Prepared for



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2025 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

PLANT HAMMOND ASH POND 3 (AP-3)

Prepared by



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Project Number GW6581D

July 2025

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CERTIFICATION STATEMENT

This *2025 Annual Groundwater Monitoring and Corrective Action Report, Plant Hammond – Ash Pond 3 (AP-3)* has been prepared in compliance with the United States Environmental Protection Agency Coal Combustion Residual Rule (40 Code of Federal Regulations [CFR] 257 Subpart D), specifically 40 CFR § 257.90(e), and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with Geosyntec Consultants, Inc. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management 391-3-4-.04.



July 31, 2025

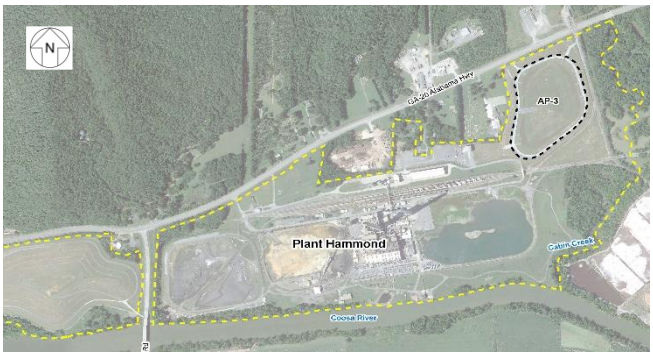
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SUMMARY

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 3 (AP-3) (the Site). This summary was prepared by Geosyntec Consultants, Inc. (Geosyntec) on behalf of Georgia Power to meet the requirements listed in Part A, Section 6[1] 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. AP-3 is located on the northeastern corner of the Plant Hammond property. In the early 1980's, AP- 3 was converted into a dry ash disposal area and in the early 1990's the pond stopped receiving CCR materials. Final capping of the pond with a low-permeability cover system was completed in the second quarter of 2018. The Georgia Environmental Protection Division (GA EPD) approved closure permit no. 057-026D(CCR) for AP-3 on November 13, 2023.



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-3 since August 2016.

During the annual reporting period, Geosyntec conducted two groundwater sampling events, one in August 2024, and one in February 2025. Groundwater samples were submitted to Pace Analytical Services, LLC, for analysis. Groundwater data for the two events were evaluated in accordance with the certified statistical methods. Statistically significant increases of Appendix III[2] constituents above background were observed in

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

select monitoring wells following the August 2024 and February 2025 events, as summarized in the table below.

Appendix III Constituent[2]	***August 2024***	***February 2025***
Boron	HGWC-120, HGWC-121A, HGWC-125	HGWC-120, HGWC-121A, HGWC-125
Calcium	HGWC-120, HGWC-121A, HGWC-125	HGWC-120, HGWC-125, HGWC-126
Sulfate	HGWC-120, HGWC-121A, HGWC-125	HGWC-120, HGWC-125
Total dissolved solids	HGWC-120, HGWC-121A, HGWC-125	HGWC-125

No statistically significant levels (SSLs) were identified for Appendix IV groundwater data from both the August 2024 and February 2025 events[3].

Groundwater at AP-3 will continue to be managed under the assessment monitoring program. 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 the GA EPD semiannually.

[3] Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228. A statistically significant 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-3	Ash Pond 3
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
Georgia Power	Georgia Power Company
Geosyntec	Geosyntec Consultants, Inc.
GSC	Groundwater Stats Consulting
GWPS	Groundwater Protection Standard
HAR	Hydrogeologic Assessment Report
HDPE	high density polyethylene
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 (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 3 (AP-3) for the reporting period of July 2024 through June 2025 (referred herein as the "annual reporting period").

Groundwater monitoring and reporting for the CCR unit is performed in accordance with the monitoring requirements of § 257.90 through § 257.95 of the federal CCR Rule, and GA EPD Rules for Solid Waste Management 391-3-4-.10(6). To specify groundwater monitoring requirements, GA EPD rule 391-3-4-.10(6)(a) incorporates by reference the federal CCR Rule. For ease of reference, the federal CCR rules are cited within this report, in lieu of citing both sets of regulations.

A notification of intent to initiate closure of the inactive CCR surface impoundment was certified on December 7, 2015 and posted to Georgia Power's website. Groundwater monitoring and reporting for AP-3 are being completed in accordance with the alternate schedule in § 257.100(e)(5) of the revised federal CCR Rule (August 5, 2016). Pursuant to § 257.96(b), Georgia Power monitors groundwater associated with AP-3 in accordance with the assessment monitoring program established for the unit in 2019, including semiannual monitoring and reporting pursuant to § 257.90 through § 257.95 of the federal CCR Rule. Also, the closure permit issued by GA EPD (i.e., no. 057-026D(CCR)) stipulates that groundwater monitoring is required for the duration of the post closure care period (30-years).

1.1 Site Description and Background

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

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

AP-3 is a 25-acre former ash pond that was constructed in 1973 and 1974. Ash sluicing and placement operations at AP-3 commenced in June 1977. In the early 1980's, AP-3 was converted into a dry ash disposal area, and in the early 1990's, the pond stopped receiving CCR materials.

Closure of AP-3 commenced in 2016. As part of closure, AP-3 was dewatered sufficiently to remove the free liquids. The CCR material remaining in AP-3 was graded, and a final cover system installed. The final cover system consists of a 60-millimeter-high density polyethylene (HDPE) liner, geocomposite drainage media, a minimum 18-inch-thick protective soil cover, and a 6-inch-thick vegetative layer. The final cover system was designed to limit infiltration of precipitation using low permeability materials and is graded to promote positive drainage and shed stormwater away from AP-3 via riprap drainage ditches toward three outfall locations around AP-3. Final capping of the unit was completed in the second quarter of 2018. Closure permit no. 057-026D(CCR) was approved by GA EPD on November 13, 2023. As part of the closure process and in compliance with the closure permit, a Treewell system was installed in November 2024.

1.2 Regional Geology and Hydrogeologic Setting

The following section summarizes the geologic and hydrogeologic conditions at AP-3 as described in the *Hydrogeologic Assessment Report* (*Revision 01) – Plant Hammond Ash Pond 3 (AP-3)* (HAR Rev 01) submitted to GA EPD in support of the AP-3 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-3 is underlain by the middle units of the Cambrian age Conasauga Formation, consisting of mostly shaley limestone. Based on review of site-specific subsurface investigations, the bedrock at AP-3 was identified as limestone or shaley limestone. AP-3 is underlain primarily by five units: (i) fill material; (ii) terrace alluvium; (iii) residuum; (iv) highly weathered/fractured limestone bedrock; and (v) unweathered limestone bedrock.

Based on subsurface investigations, the fill is composed of lean clay or gravelly lean clay with sand, sometimes identified by the presence of wood or roots. The terrace alluvium

consists of unconsolidated sediments with high sand and gravel content associated with deposition from the Coosa River and Cabin Creek. Residual or native soils have been derived from the in-place weathering of the shaley limestone bedrock. The residuum is generally described as fat clay with typically only trace amounts of sand, and rarely gravel. Just below the residuum clay layer is a gradational zone of varying proportions of clayey residuum and sand, gravel, and cobble-sized angular pieces of partially weathered limestone, grading into a zone of fractured limestone, before grading into unweathered, fresh limestone. The upper highly weathered zone appears more as residuum with various sized rock fragments. The lower zone becomes less clayey with depth and is estimated to be approximately 5 feet thick. Most of the limestone is described as medium to dark gray with a slabby or flaggy habit when broken in pieces by the sonic drilling. The limestone is very finely laminated with lighter and darker gray layers, and contains interbeds of calcareous shale.

1.2.2 Hydrogeologic Setting

The uppermost aquifer at AP-3 is a regional groundwater aquifer that occurs within the residuum and the weathered and fractured bedrock. The uppermost aquifer is considered to be unconfined; however, localized, semi-confined conditions may be encountered due to the low-permeability clayey nature of the residual soils, or as a result of perched groundwater or poorly interconnected fracture networks in the bedrock. Based on observations of soil types and horizontal conductivity values, the movement of groundwater in the soil, and to some degree the highly weathered bedrock zone, can be characterized as low-to moderate permeability, porous media flow. Groundwater flow in the more competent underlying bedrock is characterized as fracture flow. Flow direction within the area of AP-3 is generally from west to east.

1.3 Groundwater Monitoring Well Network

In accordance with § 257.91, a groundwater monitoring system was installed at AP-3 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.

The current on-site network of piezometers is used to gauge water levels to define groundwater flow direction and gradients. The locations of the detection monitoring wells and piezometers associated with AP-3 are shown on **Figure 2**; well construction details are listed in **Table 1**.

2.0 GROUNDWATER AND SURFACE WATER MONITORING ACTIVITIES

The following describes groundwater and surface water monitoring related activities performed during the annual reporting period and discusses any change in status of the monitoring program. Groundwater and surface water sampling were performed in accordance with the most current AP-3 Groundwater Monitoring Plan (Geosyntec, 2021)..

2.1 Monitoring Well Installation and Maintenance

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

The well and piezometer networks are inspected semiannually to evaluate if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A. § 12-5-134(5)(d)(vii)). In 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-3 in August 2019. No SSLs of Appendix IV constituents were identified during the annual reporting period. Groundwater at AP-3 will continue to be managed under the assessment monitoring program stipulated by § 257.95.

For the current annual reporting period, two semiannual assessment monitoring events were conducted in August 2024 and February 2025. The number of groundwater samples collected for analysis and the dates the samples were collected at AP-3 during the annual reporting period are summarized in **Table 2**. Details of these events and analytical results are discussed in Section 3, while the statistical results are discussed in Section 4.

2.3 Additional Groundwater and Surface Water Evaluation

Supplemental groundwater samples were collected from the entire AP-3 detection monitoring well network during the February 2025 monitoring events and were analyzed

for additional 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**.

Following the issuance of the closure permit no. 057-026D(CCR), three surface water sampling locations (SW-1, SW-2, and SW-3) on the stormwater outfalls were added to the semiannual sampling network and analyzed for the full Appendix IV constituent list, as shown on **Figure 2**. In August 2024, the three surface water sampling locations were dry therefore, no sample was collected. In February 2025, surface water samples were collected from SW-1 and SW-2.

The laboratory reports associated with the additional surface water evaluations 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-3 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-3 wells and piezometers during the August 2024 and February 2025 assessment monitoring events and used to calculate 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.

Surface water elevations were recorded from two surveyed gauging points located along Cabin Creek east of AP-3, as shown on **Figure 2**. One gauging location, referenced in **Table 3** as "Cabin Creek (Hwy 20)", is located midway across the bridge along GA-20 Alabama Highway spanning Cabin Creek. The second Cabin Creek gauging location is along the railroad bridge southeast of AP-3; this location is referred to in **Table 3** as "Cabin Creek (Railroad Bridge)".

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 2025 events, which is presented on **Figure 3** and **Figure 4**. Groundwater in the AP-3 area flows under the influence of topography from slightly higher ground surface elevations on the western side of the Site toward lower elevations to the east of AP-3. The flow direction is generally consistent with previous observations for AP-3.

3.2 Groundwater Gradient and Flow Velocity

The horizontal groundwater hydraulic gradients within the uppermost aquifer beneath AP-3 was calculated using the groundwater elevation data from the annual sampling events. The hydraulic gradients are commonly calculated along the groundwater flow path perpendicular to groundwater elevation contours. Ideally, this flow path originates and concludes with groundwater elevations reported for two wells, but this may not be feasible and still remain perpendicular to the contours. The hydraulic gradients in this report have been calculated between an upgradient and downgradient well pair selected

to provide the most accurate alignment possible relative to the interpreted groundwater flow path (i.e., between HGWA-122 and HGWC-120). The hydraulic gradient calculation is presented in **Table 4**. The general trajectory of the flow path for the August 2024 and February 2025 event is shown on **Figure 3** and **Figure 4**. The average hydraulic gradient for this annual reporting period across AP-3 is 0.009 feet per foot (ft/ft).

The approximate horizontal flow velocity associated with AP-3 groundwater was calculated using the following derivative of Darcy's Law. The calculation is provided in **Table 4**.

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

where:

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

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

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

h_1 and h_2 = Groundwater elevation at location 1 and 2

L = distance between location 1 and 2

n_e = Effective porosity

The groundwater flow velocity calculation was performed using the geometric mean value for K_h of the highly weathered/fractured rock of 9.8 x 10^{-4} centimeters per second (cm/sec) or 2.76 feet per day (ft/day). An estimated effective porosity (n_e) of 0.15 is used to represent average lithologic conditions at AP-3, derived based on review of literature, observed site lithology, and professional judgement. With these variables assigned, and accounting for the hydraulic gradient discussed above, the average horizontal groundwater flow velocity underneath AP-3 for this annual reporting period was calculated to be 0.17 ft/day.

3.3 Groundwater Sampling Procedures

Groundwater samples were collected using low-flow sampling procedures in accordance with § 257.93(a). Purging and sampling was performed using dedicated bladder pumps with dedicated tubing, non-dedicated bladder pumps, or peristaltic pumps. For wells sampled with non-dedicated bladder pumps, the pump intake was lowered to the midpoint of the well screen (or as appropriate based on the groundwater level). Non-dedicated bladder pump samples were collected using new disposable polyethylene tubing; all non-dedicated tubing was disposed of following the sampling events. 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 ± 0.1 standard units (s.u.).
- Conductivity ± 5%.
- ±0.2 milligram per liter (mg/L) or ± 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 annual reporting period 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 August 2024 and February 2025 sampling events are summarized in **Table 5**, surface water analytical results for February 2025 are summarized in **Table 6**.

3.5 Quality Assurance and Quality Control Summary

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

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

4.0 STATISTICAL ANALYSIS

The following section summarizes the statistical analysis of Appendix III groundwater monitoring data performed pursuant to § 257.93. In addition, pursuant to § 257.95(d)(2), Georgia Power established groundwater protection standards (GWPS) for the Appendix IV 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 report 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, that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations and guidance as recommended in the USEPA document *Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance* (Unified Guidance) (USEPA, 2009).

Appendix III statistical analysis was performed to determine if Appendix III constituents have returned to background levels. Appendix IV constituents were evaluated to assess if concentrations statistically exceeded the established GWPS. Detailed statistical methods used for Appendix III and Appendix IV constituents are discussed in statistical analysis 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 are presented in **Table 7**.

4.1.1 Appendix III Statistical Methods

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

exceedance is noted only when the resample confirms the initial exceedance by also exceeding the statistical limit. If the resample falls within its respective prediction limit, no exceedance is declared.

4.1.2 Appendix IV Statistical Methods

To statistically compare groundwater data to GWPS, confidence intervals are constructed for each of the detected Appendix IV constituents in each downgradient detection monitoring well with a minimum of four samples. In accordance with Section 21.1.1 of the Unified Guidance (USEPA, 2009), four independent data are the minimum population size recommended to construct confidence intervals required to assess SSLs for Appendix IV constituents.

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 is identified.

GWPS have been established for statistical comparison of Appendix IV constituents and are presented in **Table 7**.

4.2 Statistical Analyses Results

Based on review of the Appendix III statistical analysis discussion presented in **Appendix C**, groundwater conditions have not returned to background and assessment monitoring should continue. However, 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; and therefore, Georgia Power will continue to monitor groundwater at AP-3 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-3 was prepared to fulfill the requirements of the federal CCR Rule and the GA EPD Rules for Solid Waste Management 391-3-4-.10.

Statistical analyses of the groundwater monitoring data for AP-3 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-3 is scheduled to begin in August 2025.

7.0 REFERENCES

Geosyntec, 2020. Hydrogeologic Assessment Report (Revision 01) – Plant Hammond Ash Pond 3 (AP-3). November 2020.

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TABLES

Table 1
Monitoring Well Network Summary
Georgia Power Company
Plant Hammond - Ash Pond 3
Floyd County, GA

Well ID	Well Designation	Hydraulic Location	Northing[1]	Easting[1]	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 (Feet Below Top of Casing)[2]	Groundwater Zone Screened	Installation Date
HGWA-1	Detection	Upgradient	1550423.32	1940770.00	592.32	595.21	573.12	563.12	32.49	Bedrock	12/03/2014
HGWA-2	Detection	Upgradient	1549796.87	1939845.15	585.29	587.92	570.29	560.29	27.95	Overburden	12/02/2015
HGWA-3	Detection	Upgradient	1549794.41	1939833.39	585.23	587.74	553.23	543.23	44.51	PWR	12/02/2015
HGWA-43D	Detection	Upgradient	1550422.85	1940753.80	592.08	595.08	544.08	534.08	61.25	Bedrock	08/26/2020
HGWA-44D	Detection	Upgradient	1550409.13	1940756.18	592.01	594.79	491.76	481.76	113.28	Bedrock	08/25/2020
HGWA-45D	Detection	Upgradient	1551157.68	1941907.54	584.08	586.95	535.23	525.23	62.87	Bedrock	08/19/2020
HGWC-120	Detection	Downgradient	1551067.24	1942926.62	602.83	605.82	548.83	538.83	67.00	Bedrock	06/27/2016
HGWC-121A	Detection	Downgradient	1550607.97	1943030.44	582.31	584.69	556.71	546.71	37.98	Overburden	07/17/2017
HGWA-122	Detection	Upgradient	1551251.42	1941887.11	585.04	587.90	570.54	560.54	27.76	Overburden	11/20/2014
HGWC-124	Detection	Downgradient	1551624.93	1942781.05	579.80	582.52	557.80	547.80	35.12	Bedrock	11/13/2014
HGWC-125	Detection	Downgradient	1550821.41	1942962.87	605.70	608.89	556.03	546.03	63.19	Overburden/PWR	05/04/2020
HGWC-126	Detection	Downgradient	1550422.03	1942689.40	608.72	611.24	552.72	542.72	68.52	PWR/Bedrock	11/25/2019
MW-21	Piezometer	Upgradient	1550270.15	1941809.76	583.60	586.27	570.40	560.40	26.28	Overburden/PWR/Bedrock	12/03/2014
MW-23	Piezometer	Downgradient	1551641.44	1942496.83	582.13	584.91	563.03	553.03	32.28	Overburden/Bedrock	11/24/2014
MW-32	Piezometer	Downgradient	1551092.83	1943021.47	583.10	585.46	559.30	549.30	36.16	Overburden/PWR/Bedrock	11/22/2019
MW-39	Piezometer	Downgradient	1551111.45	1943089.26	577.60	580.42	564.93	554.93	25.82	Overburden/PWR/Bedrock	03/16/2020
MW-41	Piezometer	Downgradient	1551158.16	1943196.47	574.87	577.25	563.20	553.20	24.38	Overburden	05/18/2020
MW-46D	Piezometer	Downgradient	1551056.48	1942929.10	603.17	605.72	513.92	503.92	102.05	Bedrock	08/18/2020

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 data certified by GEL Solutions May 19, 2020. Survey data for HGWA-43D and HGWA-44D certified by GEL Solutions September 10, 2020.
(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 3
Floyd County, GA

Well ID	Hydraulic Location	Well Designation	August 05 2024 - August 07 2024	February 12 2025 - February 16 2025
			Assessment Event	Assessment Event
Georgia Power Company - Plant Hammond Ash Pond 3				
HGWA-1	Upgradient	Detection	X	X
HGWA-2	Upgradient	Detection	X	X
HGWA-3	Upgradient	Detection	X	X
HGWA-43D	Upgradient	Detection	X	X
HGWA-44D	Upgradient	Detection	X	X
HGWA-45D	Upgradient	Detection	X	X
HGWC-120	Downgradient	Detection	X	X
HGWC-121A	Downgradient	Detection	X	X
HGWA-122	Upgradient	Detection	X	X
HGWC-124	Downgradient	Detection	X	X
HGWC-125	Downgradient	Detection	X	X
HGWC-126	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 3
Floyd County, GA

		August 2024		February 2025	
Well ID	Top of Casing Elevation[(1)] (feet)	Depth to Water (feet)	Groundwater Elevation[(1)] (feet)	Depth to Water (feet)	Groundwater Elevation[(1)] (feet)
HGWA-1	595.21	20.87	574.34	19.09	576.12
HGWA-2	587.92	14.59	573.33	14.30	573.62
HGWA-3	587.74	14.37	573.37	13.88	573.86
HGWA-43D	595.08	20.78	574.30	18.94	576.14
HGWA-44D	594.79	20.73	574.06	19.41	575.38
HGWA-45D	586.95	13.14	573.81	11.65	575.30
HGWA-122	587.9	14.25	573.65	12.74	575.16
HGWC-120	605.82	40.75	565.07	41.36	564.46
HGWC-121A	584.69	18.21	566.48	18.76	565.93
HGWC-124	582.52	16.34	566.18	15.52	567.00
HGWC-125	608.89	44.11	564.78	44.63	564.26
HGWC-126	611.24	41.48	569.76	42.05	569.19
MW-21	586.27	10.69	575.58	9.73	576.54
MW-23	584.91	14.40	570.51	13.67	571.24
MW-32	585.46	20.42	565.04	21.04	564.42
MW-39	580.42	15.45	564.97	16.02	564.40
MW-41	577.25	12.40	564.85	12.96	564.29
MW-46D	605.72	40.37	565.35	40.99	564.73
Cabin Creek (Hwy 20)	594.46	29.98	564.48	29.66	564.80
Cabin Creek (Railway Bridge)	586.60	22.56	564.04	25.21	561.39

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 3
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	HGWA-122 to HGWC-120	573.65	565.07	8.58	1,102	0.008	2.76	0.15	0.15	54.4	0.009	0.17
February 2025	HGWA-122 to HGWC-120	575.16	564.46	10.70	1,054	0.010	2.76	0.15	0.18	67.2		

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 2.76 feet per day (ft/day) was computed from slug test data derived from AP-3.
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 (h_1 and h_2 = 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 path.
(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 3
Floyd County, GA

	Sample Location	HGWA-1	HGWA-1	HGWA-2	HGWA-2	HGWA-3	HGWA-3	HGWA-3	HGWA-43D	HGWA-43D	HGWA-44D	HGWA-44D	HGWA-45D	HGWA-45D
	Sample Date	08/05/2024	02/12/2025	08/05/2024	02/14/2025	08/05/2024	02/12/2025	02/14/2025	08/06/2024	02/12/2025	08/06/2024	02/12/2025	08/06/2024	02/13/2025
ANALYTE	UNITS													
APPENDIX III														
Boron	mg/L	0.020 J	0.021 J	0.057	0.053	< 0.012	0.011 J	NA	0.043	0.040 J	0.52	0.54	0.16	0.18
Calcium	mg/L	113	125	34.7	51.5	83.3	86.6	NA	57.2	61.8	7.1	7.2	53.3	55.9
Chloride	mg/L	8.7	4.8	7.9	8.5	5.2	5.0	NA	4.0	3.8	30.2	30.7	3.6	3.2
Fluoride	mg/L	0.11	0.10	0.12	0.10	0.077 J	0.073 J	NA	0.21	0.21	1.3	1.1	0.20	0.22
pH, Field	SU	7.29	7.08	4.91	5.75	7.27	7.37	7.45	7.46	7.50	8.36	8.49	7.47	7.63
Sulfate	mg/L	49.4	43.8	87.2	94.5	31.1	28.0	NA	25.5	25.2	0.86 J	0.51 J	2.9	9.5
TDS	mg/L	444	374	217	242	304	267	NA	283	273	380	363	256	272
APPENDIX IV														
Antimony	mg/L	< 0.00054	< 0.00050	< 0.00054	< 0.00050	< 0.00054	< 0.00050	NA	< 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	NA	< 0.00084	< 0.0012	< 0.00084	0.0014 J	< 0.00084	< 0.0012
Barium	mg/L	0.032	0.034	0.062	0.057	0.13	0.13	NA	0.28	0.30	0.11	0.095	0.50	0.57
Beryllium	mg/L	< 0.000094	< 0.00015	0.00026 J	0.00023 J	< 0.000094	< 0.00015	NA	< 0.000094	< 0.00015	< 0.000094	< 0.00015	< 0.000094	< 0.00015
Cadmium	mg/L	< 0.00010	< 0.00012	0.00026 J	0.00028 J	< 0.00010	< 0.00012	NA	< 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	NA	< 0.0019	< 0.0012	< 0.0019	< 0.0012	< 0.0019	< 0.0012
Cobalt	mg/L	0.00055 J	< 0.0012	0.032	0.030	< 0.00032	< 0.0012	NA	< 0.00032	< 0.0012	< 0.00032	< 0.0012	< 0.00032	< 0.0012
Fluoride	mg/L	0.11	0.10	0.12	0.10	0.077 J	0.073 J	NA	0.21	0.21	1.3	1.1	0.20	0.22
Lead	mg/L	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025	NA	< 0.00016	< 0.00025	< 0.00016	< 0.00025	< 0.00016	< 0.00025
Lithium	mg/L	< 0.0016	0.00119 J	0.0019 J	0.00183 J	0.0034 J	0.00331 J	NA	0.0025 J	0.00266 J	0.10	0.101	0.0048 J	0.00456 J
Mercury	mg/L	< 0.00013	< 0.00012	< 0.00013	< 0.00012	< 0.00013	< 0.00012	NA	< 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	NA	0.0010 J	< 0.0025	0.00079 J	< 0.0025	< 0.00062	< 0.0025
Combined Radium 226 + 228	pCi/L	0.640 U	0.624 U	1.27	1.20 U	0.371 U	NA	0.606 U	0.674 U	0.624 U	0.529 U	0.622 U	1.76	0.871 U
Selenium	mg/L	< 0.00096	< 0.0012	0.0013 J	0.0043 J	< 0.00096	< 0.0012	NA	< 0.00096	< 0.0012	< 0.00096	< 0.0012	< 0.00096	< 0.0012
Thallium	mg/L	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015	NA	< 0.00038	< 0.00015	< 0.00038	< 0.00015	< 0.00038	< 0.00015
Additional Parameters														
Bicarbonate Alkalinity as CaCO3	mg/L	NA	283	NA	58.3	NA	223	NA	NA	237	NA	294	NA	267
Carbonate Alkalinity as CaCO3	mg/L	NA	< 5.0	NA	< 5.0	NA	< 5.0	NA	NA	< 5.0	NA	< 5.0	NA	< 5.0
Total Alkalinity as CaCO3	mg/L	NA	283	NA	58.3	NA	223	NA	NA	237	NA	294	NA	267
Iron	mg/L	NA	0.023 J	NA	0.068	NA	0.91	NA	NA	0.27	NA	0.19	NA	0.26
Magnesium	mg/L	NA	4.7	NA	5.0	NA	5.5	NA	NA	19.3	NA	3.5	NA	20.6
Manganese	mg/L	NA	0.063	NA	0.84	NA	0.25	NA	NA	0.015 J	NA	0.0058 J	NA	0.014 J
Potassium	mg/L	NA	0.48 J	NA	1.5	NA	0.46 J	NA	NA	0.86	NA	2.3 J	NA	1.9
Sodium	mg/L	NA	14.7	NA	12.5	NA	5.7	NA	NA	19.8	NA	141	NA	21.9
Sulfide	mg/L	NA	< 0.022	NA	< 0.022	NA	< 0.022	NA	NA	0.025 J	NA	0.10	NA	0.12

Notes:
mg/L - milligrams per liter
pCi/L - picocuries per liter
SU - Standard Units
NA - Indicates not analyzed
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 3
Floyd County, GA

	Sample Location	HGWC-120	HGWC-120	HGWC-121A	HGWC-121A	HGWA-122	HGWA-122	HGWC-124	HGWC-124	HGWC-125	HGWC-125	HGWC-126	HGWC-126
	Sample Date	08/07/2024	02/15/2025	08/06/2024	02/15/2025	08/06/2024	02/13/2025	08/07/2024	02/14/2025	08/07/2024	02/15/2025	08/07/2024	02/15/2025
ANALYTE	UNITS												
APPENDIX III													
Boron	mg/L	1.1	1.2	1.4	0.85	0.15	0.15	0.34	0.33 J	1.5	1.5	0.021 J	0.016 J
Calcium	mg/L	154	162	152	125	73.7	68.8	97.7	95.1	159	169	136	143
Chloride	mg/L	2.6	2.7	11.6	5.6	2.1	1.6	2.2	2.1	9.7	3.6	8.7	8.8
Fluoride	mg/L	0.34	0.34	0.20	0.18	0.14	0.12	< 0.050	< 0.050	0.12	0.19	0.50	0.49
pH, Field	SU	7.01	7.06	6.91	7.12	6.86	6.99	7.24	7.31	6.15	6.88	6.99	7.13
Sulfate	mg/L	191	175	127	73.1	37.8	32.7	69.7	61.4	289	201	72.8	64.8
TDS	mg/L	647	626	661	457	270	206	337	317	695	640	518	525
APPENDIX IV													
Antimony	mg/L	< 0.00054	< 0.00050	0.0018 J	< 0.00050	< 0.00054	< 0.00050	0.0020 J	< 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	< 0.00084	< 0.0012	0.00090 J	< 0.0012	< 0.00084	< 0.0012
Barium	mg/L	0.051	0.050	0.044	0.044	0.029	0.033	0.064	0.060	0.035	0.038	0.23	0.24
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	< 0.00010	< 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	< 0.0019	< 0.0012	< 0.0019	< 0.0012	< 0.0019	< 0.0012
Cobalt	mg/L	0.0064	0.0046 J	< 0.00032	< 0.0012	< 0.00032	< 0.0012	< 0.00032	< 0.0012	0.012	0.0030 J	< 0.00032	< 0.0012
Fluoride	mg/L	0.34	0.34	0.20	0.18	0.14	0.12	< 0.050	< 0.050	0.12	0.19	0.50	0.49
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	0.023 J	0.0200 J	0.0063 J	0.00449 J	< 0.0016	< 0.000600	< 0.0016	0.00104 J	0.0038 J	0.00823 J	0.0042 J	0.00401 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
Molybdenum	mg/L	0.036	0.033	< 0.00062	< 0.0025	0.0047 J	0.0050 J	0.0012 J	< 0.0025	0.0028 J	0.028	< 0.00062	< 0.0025
Combined Radium 226 + 228	pCi/L	0.679 U	0.506 U	1.27	0.874 U	0.661 U	0.662 U	0.422 U	0.102 U	0.603 U	1.29 U	0.662 U	1.21 U
Selenium	mg/L	< 0.00096	< 0.0012	< 0.00096	< 0.0012	0.0012 J	0.0013 J	< 0.00096	< 0.0012	< 0.00096	< 0.0012	< 0.00096	0.0013 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	283	NA	324	NA	157	NA	203	NA	255	NA	414
Carbonate Alkalinity as CaCO3	mg/L	NA	< 5.0	NA	< 5.0	NA	< 5.0	NA	< 5.0	NA	< 5.0	NA	< 5.0
Total Alkalinity as CaCO3	mg/L	NA	283	NA	324	NA	157	NA	203	NA	255	NA	414
Iron	mg/L	NA	0.52	NA	0.093	NA	0.028 J	NA	0.41	NA	0.056	NA	1.4
Magnesium	mg/L	NA	21.1	NA	16.2	NA	5.1	NA	8.6	NA	24.9	NA	26.6
Manganese	mg/L	NA	1.2	NA	0.43	NA	0.0022 J	NA	0.15	NA	0.93	NA	0.16
Potassium	mg/L	NA	6.8	NA	0.86	NA	0.79	NA	0.87	NA	3.7	NA	0.80
Sodium	mg/L	NA	8.4	NA	19.0	NA	5.5	NA	4.7	NA	10.4	NA	31.5
Sulfide	mg/L	NA	< 0.022	NA	< 0.022	NA	< 0.022	NA	< 0.022	NA	< 0.022	NA	< 0.022

Table 6
Summary of Surface Water Analytical Data
Georgia Power Company
Plant Hammond - Ash Pond 3
Floyd County, GA

Sample Location[(1)]		SW-1	SW-1	SW-2	SW-2
Sample Date		8/6/2024	02/16/2025	8/6/2024	02/16/2025
ANALYTE	UNITS				
APPENDIX IV					
Antimony	mg/L	NA	< 0.00050	NA	< 0.00050
Arsenic	mg/L	NA	< 0.0012	NA	< 0.0012
Barium	mg/L	NA	0.011	NA	0.0083
Beryllium	mg/L	NA	< 0.00015	NA	< 0.00015
Cadmium	mg/L	NA	< 0.00012	NA	< 0.00012
Chromium	mg/L	NA	< 0.0012	NA	< 0.0012
Cobalt	mg/L	NA	< 0.0012	NA	< 0.0012
Fluoride	mg/L	NA	< 0.050	NA	0.064 J
Lead	mg/L	NA	0.00081 J	NA	0.00058 J
Lithium	mg/L	NA	0.00141 J	NA	0.000920 J
Mercury	mg/L	NA	< 0.00012	NA	< 0.00012
Molybdenum	mg/L	NA	< 0.0025	NA	< 0.0025
Combined Radium 226 + 228	pCi/L	NA	1.24 U	NA	0.984 U
Selenium	mg/L	NA	< 0.0012	NA	< 0.0012
Thallium	mg/L	NA	< 0.00015	NA	< 0.00015

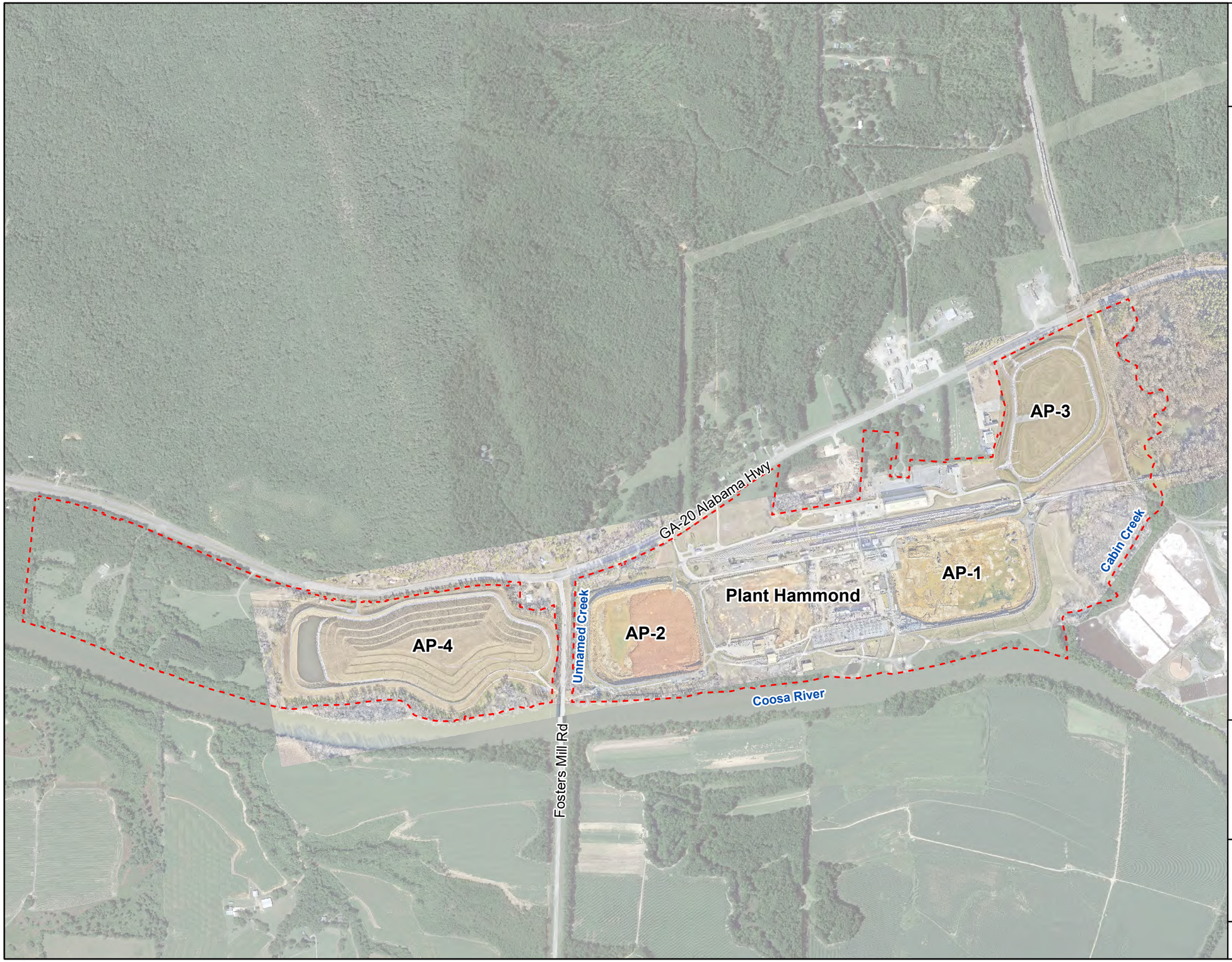
Notes:
mg/L - milligrams per liter
NA - Indicates not analyzed (sampling location dry)
pCi/L - picocuries per liter
< indicates the substance was not detected above the method detection limit (MDL). The value displayed is the MDL.
J - The result is an estimated concentration. “J” qualifiers are applied by the laboratory when the concentration reported is above the MDL, but below the laboratory reporting limit.
Radium data are a combination of radium isotopes 226 and 228. When results are reported below the Minimum Detectable Concentration (MDC), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
(1) Refer to Figure 2 for locations.

Table 7
Summary of Background Concentrations and Groundwater Protection Standards
Georgia Power Company
Plant Hammond Ash Pond 3
Floyd County, GA

Analyte	Units	MCL	Federal CCR Rules Specified GWPS (1)	Background Limit (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	0.64	2
Beryllium	mg/L	0.004	N/A	0.0005	0.004
Cadmium	mg/L	0.005	N/A	0.0005	0.005
Chromium	mg/L	0.1	N/A	0.0079	0.1
Cobalt	mg/L	N/A	0.006	0.038	0.038
Combined Radium 226 + 228	pCi/L	5	N/A	1.69, 1.67	5
Fluoride	mg/L	4	N/A	1.5	4
Lead	mg/L	N/A	0.015	0.001	0.015
Lithium	mg/L	N/A	0.04	0.064	0.064
Mercury	mg/L	0.002	N/A	0.0002	0.002
Molybdenum	mg/L	N/A	0.1	0.01	0.1
Selenium	mg/L	0.05	N/A	0.005	0.05
Thallium	mg/L	0.002	N/A	0.001	0.002

Notes:
CCR = Coal Cumbustion Residuals
EPA = Environmental Protection Agency
GWPS- Groundwater Protection Standard
MCL - Maximum Contaminant Level
mg/L = miligrams 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.
(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



N

LEGEND

Plant Hammond Property Boundary



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

0 500 1,000 2,000

SCALE IN FEET

SITE LOCATION MAP

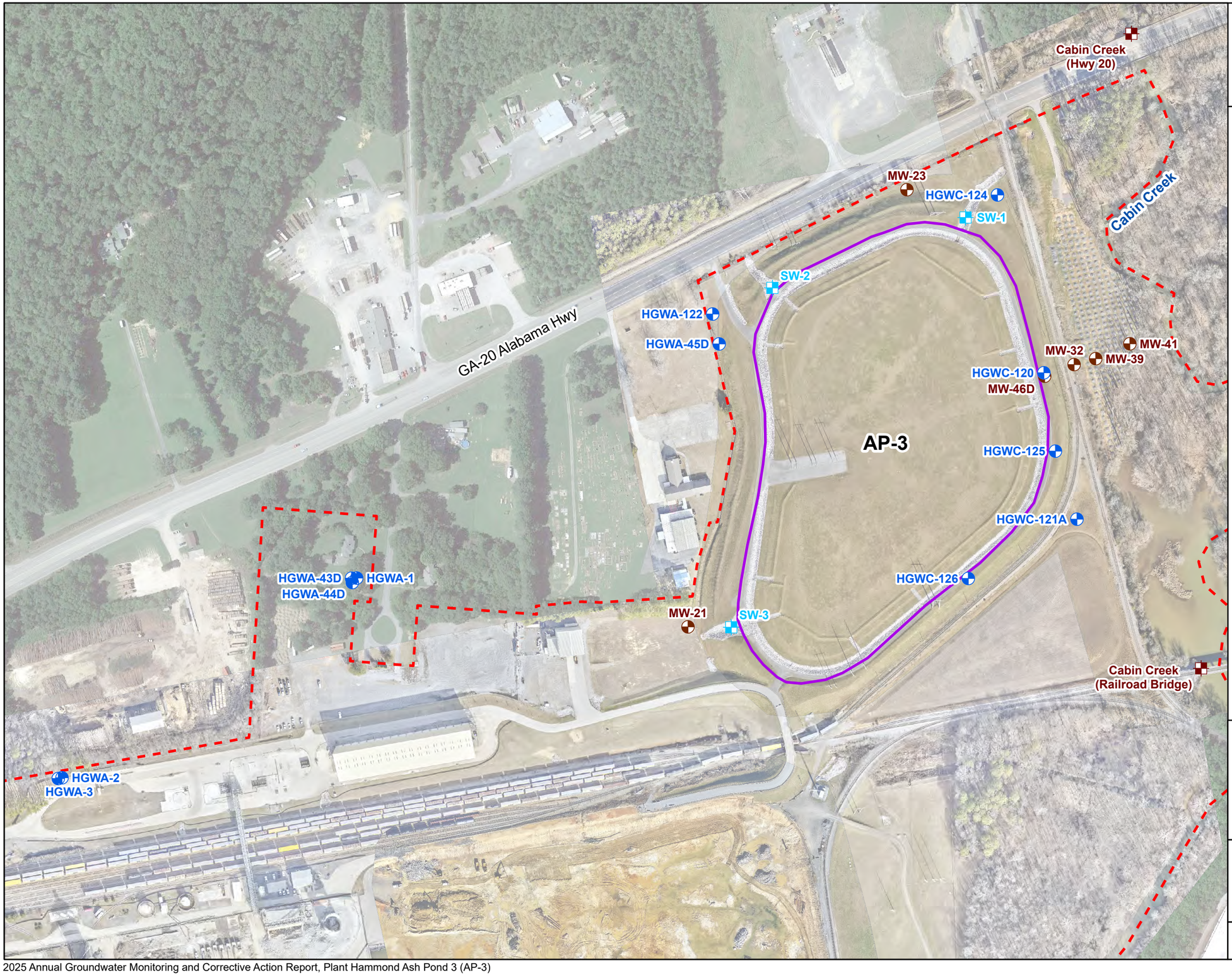
GEORGIA POWER COMPANY
PLANT HAMMOND AP-3
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JULY 2025

FIGURE 1



N

LEGEND

- Detection Monitoring Well
- Piezometer
- Surface Water Level Gauge Point
- Surface Water Sample Point
- Approximate AP-3 Boundary
- Plant Hammond Property Boundary

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

0 150 300 600

SCALE IN FEET

MONITORING WELL NETWORK AND SAMPLING LOCATION MAP

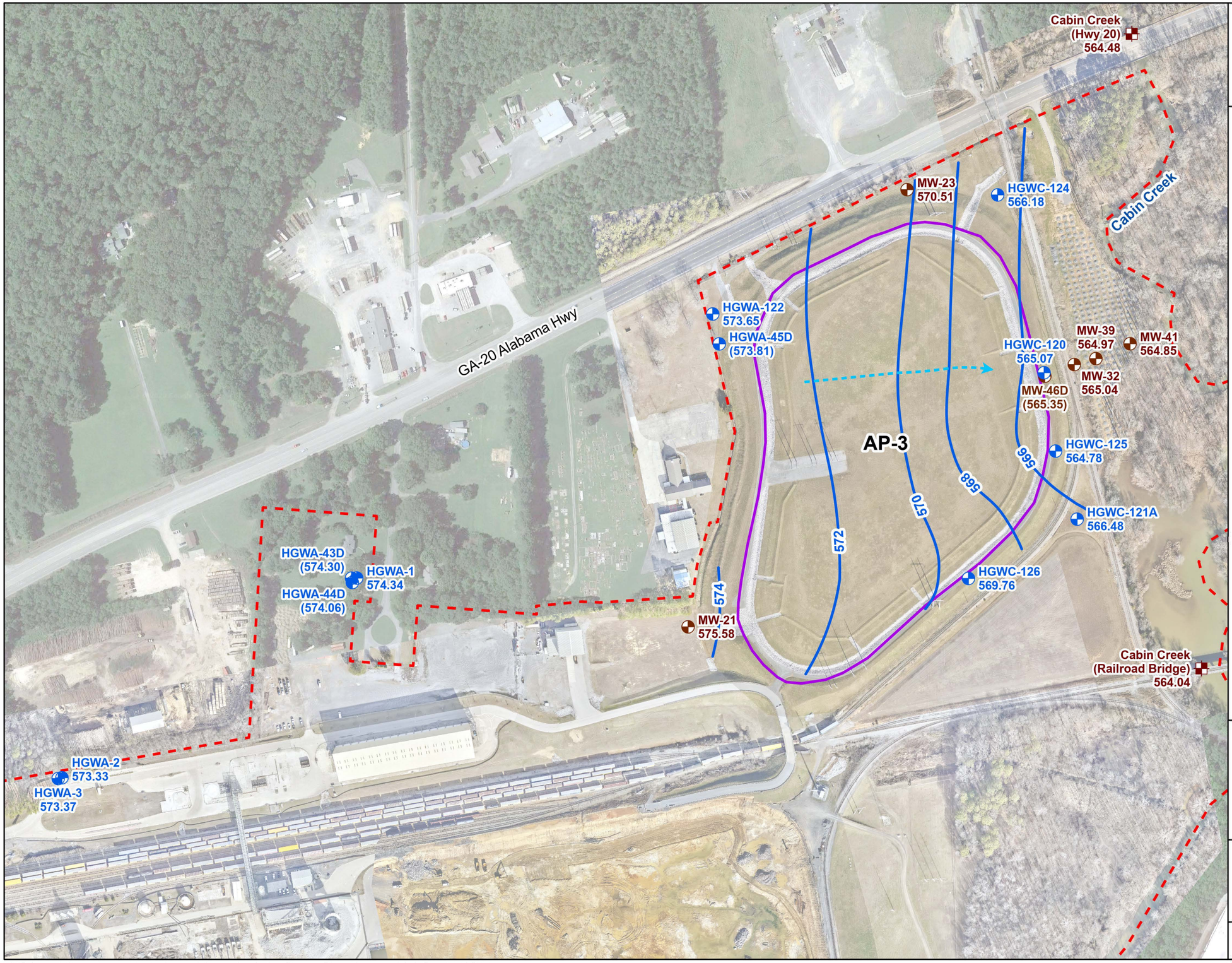
GEORGIA POWER COMPANY
PLANT HAMMOND AP-3
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JULY 2025

FIGURE 2



N

LEGEND

- Detection Monitoring Well
- Piezometer
- Surface Water Level Gauge Point
- Groundwater Elevation Contour
- Approximate Groundwater Flow Direction
- Approximate AP-3 Boundary
- Plant Hammond Property Boundary

GEORGIA REGISTERED No. PE036570 PROFESSIONAL ENGINEER WHITNEY B. LAW

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.

0 150 300 600

SCALE IN FEET

POTENTIOMETRIC SURFACE CONTOUR MAP - AUGUST 2024

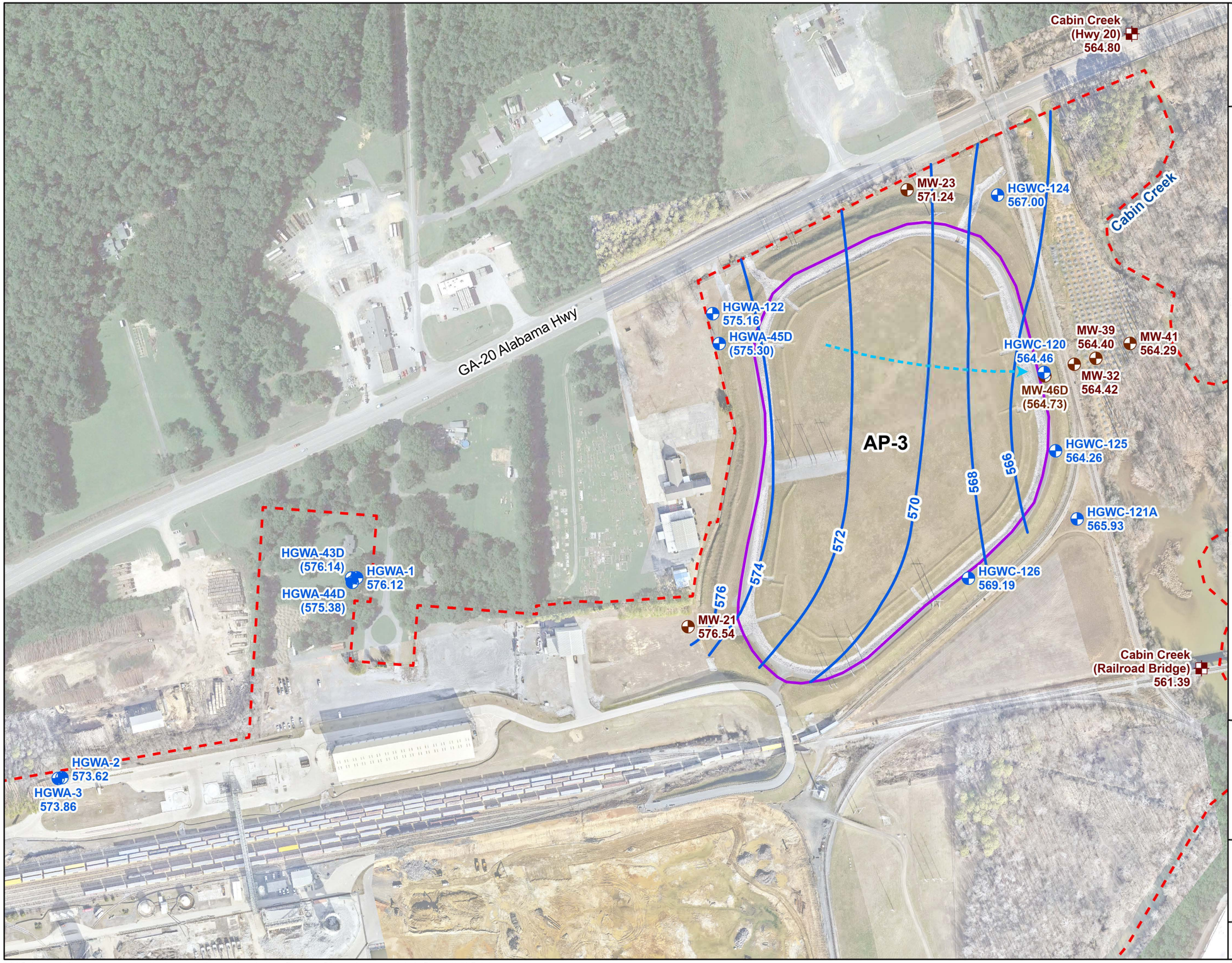
GEORGIA POWER COMPANY
PLANT HAMMOND AP-3
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA | JULY 2025

FIGURE 3



N

LEGEND

- Detection Monitoring Well
- Piezometer
- Surface Water Level Gauge Point
- Groundwater Elevation Contour
- Approximate Groundwater Flow Direction
- Approximate AP-3 Boundary
- Plant Hammond Property Boundary

GEORGIA REGISTERED No. PE036570 PROFESSIONAL ENGINEER WHITNEY B. LAW

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.

0 150 300 600

SCALE IN FEET

POTENTIOMETRIC SURFACE CONTOUR MAP - FEBRUARY 2025

GEORGIA POWER COMPANY
PLANT HAMMOND AP-3
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

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FIGURE 4

APPENDIX A

Well Maintenance and Repair Documentation Memoranda

August 2024

Geosyntec consultants

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144
PH 678.202.9500
FAX 678.202.9501
www.geosyntec.com

MEMORANDUM

DATE: December 2, 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 3 (AP-3) – 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 3 (AP-3) 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-3	8/5/2024	All Wells	Checked and cleared weep holes of debris.

Attachment
Well Inspection Summary Table

Well Inspection

Site Name: Plant Hammond AP-3

Date: 08/05/2024

Permit Number: 057-026D (CCR)

Field Conditions: Sunny, 80° 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-1	Yes	Yes	No	Yes
HGWA-2	Yes	Yes	No	Yes
HGWA-3	Yes	Yes	No	Yes
HGWA-43D	Yes	Yes	No	Yes
HGWA-44D	Yes	Yes	No	Yes
HGWA-45D	Yes	Yes	No	Yes
HGWA-122	Yes	Yes	No	Yes
HGWC-120	Yes	Yes	No	Yes
HGWC-121A	Yes	Yes	No	Yes
HGWC-124	Yes	Yes	No	Yes
HGWC-125	Yes	Yes	No	Yes
HGWC-126	Yes	Yes	No	Yes
MW-21	Yes	Yes	No	Yes
MW-23	Yes	Yes	No	Yes
MW-32	Yes	Yes	No	Yes
MW-39	Yes	Yes	No	Yes
MW-41	Yes	Yes	No	Yes
MW-46D	Yes	Yes	No	Yes

Well Inspection

Site Name: Plant Hammond AP-3

Date: 08/05/2024

Permit Number: 057-026D (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-1	Yes	Yes	Yes	Yes	Yes
HGWA-2	Yes	Yes	Yes	Yes	Yes
HGWA-3	Yes	Yes	Yes	Yes	Yes
HGWA-43D	Yes	Yes	Yes	Yes	Yes
HGWA-44D	Yes	Yes	Yes	Yes	Yes
HGWA-45D	Yes	Yes	Yes	Yes	Yes
HGWA-122	Yes	Yes	Yes	Yes	Yes
HGWC-120	Yes	Yes	Yes	Yes	Yes
HGWC-121A	Yes	Yes	Yes	Yes	Yes
HGWC-124	Yes	Yes	Yes	Yes	Yes
HGWC-125	Yes	Yes	Yes	Yes	Yes
HGWC-126	Yes	Yes	Yes	Yes	Yes
MW-21	Yes	Yes	Yes	Yes	Yes
MW-23	Yes	Yes	Yes	Yes	Yes
MW-32	Yes	Yes	Yes	Yes	Yes
MW-39	Yes	Yes	Yes	Yes	Yes
MW-41	Yes	Yes	Yes	Yes	Yes
MW-46D	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-3

Date: 08/05/2024

Permit Number: 057-026D (CCR)

Field Conditions: Sunny, 80° F

	Surface Pad			Internal Casing		
Well ID:	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
HGWA-1	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-2	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-3	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-43D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-44D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-45D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-122	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-120	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-121A	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-124	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-125	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-126	Yes	Yes	Yes	Yes	Yes	Yes
MW-21	Yes	Yes	Yes	Yes	Yes	Yes
MW-23	Yes	Yes	Yes	Yes	Yes	Yes
MW-32	Yes	Yes	Yes	Yes	Yes	Yes
MW-39	Yes	Yes	Yes	Yes	Yes	Yes
MW-41	Yes	Yes	Yes	Yes	Yes	Yes
MW-46D	Yes	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-3

Date: 08/05/2024

Permit Number: 057-026D (CCR)

Field Conditions: Sunny, 80° F

Well ID:	Corrective actions as needed, by date:
HGWA-1	N/A
HGWA-2	N/A
HGWA-3	N/A
HGWA-43D	N/A
HGWA-44D	N/A
HGWA-45D	N/A
HGWA-122	N/A
HGWC-120	N/A
HGWC-121A	N/A
HGWC-124	N/A
HGWC-125	N/A
HGWC-126	N/A
MW-21	N/A
MW-23	N/A
MW-32	N/A
MW-39	N/A
MW-41	N/A
MW-46D	N/A

February 2025

Geosyntec consultants

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144
PH 678.202.9500
FAX 678.202.9501
www.geosyntec.com

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 3 (AP-3) – 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 3 (AP-3) 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-3	2/10/2025	All Wells	Checked and cleared weep holes of debris.
Hammond/AP-3	4/3/2025	MW-41	Fixed/replaced cracked well surface pad.

Attachment
Well Inspection Summary Table

Well Inspection

Site Name: Plant Hammond AP-3

Date: 02/10/2025

Permit Number: 057-026D (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-1	Yes	Yes	No	Yes
HGWA-2	Yes	Yes	No	Yes
HGWA-3	Yes	Yes	No	Yes
HGWA-43D	Yes	Yes	No	Yes
HGWA-44D	Yes	Yes	No	Yes
HGWA-45D	Yes	Yes	No	Yes
HGWA-122	Yes	Yes	No	Yes
HGWC-120	Yes	Yes	No	Yes
HGWC-121A	Yes	Yes	No	Yes
HGWC-124	Yes	Yes	No	Yes
HGWC-125	Yes	Yes	No	Yes
HGWC-126	Yes	Yes	No	Yes
MW-21	Yes	Yes	No	Yes
MW-23	Yes	Yes	No	Yes
MW-32	Yes	Yes	No	Yes
MW-39	Yes	Yes	No	Yes
MW-41	Yes	Yes	No	Yes
MW-46D	Yes	Yes	No	Yes

Well Inspection

Site Name: Plant Hammond AP-3

Date: 02/10/2025

Permit Number: 057-026D (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-1	Yes	Yes	Yes	Yes	Yes
HGWA-2	Yes	Yes	Yes	Yes	Yes
HGWA-3	Yes	Yes	Yes	Yes	Yes
HGWA-43D	Yes	Yes	Yes	Yes	Yes
HGWA-44D	Yes	Yes	Yes	Yes	Yes
HGWA-45D	Yes	Yes	Yes	Yes	Yes
HGWA-122	Yes	Yes	Yes	Yes	Yes
HGWC-120	Yes	Yes	Yes	Yes	Yes
HGWC-121A	Yes	Yes	Yes	Yes	Yes
HGWC-124	Yes	Yes	Yes	Yes	Yes
HGWC-125	Yes	Yes	Yes	Yes	Yes
HGWC-126	Yes	Yes	Yes	Yes	Yes
MW-21	Yes	Yes	Yes	Yes	Yes
MW-23	Yes	Yes	Yes	Yes	Yes
MW-32	Yes	Yes	Yes	Yes	Yes
MW-39	Yes	Yes	Yes	Yes	Yes
MW-41	Yes	Yes	Yes	Yes	Yes
MW-46D	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-3

Date: 02/10/2025

Permit Number: 057-026D (CCR)

Field Conditions: Cloudy, 50° F

	Surface Pad			Internal Casing		
Well ID:	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
HGWA-1	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-2	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-3	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-43D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-44D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-45D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-122	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-120	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-121A	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-124	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-125	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-126	Yes	Yes	Yes	Yes	Yes	Yes
MW-21	Yes	Yes	Yes	Yes	Yes	Yes
MW-23	Yes	Yes	Yes	Yes	Yes	Yes
MW-32	Yes	Yes	Yes	Yes	Yes	Yes
MW-39	Yes	Yes	Yes	Yes	Yes	Yes
MW-41	No	Yes	Yes	Yes	Yes	Yes
MW-46D	Yes	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-3

Date: 02/10/2025

Permit Number: 057-026D (CCR)

Field Conditions: Cloudy, 50° F

Well ID:	Corrective actions as needed, by date:
HGWA-1	N/A
HGWA-2	N/A
HGWA-3	N/A
HGWA-43D	N/A
HGWA-44D	N/A
HGWA-45D	N/A
HGWA-122	N/A
HGWC-120	N/A
HGWC-121A	N/A
HGWC-124	N/A
HGWC-125	N/A
HGWC-126	N/A
MW-21	N/A
MW-23	N/A
MW-32	N/A
MW-39	N/A
MW-41	Cracked well pad was repaired on April 3, 2025.
MW-46D	N/A

APPENDIX B

Laboratory Analytical and Field Sampling Reports

LABORATORY ANALYTICAL RESULTS

August 2024

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

August 20, 2024

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

RE: Project: Hammond AP-3
Pace Project No.: 92746286

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between August 07, 2024 and August 09, 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

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Hammond AP-3
Pace Project No.: 92746286

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Hammond AP-3
Pace Project No.: 92746286

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92746286001	**HAM-HGWA-45D**	Water	08/06/24 14:40	08/07/24 12:25
92746286002	**HAM-HGWC-121A**	Water	08/06/24 16:22	08/07/24 12:25
92746286003	**HAM-HGWA-122**	Water	08/06/24 12:56	08/07/24 12:25
92746286004	**HAM-HGWC-120**	Water	08/07/24 11:22	08/09/24 14:15
92746286005	**HAM-HGWC-124**	Water	08/07/24 09:21	08/09/24 14:15
92746286006	**HAM-HGWC-125**	Water	08/07/24 13:01	08/09/24 14:15
92746286007	**HAM-HGWC-126**	Water	08/07/24 14:38	08/09/24 14:15
92746286008	**HAM-AP3-FD-01**	Water	08/07/24 00:00	08/09/24 14:15
92746286009	**HAM-AP3-FB-01**	Water	08/07/24 15:30	08/09/24 14:15
92746286010	**HAM-AP3-EB-01**	Water	08/07/24 15:35	08/09/24 14:15

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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-3
Pace Project No.: 92746286

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92746286001	**HAM-HGWA-45D**	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
92746286002	**HAM-HGWC-121A**	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
92746286003	**HAM-HGWA-122**	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
92746286004	**HAM-HGWC-120**	EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92746286005	**HAM-HGWC-124**	EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92746286006	**HAM-HGWC-125**	EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92746286007	**HAM-HGWC-126**	EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92746286008	**HAM-AP3-FD-01**	EPA 6010D	AJM	1
		EPA 6020B	CW1	13

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-3
Pace Project No.: 92746286

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92746286009	**HAM-AP3-FB-01**	EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92746286010	**HAM-AP3-EB-01**	EPA 6010D	AJM	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Hammond AP-3
Pace Project No.: 92746286

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746286001	**HAM-HGWA-45D**					
EPA 6010D	Calcium	53.3	mg/L	1.0	08/15/24 23:13	
EPA 6020B	Barium	0.50	mg/L	0.0050	08/09/24 18:32	M1
EPA 6020B	Boron	0.16	mg/L	0.040	08/09/24 18:32	
EPA 6020B	Lithium	0.0048J	mg/L	0.030	08/09/24 18:32	
SM 2540C-2015	Total Dissolved Solids	256	mg/L	25.0	08/09/24 11:41	
EPA 300.0 Rev 2.1 1993	Chloride	3.6	mg/L	1.0	08/09/24 02:22	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	08/09/24 02:22	
EPA 300.0 Rev 2.1 1993	Sulfate	2.9	mg/L	1.0	08/09/24 02:22	
92746286002	**HAM-HGWC-121A**					
EPA 6010D	Calcium	152	mg/L	1.0	08/15/24 23:17	
EPA 6020B	Antimony	0.0018J	mg/L	0.0030	08/09/24 18:49	
EPA 6020B	Barium	0.044	mg/L	0.0050	08/09/24 18:49	
EPA 6020B	Boron	1.4	mg/L	0.040	08/09/24 18:49	
EPA 6020B	Lithium	0.0063J	mg/L	0.030	08/09/24 18:49	
SM 2540C-2015	Total Dissolved Solids	661	mg/L	25.0	08/09/24 11:42	
EPA 300.0 Rev 2.1 1993	Chloride	11.6	mg/L	1.0	08/09/24 02:37	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	08/09/24 02:37	
EPA 300.0 Rev 2.1 1993	Sulfate	127	mg/L	3.0	08/09/24 14:01	M1
92746286003	**HAM-HGWA-122**					
EPA 6010D	Calcium	73.7	mg/L	1.0	08/15/24 23:21	
EPA 6020B	Barium	0.029	mg/L	0.0050	08/09/24 18:53	
EPA 6020B	Boron	0.15	mg/L	0.040	08/09/24 18:53	
EPA 6020B	Molybdenum	0.0047J	mg/L	0.010	08/09/24 18:53	
EPA 6020B	Selenium	0.0012J	mg/L	0.0050	08/09/24 18:53	
SM 2540C-2015	Total Dissolved Solids	270	mg/L	25.0	08/09/24 11:42	
EPA 300.0 Rev 2.1 1993	Chloride	2.1	mg/L	1.0	08/09/24 04:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.14	mg/L	0.10	08/09/24 04:08	
EPA 300.0 Rev 2.1 1993	Sulfate	37.8	mg/L	1.0	08/09/24 04:08	
92746286004	**HAM-HGWC-120**					
EPA 6010D	Calcium	154	mg/L	1.0	08/19/24 16:27	
EPA 6020B	Barium	0.051	mg/L	0.0050	08/16/24 13:15	
EPA 6020B	Boron	1.1	mg/L	0.040	08/16/24 13:15	
EPA 6020B	Cobalt	0.0064	mg/L	0.0050	08/16/24 13:15	
EPA 6020B	Lithium	0.023J	mg/L	0.030	08/16/24 13:15	
EPA 6020B	Molybdenum	0.036	mg/L	0.010	08/16/24 13:15	
SM 2540C-2015	Total Dissolved Solids	647	mg/L	25.0	08/12/24 11:32	
EPA 300.0 Rev 2.1 1993	Chloride	2.6	mg/L	1.0	08/13/24 11:49	
EPA 300.0 Rev 2.1 1993	Fluoride	0.34	mg/L	0.10	08/13/24 11:49	
EPA 300.0 Rev 2.1 1993	Sulfate	191	mg/L	5.0	08/13/24 22:48	
92746286005	**HAM-HGWC-124**					
EPA 6010D	Calcium	97.7	mg/L	1.0	08/19/24 16:30	
EPA 6020B	Antimony	0.0020J	mg/L	0.0030	08/16/24 13:31	
EPA 6020B	Barium	0.064	mg/L	0.0050	08/16/24 13:31	
EPA 6020B	Boron	0.34	mg/L	0.040	08/16/24 13:31	
EPA 6020B	Molybdenum	0.0012J	mg/L	0.010	08/16/24 13:31	

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SUMMARY OF DETECTION

Project: Hammond AP-3
Pace Project No.: 92746286

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746286005	**HAM-HGWC-124**					
SM 2540C-2015	Total Dissolved Solids	337	mg/L	25.0	08/12/24 11:34	
EPA 300.0 Rev 2.1 1993	Chloride	2.2	mg/L	1.0	08/13/24 12:03	
EPA 300.0 Rev 2.1 1993	Sulfate	69.7	mg/L	1.0	08/13/24 12:03	
92746286006	**HAM-HGWC-125**					
EPA 6010D	Calcium	159	mg/L	1.0	08/19/24 16:34	
EPA 6020B	Arsenic	0.00090J	mg/L	0.0050	08/16/24 13:36	
EPA 6020B	Barium	0.035	mg/L	0.0050	08/16/24 13:36	
EPA 6020B	Boron	1.5	mg/L	0.040	08/16/24 13:36	
EPA 6020B	Cobalt	0.012	mg/L	0.0050	08/16/24 13:36	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	08/16/24 13:36	
EPA 6020B	Molybdenum	0.0028J	mg/L	0.010	08/16/24 13:36	
SM 2540C-2015	Total Dissolved Solids	695	mg/L	25.0	08/12/24 11:38	
EPA 300.0 Rev 2.1 1993	Chloride	9.7	mg/L	1.0	08/13/24 12:17	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	08/13/24 12:17	
EPA 300.0 Rev 2.1 1993	Sulfate	289	mg/L	7.0	08/13/24 23:02	
92746286007	**HAM-HGWC-126**					
EPA 6010D	Calcium	136	mg/L	1.0	08/19/24 16:45	
EPA 6020B	Barium	0.23	mg/L	0.0050	08/16/24 13:40	
EPA 6020B	Boron	0.021J	mg/L	0.040	08/16/24 13:40	
EPA 6020B	Lithium	0.0042J	mg/L	0.030	08/16/24 13:40	
SM 2540C-2015	Total Dissolved Solids	518	mg/L	25.0	08/12/24 11:38	
EPA 300.0 Rev 2.1 1993	Chloride	8.7	mg/L	1.0	08/13/24 12:31	
EPA 300.0 Rev 2.1 1993	Fluoride	0.50	mg/L	0.10	08/13/24 12:31	
EPA 300.0 Rev 2.1 1993	Sulfate	72.8	mg/L	1.0	08/13/24 12:31	
92746286008	**HAM-AP3-FD-01**					
EPA 6010D	Calcium	95.3	mg/L	1.0	08/19/24 16:48	
EPA 6020B	Barium	0.066	mg/L	0.0050	08/16/24 13:44	
EPA 6020B	Boron	0.37	mg/L	0.040	08/16/24 13:44	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	08/16/24 13:44	
SM 2540C-2015	Total Dissolved Solids	345	mg/L	25.0	08/12/24 11:39	
EPA 300.0 Rev 2.1 1993	Chloride	2.2	mg/L	1.0	08/13/24 12:45	
EPA 300.0 Rev 2.1 1993	Sulfate	69.2	mg/L	1.0	08/13/24 12:45	
92746286009	**HAM-AP3-FB-01**					
SM 2540C-2015	Total Dissolved Solids	33.0	mg/L	25.0	08/12/24 11:39	
92746286010	**HAM-AP3-EB-01**					
SM 2540C-2015	Total Dissolved Solids	34.0	mg/L	25.0	08/12/24 11:39	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92746286

Sample: HAM-HGWA-45D **Lab ID: 92746286001** Collected: 08/06/24 14:40 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**53.3**	mg/L	1.0	0.12	1	08/09/24 11:23	08/15/24 23:13	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 18:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 18:32	7440-38-2	
Barium	**0.50**	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/09/24 18:32	7440-39-3	M1
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/09/24 18:32	7440-41-7	
Boron	**0.16**	mg/L	0.040	0.012	1	08/08/24 10:21	08/09/24 18:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 18:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 18:32	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 18:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 18:32	7439-92-1	
Lithium	**0.0048J**	mg/L	0.030	0.0016	1	08/08/24 10:21	08/09/24 18:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 18:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 18:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/09/24 18:32	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	08/19/24 16:00	08/20/24 09:18	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**256**	mg/L	25.0	25.0	1		08/09/24 11:41		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.6**	mg/L	1.0	0.60	1		08/09/24 02:22	16887-00-6	
Fluoride	**0.20**	mg/L	0.10	0.050	1		08/09/24 02:22	16984-48-8	
Sulfate	**2.9**	mg/L	1.0	0.50	1		08/09/24 02:22	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92746286

Sample: HAM-HGWC-121A **Lab ID: 92746286002** Collected: 08/06/24 16:22 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**152**	mg/L	1.0	0.12	1	08/09/24 11:23	08/15/24 23:17	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0018J**	mg/L	0.0030	0.00054	1	08/08/24 10:21	08/09/24 18:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 18:49	7440-38-2	
Barium	**0.044**	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/09/24 18:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/09/24 18:49	7440-41-7	
Boron	**1.4**	mg/L	0.040	0.012	1	08/08/24 10:21	08/09/24 18:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 18:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 18:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 18:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 18:49	7439-92-1	
Lithium	**0.0063J**	mg/L	0.030	0.0016	1	08/08/24 10:21	08/09/24 18:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 18:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 18:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/09/24 18:49	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	08/19/24 16:00	08/20/24 09:35	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**661**	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	**11.6**	mg/L	1.0	0.60	1		08/09/24 02:37	16887-00-6	
Fluoride	**0.20**	mg/L	0.10	0.050	1		08/09/24 02:37	16984-48-8	
Sulfate	**127**	mg/L	3.0	1.5	3		08/09/24 14:01	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92746286

Sample: HAM-HGWA-122 **Lab ID: 92746286003** Collected: 08/06/24 12:56 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**73.7**	mg/L	1.0	0.12	1	08/09/24 11:23	08/15/24 23:21	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 18:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 18:53	7440-38-2	
Barium	**0.029**	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/09/24 18:53	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/09/24 18:53	7440-41-7	
Boron	**0.15**	mg/L	0.040	0.012	1	08/08/24 10:21	08/09/24 18:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 18:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 18:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 18:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 18:53	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/08/24 10:21	08/09/24 18:53	7439-93-2	
Molybdenum	**0.0047J**	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 18:53	7439-98-7	
Selenium	**0.0012J**	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 18:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/09/24 18:53	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	08/19/24 16:00	08/20/24 09:37	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**270**	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	**2.1**	mg/L	1.0	0.60	1		08/09/24 04:08	16887-00-6	
Fluoride	**0.14**	mg/L	0.10	0.050	1		08/09/24 04:08	16984-48-8	
Sulfate	**37.8**	mg/L	1.0	0.50	1		08/09/24 04:08	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92746286

Sample: HAM-HGWC-120 **Lab ID: 92746286004** Collected: 08/07/24 11:22 Received: 08/09/24 14:15 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	**154**	mg/L	1.0	0.12	1	08/15/24 16:46	08/19/24 16:27	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 12:21	08/16/24 13:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 12:21	08/16/24 13:15	7440-38-2	
Barium	**0.051**	mg/L	0.0050	0.00047	1	08/15/24 12:21	08/16/24 13:15	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 12:21	08/16/24 13:15	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.012	1	08/15/24 12:21	08/16/24 13:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 12:21	08/16/24 13:15	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 12:21	08/16/24 13:15	7440-47-3	
Cobalt	**0.0064**	mg/L	0.0050	0.00032	1	08/15/24 12:21	08/16/24 13:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 12:21	08/16/24 13:15	7439-92-1	
Lithium	**0.023J**	mg/L	0.030	0.0016	1	08/15/24 12:21	08/16/24 13:15	7439-93-2	
Molybdenum	**0.036**	mg/L	0.010	0.00062	1	08/15/24 12:21	08/16/24 13:15	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 12:21	08/16/24 13:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 12:21	08/16/24 13:15	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	08/19/24 16:00	08/20/24 09:40	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**647**	mg/L	25.0	25.0	1		08/12/24 11:32		
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		08/13/24 11:49	16887-00-6	
Fluoride	**0.34**	mg/L	0.10	0.050	1		08/13/24 11:49	16984-48-8	
Sulfate	**191**	mg/L	5.0	2.5	5		08/13/24 22:48	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92746286

Sample: HAM-HGWC-124 **Lab ID: 92746286005** Collected: 08/07/24 09:21 Received: 08/09/24 14:15 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	**97.7**	mg/L	1.0	0.12	1	08/15/24 16:46	08/19/24 16:30	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0020J**	mg/L	0.0030	0.00054	1	08/15/24 12:21	08/16/24 13:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 12:21	08/16/24 13:31	7440-38-2	
Barium	**0.064**	mg/L	0.0050	0.00047	1	08/15/24 12:21	08/16/24 13:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 12:21	08/16/24 13:31	7440-41-7	
Boron	**0.34**	mg/L	0.040	0.012	1	08/15/24 12:21	08/16/24 13:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 12:21	08/16/24 13:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 12:21	08/16/24 13:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 12:21	08/16/24 13:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 12:21	08/16/24 13:31	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 12:21	08/16/24 13:31	7439-93-2	
Molybdenum	**0.0012J**	mg/L	0.010	0.00062	1	08/15/24 12:21	08/16/24 13:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 12:21	08/16/24 13:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 12:21	08/16/24 13:31	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	08/19/24 16:00	08/20/24 09:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**337**	mg/L	25.0	25.0	1		08/12/24 11:34		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.2**	mg/L	1.0	0.60	1		08/13/24 12:03	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/13/24 12:03	16984-48-8	
Sulfate	**69.7**	mg/L	1.0	0.50	1		08/13/24 12:03	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92746286

Sample: HAM-HGWC-125 **Lab ID: 92746286006** Collected: 08/07/24 13:01 Received: 08/09/24 14:15 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	**159**	mg/L	1.0	0.12	1	08/15/24 16:46	08/19/24 16:34	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 12:21	08/16/24 13:36	7440-36-0	
Arsenic	**0.00090J**	mg/L	0.0050	0.00084	1	08/15/24 12:21	08/16/24 13:36	7440-38-2	
Barium	**0.035**	mg/L	0.0050	0.00047	1	08/15/24 12:21	08/16/24 13:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 12:21	08/16/24 13:36	7440-41-7	
Boron	**1.5**	mg/L	0.040	0.012	1	08/15/24 12:21	08/16/24 13:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 12:21	08/16/24 13:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 12:21	08/16/24 13:36	7440-47-3	
Cobalt	**0.012**	mg/L	0.0050	0.00032	1	08/15/24 12:21	08/16/24 13:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 12:21	08/16/24 13:36	7439-92-1	
Lithium	**0.0038J**	mg/L	0.030	0.0016	1	08/15/24 12:21	08/16/24 13:36	7439-93-2	
Molybdenum	**0.0028J**	mg/L	0.010	0.00062	1	08/15/24 12:21	08/16/24 13:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 12:21	08/16/24 13:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 12:21	08/16/24 13:36	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	08/19/24 16:00	08/20/24 09:45	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**695**	mg/L	25.0	25.0	1		08/12/24 11:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.7**	mg/L	1.0	0.60	1		08/13/24 12:17	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		08/13/24 12:17	16984-48-8	
Sulfate	**289**	mg/L	7.0	3.5	7		08/13/24 23:02	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92746286

Sample: HAM-HGWC-126 **Lab ID: 92746286007** Collected: 08/07/24 14:38 Received: 08/09/24 14:15 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	**136**	mg/L	1.0	0.12	1	08/15/24 16:46	08/19/24 16:45	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	08/15/24 12:21	08/16/24 13:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 12:21	08/16/24 13:40	7440-38-2	
Barium	**0.23**	mg/L	0.0050	0.00047	1	08/15/24 12:21	08/16/24 13:40	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 12:21	08/16/24 13:40	7440-41-7	
Boron	**0.021J**	mg/L	0.040	0.012	1	08/15/24 12:21	08/16/24 13:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 12:21	08/16/24 13:40	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 12:21	08/16/24 13:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 12:21	08/16/24 13:40	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 12:21	08/16/24 13:40	7439-92-1	
Lithium	**0.0042J**	mg/L	0.030	0.0016	1	08/15/24 12:21	08/16/24 13:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 12:21	08/16/24 13:40	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 12:21	08/16/24 13:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 12:21	08/16/24 13:40	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	08/19/24 16:00	08/20/24 09:48	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**518**	mg/L	25.0	25.0	1		08/12/24 11:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.7**	mg/L	1.0	0.60	1		08/13/24 12:31	16887-00-6	
Fluoride	**0.50**	mg/L	0.10	0.050	1		08/13/24 12:31	16984-48-8	
Sulfate	**72.8**	mg/L	1.0	0.50	1		08/13/24 12:31	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92746286

Sample: HAM-AP3-FD-01 **Lab ID: 92746286008** Collected: 08/07/24 00:00 Received: 08/09/24 14:15 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	**95.3**	mg/L	1.0	0.12	1	08/15/24 16:46	08/19/24 16:48	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 12:21	08/16/24 13:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 12:21	08/16/24 13:44	7440-38-2	
Barium	**0.066**	mg/L	0.0050	0.00047	1	08/15/24 12:21	08/16/24 13:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 12:21	08/16/24 13:44	7440-41-7	
Boron	**0.37**	mg/L	0.040	0.012	1	08/15/24 12:21	08/16/24 13:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 12:21	08/16/24 13:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 12:21	08/16/24 13:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 12:21	08/16/24 13:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 12:21	08/16/24 13:44	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 12:21	08/16/24 13:44	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00062	1	08/15/24 12:21	08/16/24 13:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 12:21	08/16/24 13:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 12:21	08/16/24 13:44	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	08/19/24 16:00	08/20/24 09:50	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**345**	mg/L	25.0	25.0	1		08/12/24 11:39		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.2**	mg/L	1.0	0.60	1		08/13/24 12:45	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/13/24 12:45	16984-48-8	
Sulfate	**69.2**	mg/L	1.0	0.50	1		08/13/24 12:45	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92746286

Sample: HAM-AP3-FB-01 **Lab ID: 92746286009** Collected: 08/07/24 15:30 Received: 08/09/24 14:15 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	08/15/24 16:46	08/19/24 16:52	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 12:21	08/16/24 14:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 12:21	08/16/24 14:04	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	08/15/24 12:21	08/16/24 14:04	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 12:21	08/16/24 14:04	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/15/24 12:21	08/16/24 14:04	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 12:21	08/16/24 14:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 12:21	08/16/24 14:04	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 12:21	08/16/24 14:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 12:21	08/16/24 14:04	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 12:21	08/16/24 14:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 12:21	08/16/24 14:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 12:21	08/16/24 14:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 12:21	08/16/24 14:04	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	08/19/24 16:00	08/20/24 09:53	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**33.0**	mg/L	25.0	25.0	1		08/12/24 11:39		
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		08/12/24 23:09	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/12/24 23:09	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/12/24 23:09	14808-79-8	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92746286

Sample: HAM-AP3-EB-01 **Lab ID: 92746286010** Collected: 08/07/24 15:35 Received: 08/09/24 14:15 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	08/15/24 16:46	08/19/24 16:55	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 12:21	08/16/24 14:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/15/24 12:21	08/16/24 14:08	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	08/15/24 12:21	08/16/24 14:08	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/15/24 12:21	08/16/24 14:08	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/15/24 12:21	08/16/24 14:08	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/15/24 12:21	08/16/24 14:08	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/15/24 12:21	08/16/24 14:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/15/24 12:21	08/16/24 14:08	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/15/24 12:21	08/16/24 14:08	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/15/24 12:21	08/16/24 14:08	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/15/24 12:21	08/16/24 14:08	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/15/24 12:21	08/16/24 14:08	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/15/24 12:21	08/16/24 14:08	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	08/19/24 16:00	08/20/24 10:01	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**34.0**	mg/L	25.0	25.0	1		08/12/24 11:39		
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		08/12/24 23:23	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/12/24 23:23	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/12/24 23:23	14808-79-8	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92746286

QC Batch: 874538
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746286001, 92746286002, 92746286003

METHOD BLANK: 4505177 Matrix: Water
Associated Lab Samples: 92746286001, 92746286002, 92746286003

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	92746435001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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-3
Pace Project No.: 92746286

QC Batch: 875957
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746286004, 92746286005, 92746286006, 92746286007, 92746286008, 92746286009, 92746286010

METHOD BLANK: 4512098 Matrix: Water
Associated Lab Samples: 92746286004, 92746286005, 92746286006, 92746286007, 92746286008, 92746286009, 92746286010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/19/24 15:46	

LABORATORY CONTROL SAMPLE: 4512099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4512100 4512101

Parameter	Units	92746285005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	182	1	1	187	186	444	443	75-125	0	20	M1

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92746286

QC Batch: 874205
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746286001, 92746286002, 92746286003

METHOD BLANK: 4503459 Matrix: Water
Associated Lab Samples: 92746286001, 92746286002, 92746286003

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	92746286001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	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-3
Pace Project No.: 92746286

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4503461 4503462

Parameter	Units	92746286001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92746286

QC Batch: 875884
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746286004, 92746286005, 92746286006, 92746286007, 92746286008, 92746286009, 92746286010

METHOD BLANK: 4511647 Matrix: Water
Associated Lab Samples: 92746286004, 92746286005, 92746286006, 92746286007, 92746286008, 92746286009, 92746286010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	08/16/24 13:06	
Arsenic	mg/L	ND	0.0050	0.00084	08/16/24 13:06	
Barium	mg/L	ND	0.0050	0.00047	08/16/24 13:06	
Beryllium	mg/L	ND	0.00050	0.000094	08/16/24 13:06	
Boron	mg/L	ND	0.040	0.012	08/16/24 13:06	
Cadmium	mg/L	ND	0.00050	0.00010	08/16/24 13:06	
Chromium	mg/L	ND	0.0050	0.0019	08/16/24 13:06	
Cobalt	mg/L	ND	0.0050	0.00032	08/16/24 13:06	
Lead	mg/L	ND	0.0010	0.00016	08/16/24 13:06	
Lithium	mg/L	ND	0.030	0.0016	08/16/24 13:06	
Molybdenum	mg/L	ND	0.010	0.00062	08/16/24 13:06	
Selenium	mg/L	ND	0.0050	0.00096	08/16/24 13:06	
Thallium	mg/L	ND	0.0010	0.00038	08/16/24 13:06	

LABORATORY CONTROL SAMPLE: 4511648

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.11	108	80-120	
Boron	mg/L	1	1.1	114	80-120	
Cadmium	mg/L	0.1	0.11	107	80-120	
Chromium	mg/L	0.1	0.11	110	80-120	
Cobalt	mg/L	0.1	0.11	108	80-120	
Lead	mg/L	0.1	0.10	103	80-120	
Lithium	mg/L	0.1	0.11	112	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.11	107	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4511649 4511650

Parameter	Units	92746286004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	107	107	75-125	0	20	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92746286

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4511649 4511650

Parameter	Units	92746286004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.051	0.1	0.1	0.15	0.15	101	100	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	3	20	
Boron	mg/L	1.1	1	1	2.1	2.1	91	99	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.097	103	97	75-125	5	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	3	20	
Cobalt	mg/L	0.0064	0.1	0.1	0.11	0.10	99	97	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	
Lithium	mg/L	0.023J	0.1	0.1	0.12	0.12	99	102	75-125	2	20	
Molybdenum	mg/L	0.036	0.1	0.1	0.14	0.14	104	107	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	2	20	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92746286

QC Batch: 876620
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746286001, 92746286002, 92746286003, 92746286004, 92746286005, 92746286006, 92746286007, 92746286008, 92746286009, 92746286010

METHOD BLANK: 4515362 Matrix: Water
Associated Lab Samples: 92746286001, 92746286002, 92746286003, 92746286004, 92746286005, 92746286006, 92746286007, 92746286008, 92746286009, 92746286010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/20/24 09:05	

LABORATORY CONTROL SAMPLE: 4515363

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4515364 4515365

Parameter	Units	92746286001 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	0.0026	0.0026	106	104	75-125	2	20	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92746286

QC Batch: 874243
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746286001, 92746286002, 92746286003

METHOD BLANK: 4503653 Matrix: Water
Associated Lab Samples: 92746286001, 92746286002, 92746286003

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-3
Pace Project No.: 92746286

QC Batch: 874945 | 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: 92746286004, 92746286005, 92746286006, 92746286007, 92746286008, 92746286009, 92746286010

METHOD BLANK: 4506901 Matrix: Water
Associated Lab Samples: 92746286004, 92746286005, 92746286006, 92746286007, 92746286008, 92746286009, 92746286010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/12/24 11:29	

LABORATORY CONTROL SAMPLE: 4506902

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	391	98	80-120	

SAMPLE DUPLICATE: 4506903

Parameter	Units	92745465020 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	27.0	27.0	0	10	

SAMPLE DUPLICATE: 4506904

Parameter	Units	92746286004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	647	631	3	10	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92746286

QC Batch: 874380
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92746286001, 92746286002, 92746286003

METHOD BLANK: 4504473 Matrix: Water
Associated Lab Samples: 92746286001, 92746286002, 92746286003

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	92746012001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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	92746286002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92746286

QC Batch: 875040
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92746286004, 92746286005, 92746286006, 92746286007, 92746286008, 92746286009, 92746286010

METHOD BLANK: 4507379 Matrix: Water
Associated Lab Samples: 92746286004, 92746286005, 92746286006, 92746286007, 92746286008, 92746286009, 92746286010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/12/24 22:41	
Fluoride	mg/L	ND	0.10	0.050	08/12/24 22:41	
Sulfate	mg/L	ND	1.0	0.50	08/12/24 22:41	

LABORATORY CONTROL SAMPLE: 4507380

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.0	104	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	50	52.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4507381 4507382

Parameter	Units	92746285005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	80.2	50	50	104	105	48	50	90-110	1	10	M1
Fluoride	mg/L	0.080J	2.5	2.5	2.4	2.4	92	94	90-110	3	10	
Sulfate	mg/L	286	50	50	319	321	65	69	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4507383 4507384

Parameter	Units	92746891001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	28.6	50	50	78.9	79.3	101	101	90-110	0	10	
Fluoride	mg/L	0.074J	2.5	2.5	2.6	2.6	99	100	90-110	0	10	
Sulfate	mg/L	86.5	50	50	116	116	60	58	90-110	1	10	M1

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QUALIFIERS

Project: Hammond AP-3
Pace Project No.: 92746286

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.

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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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-3
Pace Project No.: 92746286

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92746286001	**HAM-HGWA-45D**	EPA 3010A	874538	EPA 6010D	874645
92746286002	**HAM-HGWC-121A**	EPA 3010A	874538	EPA 6010D	874645
92746286003	**HAM-HGWA-122**	EPA 3010A	874538	EPA 6010D	874645
92746286004	**HAM-HGWC-120**	EPA 3010A	875957	EPA 6010D	876038
92746286005	**HAM-HGWC-124**	EPA 3010A	875957	EPA 6010D	876038
92746286006	**HAM-HGWC-125**	EPA 3010A	875957	EPA 6010D	876038
92746286007	**HAM-HGWC-126**	EPA 3010A	875957	EPA 6010D	876038
92746286008	**HAM-AP3-FD-01**	EPA 3010A	875957	EPA 6010D	876038
92746286009	**HAM-AP3-FB-01**	EPA 3010A	875957	EPA 6010D	876038
92746286010	**HAM-AP3-EB-01**	EPA 3010A	875957	EPA 6010D	876038
92746286001	**HAM-HGWA-45D**	EPA 3005A	874205	EPA 6020B	874325
92746286002	**HAM-HGWC-121A**	EPA 3005A	874205	EPA 6020B	874325
92746286003	**HAM-HGWA-122**	EPA 3005A	874205	EPA 6020B	874325
92746286004	**HAM-HGWC-120**	EPA 3005A	875884	EPA 6020B	876010
92746286005	**HAM-HGWC-124**	EPA 3005A	875884	EPA 6020B	876010
92746286006	**HAM-HGWC-125**	EPA 3005A	875884	EPA 6020B	876010
92746286007	**HAM-HGWC-126**	EPA 3005A	875884	EPA 6020B	876010
92746286008	**HAM-AP3-FD-01**	EPA 3005A	875884	EPA 6020B	876010
92746286009	**HAM-AP3-FB-01**	EPA 3005A	875884	EPA 6020B	876010
92746286010	**HAM-AP3-EB-01**	EPA 3005A	875884	EPA 6020B	876010
92746286001	**HAM-HGWA-45D**	EPA 7470A	876620	EPA 7470A	876670
92746286002	**HAM-HGWC-121A**	EPA 7470A	876620	EPA 7470A	876670
92746286003	**HAM-HGWA-122**	EPA 7470A	876620	EPA 7470A	876670
92746286004	**HAM-HGWC-120**	EPA 7470A	876620	EPA 7470A	876670
92746286005	**HAM-HGWC-124**	EPA 7470A	876620	EPA 7470A	876670
92746286006	**HAM-HGWC-125**	EPA 7470A	876620	EPA 7470A	876670
92746286007	**HAM-HGWC-126**	EPA 7470A	876620	EPA 7470A	876670
92746286008	**HAM-AP3-FD-01**	EPA 7470A	876620	EPA 7470A	876670
92746286009	**HAM-AP3-FB-01**	EPA 7470A	876620	EPA 7470A	876670
92746286010	**HAM-AP3-EB-01**	EPA 7470A	876620	EPA 7470A	876670
92746286001	**HAM-HGWA-45D**	SM 2540C-2015	874243		
92746286002	**HAM-HGWC-121A**	SM 2540C-2015	874243		
92746286003	**HAM-HGWA-122**	SM 2540C-2015	874243		
92746286004	**HAM-HGWC-120**	SM 2540C-2015	874945		
92746286005	**HAM-HGWC-124**	SM 2540C-2015	874945		
92746286006	**HAM-HGWC-125**	SM 2540C-2015	874945		
92746286007	**HAM-HGWC-126**	SM 2540C-2015	874945		
92746286008	**HAM-AP3-FD-01**	SM 2540C-2015	874945		
92746286009	**HAM-AP3-FB-01**	SM 2540C-2015	874945		
92746286010	**HAM-AP3-EB-01**	SM 2540C-2015	874945		
92746286001	**HAM-HGWA-45D**	EPA 300.0 Rev 2.1 1993	874380		
92746286002	**HAM-HGWC-121A**	EPA 300.0 Rev 2.1 1993	874380		
92746286003	**HAM-HGWA-122**	EPA 300.0 Rev 2.1 1993	874380		
92746286004	**HAM-HGWC-120**	EPA 300.0 Rev 2.1 1993	875040		
92746286005	**HAM-HGWC-124**	EPA 300.0 Rev 2.1 1993	875040		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-3
Pace Project No.: 92746286

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92746286006	**HAM-HGWC-125**	EPA 300.0 Rev 2.1 1993	875040		
92746286007	**HAM-HGWC-126**	EPA 300.0 Rev 2.1 1993	875040		
92746286008	**HAM-AP3-FD-01**	EPA 300.0 Rev 2.1 1993	875040		
92746286009	**HAM-AP3-FB-01**	EPA 300.0 Rev 2.1 1993	875040		
92746286010	**HAM-AP3-EB-01**	EPA 300.0 Rev 2.1 1993	875040		

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Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #

WO# : 92746286

92746286

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

WO#: 92746286

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

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)	IBP1N	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)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		1																							
2		1	1		2		1																							
3		1	1		2		1																							
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pH Adjustment Log for Preserved Samples

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

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

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

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-3
Project Number:	GW6581D

Section C — Invoice Information:

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D — Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N	N		
1	HGWA-45D	WG	G	8/6/24	14:40			22	5	2		3							X	X	X	X	N	001
2	HGWC-121A	WG	G	08/06/24	16:22			20	5	2		3							X	X	X	X	N	002
3	HGWA-122	WG	G	08/06/24	12:56			23	5	2		3							X	X	X	X	N	003
4																								
5																								
6																								
7							TK 8/6/24																	
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2024S2	Zachary Webb / Geosyntec	08/06/2024	2000	Thomas Kessler / Geosyntec	08/06/2024	2000	
	Thomas Kessler	08/06/2024	1225	Ryan Williams / Pace	8/7/2024	1225	
	Ryan Williams / Pace	8/7/2024	1505		8/7/24	1505	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Zachary Webb / Geosyntec Consultants, Inc

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 08/06/2024

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-012rev.07, 15-Feb-2017

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 #: 92746286

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: 9/4/24 CM

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

Qualtrax ID: 69614

*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 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)	BP1N	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				1																			2				
2		1	1				1																			2				
3		1	1				1																			2				
4		1	1				1																			2				
5		1	1				1																			2				
6		1	1				1																			2				
7		1	1				1																			2				
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.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

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-3
Project Number: GW6581D

Section C — Invoice Information

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: GA

Section D — Required Client Information

Valid Matrix Codes: MATRIX CODE — DRINKING WATER (DW), WATER (WT), WASTE WATER (WW), PRODUCT (P), SOIL/SOLID (SL), OIL (OL), WIPE (WP), AIR (AR), TISSUE (TS), OTHER (OT)

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-HGWC-120	WQ	G	08/07/2024	1122			22	5	2		3						N	N	N	004
2	HAM-HGWC-124	WQ	G	08/07/2024	0921			19	5	2		3						N	N	N	005
3	HAM-HGWC-125	WQ	G	08/07/2024	1301			24	5	2		3						N	N	N	006
4	HAM-HGWC-126	WQ	G	08/07/2024	1436			24	5	2		3						N	N	N	007
5	HAM-AP3-FD-01	WQ	G	08/07/2024	0000			19	5	2		3						N	N	N	008
6	HAM-AP3-FB-01	WQ	G	08/07/2024	1530			19	5	2		3						N	N	N	009
7	HAM-AP3-EB-01	WQ	G	08/07/2024	1535			19	5	2		3						N	N	N	010 Last Sample
8																					
9																					
10																					
11																					
12																					

TK: 08/07/2024

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-202452	Zach Webb / Geosyntec	8/9/2024	1415	Thomas Wessels	8/9/2024	1415	
	Thomas Wessels / Geosyntec	8/9/2024	1415	Ryan Williams / Pace	8/9/2024	1415	
	Ryan Williams / Pace	8/9/2024	1655	Charles Hurley	8/9/24	1655	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Zach Webb (Geosyntec Consultants, Inc)
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 08/07/24

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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

August 19, 2024

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

RE: Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on August 07, 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

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

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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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92746292001	**HAM-HGWA-43D**	Water	08/06/24 10:07	08/07/24 12:25
92746292002	**HAM-HGWA-44D**	Water	08/06/24 10:03	08/07/24 12:25
92746292003	**HAM-UGRD-FD-01**	Water	08/06/24 00:00	08/07/24 12:25
92746292004	**HAM-UGRD-EB-01**	Water	08/06/24 17:15	08/07/24 12:25
92746292005	**HAM-UGRD-FB-01**	Water	08/06/24 17:10	08/07/24 12:25
92746292006	**HAM-HGWA-1**	Water	08/05/24 16:37	08/07/24 12:25
92746292007	**HAM-HGWA-2**	Water	08/05/24 16:30	08/07/24 12:25
92746292008	**HAM-HGWA-3**	Water	08/05/24 16:33	08/07/24 12:25

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92746292001	**HAM-HGWA-43D**	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
92746292002	**HAM-HGWA-44D**	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
92746292003	**HAM-UGRD-FD-01**	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
92746292004	**HAM-UGRD-EB-01**	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
92746292005	**HAM-UGRD-FB-01**	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
92746292006	**HAM-HGWA-1**	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
92746292007	**HAM-HGWA-2**	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
92746292008	**HAM-HGWA-3**	EPA 6010D	MJS2	1
		EPA 6020B	CW1	13

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

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SUMMARY OF DETECTION

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746292001	**HAM-HGWA-43D**					
EPA 6010D	Calcium	57.2	mg/L	1.0	08/15/24 23:37	
EPA 6020B	Barium	0.28	mg/L	0.0050	08/13/24 12:43	
EPA 6020B	Boron	0.043	mg/L	0.040	08/13/24 12:43	
EPA 6020B	Lithium	0.0025J	mg/L	0.030	08/13/24 12:43	
EPA 6020B	Molybdenum	0.0010J	mg/L	0.010	08/09/24 19:18	
SM 2540C-2015	Total Dissolved Solids	283	mg/L	25.0	08/09/24 11:43	
EPA 300.0 Rev 2.1 1993	Chloride	4.0	mg/L	1.0	08/09/24 05:05	
EPA 300.0 Rev 2.1 1993	Fluoride	0.21	mg/L	0.10	08/09/24 05:05	
EPA 300.0 Rev 2.1 1993	Sulfate	25.5	mg/L	1.0	08/09/24 05:05	
92746292002	**HAM-HGWA-44D**					
EPA 6010D	Calcium	7.1	mg/L	1.0	08/15/24 23:41	
EPA 6020B	Barium	0.11	mg/L	0.0050	08/13/24 12:46	
EPA 6020B	Boron	0.52	mg/L	0.040	08/13/24 12:46	
EPA 6020B	Lithium	0.10	mg/L	0.030	08/13/24 12:46	
EPA 6020B	Molybdenum	0.00079J	mg/L	0.010	08/09/24 19:22	
SM 2540C-2015	Total Dissolved Solids	380	mg/L	25.0	08/09/24 11:43	
EPA 300.0 Rev 2.1 1993	Chloride	30.2	mg/L	1.0	08/09/24 05:19	
EPA 300.0 Rev 2.1 1993	Fluoride	1.3	mg/L	0.10	08/09/24 05:19	
EPA 300.0 Rev 2.1 1993	Sulfate	0.86J	mg/L	1.0	08/09/24 05:19	
92746292003	**HAM-UGRD-FD-01**					
EPA 6010D	Calcium	56.9	mg/L	1.0	08/15/24 20:07	
EPA 6020B	Barium	0.28	mg/L	0.0050	08/13/24 12:50	
EPA 6020B	Boron	0.043	mg/L	0.040	08/13/24 12:50	
EPA 6020B	Lithium	0.0027J	mg/L	0.030	08/13/24 12:50	
EPA 6020B	Molybdenum	0.00096J	mg/L	0.010	08/09/24 19:26	
SM 2540C-2015	Total Dissolved Solids	295	mg/L	25.0	08/09/24 11:44	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	08/09/24 05:34	
EPA 300.0 Rev 2.1 1993	Fluoride	0.21	mg/L	0.10	08/09/24 05:34	
EPA 300.0 Rev 2.1 1993	Sulfate	25.0	mg/L	1.0	08/09/24 05:34	
92746292004	**HAM-UGRD-EB-01**					
SM 2540C-2015	Total Dissolved Solids	41.0	mg/L	25.0	08/09/24 11:44	D6
92746292005	**HAM-UGRD-FB-01**					
SM 2540C-2015	Total Dissolved Solids	135	mg/L	25.0	08/09/24 11:45	
92746292006	**HAM-HGWA-1**					
EPA 6010D	Calcium	113	mg/L	1.0	08/15/24 20:25	M1
EPA 6020B	Barium	0.032	mg/L	0.0050	08/13/24 13:01	
EPA 6020B	Boron	0.020J	mg/L	0.040	08/13/24 13:01	
EPA 6020B	Cobalt	0.00055J	mg/L	0.0050	08/09/24 19:39	
SM 2540C-2015	Total Dissolved Solids	444	mg/L	25.0	08/08/24 12:18	
EPA 300.0 Rev 2.1 1993	Chloride	8.7	mg/L	1.0	08/09/24 06:36	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	08/09/24 06:36	
EPA 300.0 Rev 2.1 1993	Sulfate	49.4	mg/L	1.0	08/09/24 06:36	M1
92746292007	**HAM-HGWA-2**					
EPA 6010D	Calcium	34.7	mg/L	1.0	08/15/24 20:38	

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SUMMARY OF DETECTION

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746292007	**HAM-HGWA-2**					
EPA 6020B	Barium	0.062	mg/L	0.0050	08/13/24 13:05	
EPA 6020B	Beryllium	0.00026J	mg/L	0.00050	08/13/24 13:05	
EPA 6020B	Boron	0.057	mg/L	0.040	08/13/24 13:05	
EPA 6020B	Cadmium	0.00026J	mg/L	0.00050	08/09/24 19:43	
EPA 6020B	Cobalt	0.032	mg/L	0.0050	08/09/24 19:43	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	08/13/24 13:05	
EPA 6020B	Selenium	0.0013J	mg/L	0.0050	08/09/24 19:43	
SM 2540C-2015	Total Dissolved Solids	217	mg/L	25.0	08/08/24 12:18	
EPA 300.0 Rev 2.1 1993	Chloride	7.9	mg/L	1.0	08/09/24 07:19	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	08/09/24 07:19	
EPA 300.0 Rev 2.1 1993	Sulfate	87.2	mg/L	2.0	08/09/24 15:44	
92746292008	**HAM-HGWA-3**					
EPA 6010D	Calcium	83.3	mg/L	1.0	08/15/24 20:42	
EPA 6020B	Barium	0.13	mg/L	0.0050	08/13/24 13:08	
EPA 6020B	Lithium	0.0034J	mg/L	0.030	08/13/24 13:08	
SM 2540C-2015	Total Dissolved Solids	304	mg/L	25.0	08/08/24 12:18	
EPA 300.0 Rev 2.1 1993	Chloride	5.2	mg/L	1.0	08/09/24 07:33	
EPA 300.0 Rev 2.1 1993	Fluoride	0.077J	mg/L	0.10	08/09/24 07:33	
EPA 300.0 Rev 2.1 1993	Sulfate	31.1	mg/L	1.0	08/09/24 07:33	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Sample: HAM-HGWA-43D **Lab ID: 92746292001** Collected: 08/06/24 10:07 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**57.2**	mg/L	1.0	0.12	1	08/09/24 11:23	08/15/24 23:37	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	08/08/24 10:21	08/09/24 19:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 19:18	7440-38-2	
Barium	**0.28**	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/13/24 12:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/13/24 12:43	7440-41-7	
Boron	**0.043**	mg/L	0.040	0.012	1	08/08/24 10:21	08/13/24 12:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 19:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 19:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 19:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 19:18	7439-92-1	
Lithium	**0.0025J**	mg/L	0.030	0.0016	1	08/08/24 10:21	08/13/24 12:43	7439-93-2	
Molybdenum	**0.0010J**	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 19:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 19:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/13/24 12:43	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	08/12/24 13:00	08/12/24 16:29	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**283**	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	**4.0**	mg/L	1.0	0.60	1		08/09/24 05:05	16887-00-6	
Fluoride	**0.21**	mg/L	0.10	0.050	1		08/09/24 05:05	16984-48-8	
Sulfate	**25.5**	mg/L	1.0	0.50	1		08/09/24 05:05	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Sample: HAM-HGWA-44D **Lab ID: 92746292002** Collected: 08/06/24 10:03 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**7.1**	mg/L	1.0	0.12	1	08/09/24 11:23	08/15/24 23:41	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 19:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 19:22	7440-38-2	
Barium	**0.11**	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/13/24 12:46	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/13/24 12:46	7440-41-7	
Boron	**0.52**	mg/L	0.040	0.012	1	08/08/24 10:21	08/13/24 12:46	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 19:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 19:22	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 19:22	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 19:22	7439-92-1	
Lithium	**0.10**	mg/L	0.030	0.0016	1	08/08/24 10:21	08/13/24 12:46	7439-93-2	
Molybdenum	**0.00079J**	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 19:22	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 19:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/13/24 12:46	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	08/12/24 13:00	08/12/24 16:32	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**380**	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	**30.2**	mg/L	1.0	0.60	1		08/09/24 05:19	16887-00-6	
Fluoride	**1.3**	mg/L	0.10	0.050	1		08/09/24 05:19	16984-48-8	
Sulfate	**0.86J**	mg/L	1.0	0.50	1		08/09/24 05:19	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Sample: HAM-UGRD-FD-01 **Lab ID: 92746292003** Collected: 08/06/24 00:00 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**56.9**	mg/L	1.0	0.12	1	08/10/24 14:24	08/15/24 20:07	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 19:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 19:26	7440-38-2	
Barium	**0.28**	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/13/24 12:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/13/24 12:50	7440-41-7	
Boron	**0.043**	mg/L	0.040	0.012	1	08/08/24 10:21	08/13/24 12:50	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 19:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 19:26	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 19:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 19:26	7439-92-1	
Lithium	**0.0027J**	mg/L	0.030	0.0016	1	08/08/24 10:21	08/13/24 12:50	7439-93-2	
Molybdenum	**0.00096J**	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 19:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 19:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/13/24 12:50	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	08/12/24 13:00	08/12/24 16:34	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**295**	mg/L	25.0	25.0	1		08/09/24 11:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.1**	mg/L	1.0	0.60	1		08/09/24 05:34	16887-00-6	
Fluoride	**0.21**	mg/L	0.10	0.050	1		08/09/24 05:34	16984-48-8	
Sulfate	**25.0**	mg/L	1.0	0.50	1		08/09/24 05:34	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Sample: HAM-UGRD-EB-01 **Lab ID: 92746292004** Collected: 08/06/24 17:15 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	08/10/24 14:24	08/15/24 20:17	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00054	1	08/08/24 10:21	08/09/24 19:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 19:30	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/13/24 12:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/13/24 12:54	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/08/24 10:21	08/13/24 12:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 19:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 19:30	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 19:30	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 19:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/08/24 10:21	08/13/24 12:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 19:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 19:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/13/24 12:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/12/24 13:00	08/12/24 16:37	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**41.0**	mg/L	25.0	25.0	1		08/09/24 11:44		D6
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		08/08/24 22:43	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/08/24 22:43	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/08/24 22:43	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Sample: HAM-UGRD-FB-01 **Lab ID: 92746292005** Collected: 08/06/24 17:10 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	08/10/24 14:24	08/15/24 20:21	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 19:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 19:34	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/13/24 12:57	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/13/24 12:57	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/08/24 10:21	08/13/24 12:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 19:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 19:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 19:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 19:34	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/08/24 10:21	08/13/24 12:57	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 19:34	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 19:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/13/24 12:57	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	08/12/24 13:00	08/12/24 16:39	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**135**	mg/L	25.0	25.0	1		08/09/24 11:45		
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		08/08/24 22:57	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/08/24 22:57	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/08/24 22:57	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Sample: HAM-HGWA-1 **Lab ID: 92746292006** Collected: 08/05/24 16:37 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**113**	mg/L	1.0	0.12	1	08/10/24 14:24	08/15/24 20:25	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	08/08/24 10:21	08/09/24 19:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 19:39	7440-38-2	
Barium	**0.032**	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/13/24 13:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/13/24 13:01	7440-41-7	
Boron	**0.020J**	mg/L	0.040	0.012	1	08/08/24 10:21	08/13/24 13:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 19:39	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 19:39	7440-47-3	
Cobalt	**0.00055J**	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 19:39	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 19:39	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	08/08/24 10:21	08/13/24 13:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 19:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 19:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/13/24 13:01	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	08/12/24 13:00	08/12/24 16:42	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**444**	mg/L	25.0	25.0	1		08/08/24 12:18		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.7**	mg/L	1.0	0.60	1		08/09/24 06:36	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		08/09/24 06:36	16984-48-8	
Sulfate	**49.4**	mg/L	1.0	0.50	1		08/09/24 06:36	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Sample: HAM-HGWA-2 **Lab ID: 92746292007** Collected: 08/05/24 16:30 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**34.7**	mg/L	1.0	0.12	1	08/10/24 14:24	08/15/24 20:38	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 19:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 19:43	7440-38-2	
Barium	**0.062**	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/13/24 13:05	7440-39-3	
Beryllium	**0.00026J**	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/13/24 13:05	7440-41-7	
Boron	**0.057**	mg/L	0.040	0.012	1	08/08/24 10:21	08/13/24 13:05	7440-42-8	
Cadmium	**0.00026J**	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 19:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 19:43	7440-47-3	
Cobalt	**0.032**	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 19:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 19:43	7439-92-1	
Lithium	**0.0019J**	mg/L	0.030	0.0016	1	08/08/24 10:21	08/13/24 13:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 19:43	7439-98-7	
Selenium	**0.0013J**	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 19:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/13/24 13:05	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	08/12/24 13:00	08/12/24 16:45	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**217**	mg/L	25.0	25.0	1		08/08/24 12:18		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.9**	mg/L	1.0	0.60	1		08/09/24 07:19	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		08/09/24 07:19	16984-48-8	
Sulfate	**87.2**	mg/L	2.0	1.0	2		08/09/24 15:44	14808-79-8	

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ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Sample: HAM-HGWA-3 **Lab ID: 92746292008** Collected: 08/05/24 16:33 Received: 08/07/24 12:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**83.3**	mg/L	1.0	0.12	1	08/10/24 14:24	08/15/24 20:42	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 19:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00084	1	08/08/24 10:21	08/09/24 19:47	7440-38-2	
Barium	**0.13**	mg/L	0.0050	0.00047	1	08/08/24 10:21	08/13/24 13:08	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	08/08/24 10:21	08/13/24 13:08	7440-41-7	
Boron	ND	mg/L	0.040	0.012	1	08/08/24 10:21	08/13/24 13:08	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	08/08/24 10:21	08/09/24 19:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	08/08/24 10:21	08/09/24 19:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	08/08/24 10:21	08/09/24 19:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	08/08/24 10:21	08/09/24 19:47	7439-92-1	
Lithium	**0.0034J**	mg/L	0.030	0.0016	1	08/08/24 10:21	08/13/24 13:08	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	08/08/24 10:21	08/09/24 19:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	08/08/24 10:21	08/09/24 19:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	08/08/24 10:21	08/13/24 13:08	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	08/12/24 13:00	08/12/24 16:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**304**	mg/L	25.0	25.0	1		08/08/24 12:18		
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		08/09/24 07:33	16887-00-6	
Fluoride	**0.077J**	mg/L	0.10	0.050	1		08/09/24 07:33	16984-48-8	
Sulfate	**31.1**	mg/L	1.0	0.50	1		08/09/24 07:33	14808-79-8	

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

QC Batch: 874538
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746292001, 92746292002

METHOD BLANK: 4505177 Matrix: Water
Associated Lab Samples: 92746292001, 92746292002

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	92746435001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

QC Batch: 874768
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746292003, 92746292004, 92746292005, 92746292006, 92746292007, 92746292008

METHOD BLANK: 4506473 Matrix: Water
Associated Lab Samples: 92746292003, 92746292004, 92746292005, 92746292006, 92746292007, 92746292008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/15/24 20:00	

LABORATORY CONTROL SAMPLE: 4506474

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4506475 4506476

Parameter	Units	92746292006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	113	1	1	112	114	-137	107	75-125	2	20	M1

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

QC Batch: 874205
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746292001, 92746292002, 92746292003, 92746292004, 92746292005, 92746292006, 92746292007, 92746292008

METHOD BLANK: 4503459 Matrix: Water
Associated Lab Samples: 92746292001, 92746292002, 92746292003, 92746292004, 92746292005, 92746292006, 92746292007, 92746292008

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	92746286001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	2	20	

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4503461 4503462

Parameter	Units	92746286001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20	
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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

QC Batch: 874947
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746292001, 92746292002, 92746292003, 92746292004, 92746292005, 92746292006, 92746292007, 92746292008

METHOD BLANK: 4506909 Matrix: Water
Associated Lab Samples: 92746292001, 92746292002, 92746292003, 92746292004, 92746292005, 92746292006, 92746292007, 92746292008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/12/24 15:59	

LABORATORY CONTROL SAMPLE: 4506910

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4506911 4506912

Parameter	Units	92746435001 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	0.0025	0.0017	101	67	75-125	41	20	M1,R1

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

QC Batch: 874221
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92746292006, 92746292007, 92746292008

METHOD BLANK: 4503508 Matrix: Water
Associated Lab Samples: 92746292006, 92746292007, 92746292008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/08/24 12:15	

LABORATORY CONTROL SAMPLE: 4503509

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	405	101	80-120	

SAMPLE DUPLICATE: 4503510

Parameter	Units	92745465014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	226	219	3	10	

SAMPLE DUPLICATE: 4503511

Parameter	Units	92745784003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	102	107	5	10	

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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

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: 92746292001, 92746292002, 92746292003, 92746292004, 92746292005

METHOD BLANK: 4503653 Matrix: Water
Associated Lab Samples: 92746292001, 92746292002, 92746292003, 92746292004, 92746292005

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: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

QC Batch: 874380
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92746292001, 92746292002, 92746292003, 92746292004, 92746292005

METHOD BLANK: 4504473 Matrix: Water
Associated Lab Samples: 92746292001, 92746292002, 92746292003, 92746292004, 92746292005

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	92746012001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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	92746286002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

QC Batch: 874382
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92746292006, 92746292007, 92746292008

METHOD BLANK: 4504498 Matrix: Water
Associated Lab Samples: 92746292006, 92746292007, 92746292008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/08/24 22:14	
Fluoride	mg/L	ND	0.10	0.050	08/08/24 22:14	
Sulfate	mg/L	ND	1.0	0.50	08/08/24 22:14	

LABORATORY CONTROL SAMPLE: 4504499

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.3	103	90-110	
Fluoride	mg/L	2.5	2.6	104	90-110	
Sulfate	mg/L	50	51.2	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4504500 4504501

Parameter	Units	92746292006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	8.7	50	50	59.5	60.3	102	103	90-110	1	10	
Fluoride	mg/L	0.11	2.5	2.5	2.6	2.7	101	103	90-110	2	10	
Sulfate	mg/L	49.4	50	50	87.3	85.9	76	73	90-110	2	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4504502 4504503

Parameter	Units	92746434001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.7	50	50	56.6	57.6	102	104	90-110	2	10	
Fluoride	mg/L	0.053J	2.5	2.5	2.7	2.8	105	109	90-110	3	10	
Sulfate	mg/L	ND	50	50	50.5	51.6	100	102	90-110	2	10	

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QUALIFIERS

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

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.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond Pooled Upgradien
Pace Project No.: 92746292

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92746292001	**HAM-HGWA-43D**	EPA 3010A	874538	EPA 6010D	874645
92746292002	**HAM-HGWA-44D**	EPA 3010A	874538	EPA 6010D	874645
92746292003	**HAM-UGRD-FD-01**	EPA 3010A	874768	EPA 6010D	874814
92746292004	**HAM-UGRD-EB-01**	EPA 3010A	874768	EPA 6010D	874814
92746292005	**HAM-UGRD-FB-01**	EPA 3010A	874768	EPA 6010D	874814
92746292006	**HAM-HGWA-1**	EPA 3010A	874768	EPA 6010D	874814
92746292007	**HAM-HGWA-2**	EPA 3010A	874768	EPA 6010D	874814
92746292008	**HAM-HGWA-3**	EPA 3010A	874768	EPA 6010D	874814
92746292001	**HAM-HGWA-43D**	EPA 3005A	874205	EPA 6020B	874325
92746292002	**HAM-HGWA-44D**	EPA 3005A	874205	EPA 6020B	874325
92746292003	**HAM-UGRD-FD-01**	EPA 3005A	874205	EPA 6020B	874325
92746292004	**HAM-UGRD-EB-01**	EPA 3005A	874205	EPA 6020B	874325
92746292005	**HAM-UGRD-FB-01**	EPA 3005A	874205	EPA 6020B	874325
92746292006	**HAM-HGWA-1**	EPA 3005A	874205	EPA 6020B	874325
92746292007	**HAM-HGWA-2**	EPA 3005A	874205	EPA 6020B	874325
92746292008	**HAM-HGWA-3**	EPA 3005A	874205	EPA 6020B	874325
92746292001	**HAM-HGWA-43D**	EPA 7470A	874947	EPA 7470A	875009
92746292002	**HAM-HGWA-44D**	EPA 7470A	874947	EPA 7470A	875009
92746292003	**HAM-UGRD-FD-01**	EPA 7470A	874947	EPA 7470A	875009
92746292004	**HAM-UGRD-EB-01**	EPA 7470A	874947	EPA 7470A	875009
92746292005	**HAM-UGRD-FB-01**	EPA 7470A	874947	EPA 7470A	875009
92746292006	**HAM-HGWA-1**	EPA 7470A	874947	EPA 7470A	875009
92746292007	**HAM-HGWA-2**	EPA 7470A	874947	EPA 7470A	875009
92746292008	**HAM-HGWA-3**	EPA 7470A	874947	EPA 7470A	875009
92746292001	**HAM-HGWA-43D**	SM 2540C-2015	874243		
92746292002	**HAM-HGWA-44D**	SM 2540C-2015	874243		
92746292003	**HAM-UGRD-FD-01**	SM 2540C-2015	874243		
92746292004	**HAM-UGRD-EB-01**	SM 2540C-2015	874243		
92746292005	**HAM-UGRD-FB-01**	SM 2540C-2015	874243		
92746292006	**HAM-HGWA-1**	SM 2540C-2015	874221		
92746292007	**HAM-HGWA-2**	SM 2540C-2015	874221		
92746292008	**HAM-HGWA-3**	SM 2540C-2015	874221		
92746292001	**HAM-HGWA-43D**	EPA 300.0 Rev 2.1 1993	874380		
92746292002	**HAM-HGWA-44D**	EPA 300.0 Rev 2.1 1993	874380		
92746292003	**HAM-UGRD-FD-01**	EPA 300.0 Rev 2.1 1993	874380		
92746292004	**HAM-UGRD-EB-01**	EPA 300.0 Rev 2.1 1993	874380		
92746292005	**HAM-UGRD-FB-01**	EPA 300.0 Rev 2.1 1993	874380		
92746292006	**HAM-HGWA-1**	EPA 300.0 Rev 2.1 1993	874382		
92746292007	**HAM-HGWA-2**	EPA 300.0 Rev 2.1 1993	874382		
92746292008	**HAM-HGWA-3**	EPA 300.0 Rev 2.1 1993	874382		

REPORT OF LABORATORY ANALYSIS

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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 ☐ Mec[illegible] ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92746292

92746292

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: 8/17/24 CSH

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

Cooler Temp Corrected (°C): 2.3

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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

Effective Date: 05/24/2024

WO# : 92746292

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

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)	RPW	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)	DG9-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																														
1		1	1		2		1																							
2		1	1		2		1																							
3		1	1		2		1																							
4		1	1		2		1																							
5		1	1		2		1																							
6		1	1		2		1																							
7		1	1		2		1																							
8		1	1		2		1																							
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.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Plant Hammond Pooled Upgradient
Project Number:	GW6581E

Section C Invoice Information:

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes: MATRIX / CODE — Drinking Water (DW), Water (WT), Waste Water (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Other (OT), Tissue (TS)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N	N	N	N		
1	HAM-HGWA-43D	WG	G	8/6/24	10:07			19	5	2		3							X	X	X	X	N	001
2	HAM-HGWA-44D	WG	G	8/6/24	10:03			19	5	2		3							X	X	X	X	N	002
3	HAM-UGRD-FD-01	WG	G	8/6/24	0:00			19	5	2		3							X	X	X	X	N	003
4	HAM-UGRD-EB-01	WG	G	08/06/24	17:15			19	5	2		3							X	X	X	X	N	004
5	HAM-UGRD-FB-01	WG	G	8/6/24	17:10	TK 8.6.24		19	5	2		3							X	X	X	X	N	005 last sample
6																								
7																								
8																								
9					TK 8.6.24																			
10																								
11																								
12																								

92746292

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2024S2	Thomas Hessler / Geosyntec	8/7/2024	1705	Ryan William / Pace	8/7/2024	1225	
	Ryan William / Pace	8/7/2024	1505	Charles Hinds	8/7/24	1505	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: T. Hessler 210686 / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 08/06/2024

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Plant Hammond Pooled Upgradient
Project Number:	GW6581E

Section C Invoice Information:

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	Sample ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		
1	HAM-HGWA-1	WG	G	8/5/24	16:37			19	5	2		3							X	X	X	X	N	WG
2	HAM-HGWA-2	WG	G	8/5/24	16:30			21	5	2		3							X	X	X	X	N	WT
3	HAM-HGWA-3	WG	G	8/5/24	16:33			20	5	2		3							X	X	X	X	N	WG
4																								
5																								
6																								
7																								
8	TK 8/5/24					TK 8/5/24												TK 8/5/24						
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	08/07/2024	1725	Ryan Williams / Pace	8/7/2024	1225	
	Ryan Williams / Pace	8/7/2024	1505		8/7/24	1505	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: T. Kessler, Z. Webb / Geosyntec Consultants, Inc.

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

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 NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

FAL-C-020rev.07, 15-Feb-2007

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

September 04, 2024

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

RE: Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between August 07, 2024 and August 09, 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

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CERTIFICATIONS

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

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

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SAMPLE SUMMARY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92746295001	**HAM-HGWA-45D**	Water	08/06/24 14:40	08/07/24 12:25
92746295002	**HAM-HGWC-121A**	Water	08/06/24 16:22	08/07/24 12:25
92746295003	**HAM-HGWA-122**	Water	08/06/24 12:56	08/07/24 12:25
92746295004	**HAM-HGWC-120**	Water	08/07/24 11:22	08/09/24 14:15
92746295005	**HAM-HGWC-124**	Water	08/07/24 09:21	08/09/24 14:15
92746295006	**HAM-HGWC-125**	Water	08/07/24 13:01	08/09/24 14:15
92746295007	**HAM-HGWC-126**	Water	08/07/24 14:38	08/09/24 14:15
92746295008	**HAM-AP3-FD-01**	Water	08/07/24 00:00	08/09/24 14:15
92746295009	**HAM-AP3-FB-01**	Water	08/07/24 15:30	08/09/24 14:15
92746295010	**HAM-AP3-EB-01**	Water	08/07/24 15:35	08/09/24 14:15

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92746295001	**HAM-HGWA-45D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746295002	**HAM-HGWC-121A**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746295003	**HAM-HGWA-122**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746295004	**HAM-HGWC-120**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746295005	**HAM-HGWC-124**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746295006	**HAM-HGWC-125**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746295007	**HAM-HGWC-126**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746295008	**HAM-AP3-FD-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746295009	**HAM-AP3-FB-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746295010	**HAM-AP3-EB-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746295001	**HAM-HGWA-45D**					
EPA 9315	Radium-226	0.517 ± 0.295 (0.484) C:93% T:NA	pCi/L		08/29/24 08:41	
EPA 9320	Radium-228	1.24 ± 0.427 (0.568) C:83% T:90%	pCi/L		08/26/24 11:35	
Total Radium Calculation	Total Radium	1.76 ± 0.722 (1.05)	pCi/L		08/30/24 12:32	
92746295002	**HAM-HGWC-121A**					
EPA 9315	Radium-226	0.386U ± 0.264 (0.467) C:90% T:NA	pCi/L		08/29/24 08:41	
EPA 9320	Radium-228	0.884 ± 0.413 (0.695) C:79% T:85%	pCi/L		08/26/24 11:35	
Total Radium Calculation	Total Radium	1.27 ± 0.677 (1.16)	pCi/L		08/30/24 12:32	
92746295003	**HAM-HGWA-122**					
EPA 9315	Radium-226	0.251U ± 0.214 (0.399) C:92% T:NA	pCi/L		08/29/24 08:41	
EPA 9320	Radium-228	0.410U ± 0.304 (0.585) C:81% T:88%	pCi/L		08/26/24 11:35	
Total Radium Calculation	Total Radium	0.661U ± 0.518 (0.984)	pCi/L		08/30/24 12:32	
92746295004	**HAM-HGWC-120**					
EPA 9315	Radium-226	0.132U ± 0.179 (0.391) C:83% T:NA	pCi/L		09/02/24 14:39	
EPA 9320	Radium-228	0.547U ± 0.320 (0.583) C:89% T:93%	pCi/L		08/27/24 15:39	
Total Radium Calculation	Total Radium	0.679U ± 0.499 (0.974)	pCi/L		09/03/24 16:40	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746295005	**HAM-HGWC-124**					
EPA 9315	Radium-226	0.0747U ± 0.136 (0.310) C:89% T:NA	pCi/L		09/02/24 14:40	
EPA 9320	Radium-228	0.347U ± 0.367 (0.764) C:82% T:86%	pCi/L		08/27/24 15:39	
Total Radium Calculation	Total Radium	0.422U ± 0.503 (1.07)	pCi/L		09/03/24 16:40	
92746295006	**HAM-HGWC-125**					
EPA 9315	Radium-226	0.0502U ± 0.103 (0.239) C:91% T:NA	pCi/L		09/02/24 14:40	
EPA 9320	Radium-228	0.553U ± 0.339 (0.619) C:82% T:87%	pCi/L		08/27/24 15:39	
Total Radium Calculation	Total Radium	0.603U ± 0.442 (0.858)	pCi/L		09/03/24 16:40	
92746295007	**HAM-HGWC-126**					
EPA 9315	Radium-226	0.548 ± 0.217 (0.248) C:87% T:NA	pCi/L		09/03/24 08:22	
EPA 9320	Radium-228	0.114U ± 0.275 (0.614) C:79% T:89%	pCi/L		08/27/24 15:39	
Total Radium Calculation	Total Radium	0.662U ± 0.492 (0.862)	pCi/L		09/03/24 16:40	
92746295008	**HAM-AP3-FD-01**					
EPA 9315	Radium-226	0.241U ± 0.171 (0.309) C:91% T:NA	pCi/L		09/03/24 08:22	
EPA 9320	Radium-228	0.260U ± 0.306 (0.642) C:84% T:88%	pCi/L		08/27/24 15:40	
Total Radium Calculation	Total Radium	0.501U ± 0.477 (0.951)	pCi/L		09/03/24 16:40	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746295009	**HAM-AP3-FB-01**					
EPA 9315	Radium-226	0.0542U ± 0.145 (0.344) C:91% T:NA	pCi/L		09/03/24 09:22	
EPA 9320	Radium-228	0.113U ± 0.313 (0.702) C:86% T:83%	pCi/L		08/27/24 15:40	
Total Radium Calculation	Total Radium	0.167U ± 0.458 (1.05)	pCi/L		09/03/24 16:40	
92746295010	**HAM-AP3-EB-01**					
EPA 9315	Radium-226	-0.0892U ± 0.0958 (0.317) C:77% T:NA	pCi/L		09/03/24 08:23	
EPA 9320	Radium-228	0.226U ± 0.349 (0.755) C:84% T:87%	pCi/L		08/27/24 15:40	
Total Radium Calculation	Total Radium	0.226U ± 0.445 (1.07)	pCi/L		09/03/24 16:40	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Sample: HAM-HGWA-45D **Lab ID: 92746295001** Collected: 08/06/24 14:40 Received: 08/07/24 12:25 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Analysis was performed on a TCLP Extract received from the client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.517 ± 0.295 (0.484) C:93% T:NA**	pCi/L	08/29/24 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.24 ± 0.427 (0.568) C:83% T:90%**	pCi/L	08/26/24 11:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.76 ± 0.722 (1.05)**	pCi/L	08/30/24 12:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Sample: HAM-HGWC-121A **Lab ID: 92746295002** Collected: 08/06/24 16:22 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	**0.386U ± 0.264 (0.467) C:90% T:NA**	pCi/L	08/29/24 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.884 ± 0.413 (0.695) C:79% T:85%**	pCi/L	08/26/24 11:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.27 ± 0.677 (1.16)**	pCi/L	08/30/24 12:32	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Sample: HAM-HGWA-122 **Lab ID: 92746295003** Collected: 08/06/24 12:56 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	**0.251U ± 0.214 (0.399) C:92% T:NA**	pCi/L	08/29/24 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.410U ± 0.304 (0.585) C:81% T:88%**	pCi/L	08/26/24 11:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.661U ± 0.518 (0.984)**	pCi/L	08/30/24 12:32	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Sample: HAM-HGWC-120 **Lab ID: 92746295004** Collected: 08/07/24 11:22 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	**0.132U ± 0.179 (0.391) C:83% T:NA**	pCi/L	09/02/24 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.547U ± 0.320 (0.583) C:89% T:93%**	pCi/L	08/27/24 15:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.679U ± 0.499 (0.974)**	pCi/L	09/03/24 16:40	7440-14-4	

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Sample: HAM-HGWC-124 **Lab ID: 92746295005** Collected: 08/07/24 09:21 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	**0.0747U ± 0.136 (0.310) C:89% T:NA**	pCi/L	09/02/24 14:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.347U ± 0.367 (0.764) C:82% T:86%**	pCi/L	08/27/24 15:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.422U ± 0.503 (1.07)**	pCi/L	09/03/24 16:40	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Sample: HAM-HGWC-125 **Lab ID: 92746295006** Collected: 08/07/24 13:01 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	**0.0502U ± 0.103 (0.239) C:91% T:NA**	pCi/L	09/02/24 14:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.553U ± 0.339 (0.619) C:82% T:87%**	pCi/L	08/27/24 15:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.603U ± 0.442 (0.858)**	pCi/L	09/03/24 16:40	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Sample: HAM-HGWC-126 **Lab ID: 92746295007** Collected: 08/07/24 14:38 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	**0.548 ± 0.217 (0.248) C:87% T:NA**	pCi/L	09/03/24 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.114U ± 0.275 (0.614) C:79% T:89%**	pCi/L	08/27/24 15:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.662U ± 0.492 (0.862)**	pCi/L	09/03/24 16:40	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Sample: HAM-AP3-FD-01 **Lab ID: 92746295008** Collected: 08/07/24 00:00 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	**0.241U ± 0.171 (0.309) C:91% T:NA**	pCi/L	09/03/24 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.260U ± 0.306 (0.642) C:84% T:88%**	pCi/L	08/27/24 15:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.501U ± 0.477 (0.951)**	pCi/L	09/03/24 16:40	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Sample: HAM-AP3-FB-01 **Lab ID: 92746295009** Collected: 08/07/24 15:30 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	**0.0542U ± 0.145 (0.344) C:91% T:NA**	pCi/L	09/03/24 09:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.113U ± 0.313 (0.702) C:86% T:83%**	pCi/L	08/27/24 15:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.167U ± 0.458 (1.05)**	pCi/L	09/03/24 16:40	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Sample: HAM-AP3-EB-01 **Lab ID: 92746295010** Collected: 08/07/24 15:35 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	**-0.0892U ± 0.0958 (0.317) C:77% T:NA**	pCi/L	09/03/24 08:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.226U ± 0.349 (0.755) C:84% T:87%**	pCi/L	08/27/24 15:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.226U ± 0.445 (1.07)**	pCi/L	09/03/24 16:40	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

QC Batch: 690237
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92746295001, 92746295002, 92746295003

METHOD BLANK: 3361203 Matrix: Water
Associated Lab Samples: 92746295001, 92746295002, 92746295003

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	

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-3- RADs
Pace Project No.: 92746295

QC Batch: 689874
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92746295004, 92746295005, 92746295006, 92746295007, 92746295008, 92746295009, 92746295010

METHOD BLANK: 3359344
Matrix: Water
Associated Lab Samples: 92746295004, 92746295005, 92746295006, 92746295007, 92746295008, 92746295009, 92746295010

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-3- RADs
Pace Project No.: 92746295

QC Batch: 689870
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92746295001, 92746295002, 92746295003

METHOD BLANK: 3359338 Matrix: Water
Associated Lab Samples: 92746295001, 92746295002, 92746295003

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	

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-3- RADs
Pace Project No.: 92746295

QC Batch: 690239
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92746295004, 92746295005, 92746295006, 92746295007, 92746295008, 92746295009, 92746295010

METHOD BLANK: 3361205
Matrix: Water
Associated Lab Samples: 92746295004, 92746295005, 92746295006, 92746295007, 92746295008, 92746295009, 92746295010

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	

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-3- RADs
Pace Project No.: 92746295

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-3- RADs
Pace Project No.: 92746295

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92746295001	**HAM-HGWA-45D**	EPA 9315	690237		
92746295002	**HAM-HGWC-121A**	EPA 9315	690237		
92746295003	**HAM-HGWA-122**	EPA 9315	690237		
92746295004	**HAM-HGWC-120**	EPA 9315	690239		
92746295005	**HAM-HGWC-124**	EPA 9315	690239		
92746295006	**HAM-HGWC-125**	EPA 9315	690239		
92746295007	**HAM-HGWC-126**	EPA 9315	690239		
92746295008	**HAM-AP3-FD-01**	EPA 9315	690239		
92746295009	**HAM-AP3-FB-01**	EPA 9315	690239		
92746295010	**HAM-AP3-EB-01**	EPA 9315	690239		
92746295001	**HAM-HGWA-45D**	EPA 9320	689870		
92746295002	**HAM-HGWC-121A**	EPA 9320	689870		
92746295003	**HAM-HGWA-122**	EPA 9320	689870		
92746295004	**HAM-HGWC-120**	EPA 9320	689874		
92746295005	**HAM-HGWC-124**	EPA 9320	689874		
92746295006	**HAM-HGWC-125**	EPA 9320	689874		
92746295007	**HAM-HGWC-126**	EPA 9320	689874		
92746295008	**HAM-AP3-FD-01**	EPA 9320	689874		
92746295009	**HAM-AP3-FB-01**	EPA 9320	689874		
92746295010	**HAM-AP3-EB-01**	EPA 9320	689874		
92746295001	**HAM-HGWA-45D**	Total Radium Calculation	693014		
92746295002	**HAM-HGWC-121A**	Total Radium Calculation	693014		
92746295003	**HAM-HGWA-122**	Total Radium Calculation	693014		
92746295004	**HAM-HGWC-120**	Total Radium Calculation	693459		
92746295005	**HAM-HGWC-124**	Total Radium Calculation	693459		
92746295006	**HAM-HGWC-125**	Total Radium Calculation	693459		
92746295007	**HAM-HGWC-126**	Total Radium Calculation	693459		
92746295008	**HAM-AP3-FD-01**	Total Radium Calculation	693459		
92746295009	**HAM-AP3-FB-01**	Total Radium Calculation	693459		
92746295010	**HAM-AP3-EB-01**	Total Radium Calculation	693459		

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Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #

WO# : 92746295

92746295

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 CSH

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

WO# : 92746295

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

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)	BP1N	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)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		1																							
2		1	1		2		1																							
3		1	1		2		1																							
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

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

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

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-3
Project Number:	GW6581D

Section C — Invoice Information:

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D — Required Client Information

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

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		92746295
1	HGWA-45D	WG	G	8/6/24	14:40			22	5	2		3							X	X	X	X	N	001
2	HGWC-121A	WG	G	08/06/24	16:22			20	5	2		3							X	X	X	X	N	002
3	HGWA-122	WG	G	08/06/24	12:56			23	5	2		3							X	X	X	X	N	003
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

TK 8/6/24

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2024S2	Zachary Webb / Geosyntec	08/06/2024	2000	Thomas Kiessler / Geosyntec	08/06/2024	2000	
	Thomas Kiessler	08/07/2024	1225	Ryan William / Pace	8/7/2024	1225	
	Ryan William / Pace	8/7/2024	1505		8/7/24	1505	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Zachary Webb / Geosyntec Consultants, Inc

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 08/06/2024

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

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

DC#_Title: ENV-FRM-HUN1-0083 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 #: 92746295

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: 8/9/24 CM

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

Qualtrax ID: 69614

*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 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)	DG9-40 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)	6PIN	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																														
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

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-3
Project Number: GW6581D

Section C Invoice Information:

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

REGULATORY AGENCY

Site Location STATE: GA

Section D Required Client Information

Valid Matrix Codes (MATRIX / CODE): DRINKING WATER (DW), WATER (WT), WASTE WATER (WW), PRODUCT (P), SOLID (SL), OIL (OL), WIPE (WP), AIR (AR), TISSUE (TS), OTHER (OT)

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END DATE	COLLECTED COMPOSITE END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): Chloride, Fluoride, Sulfate	Total Appl. Rad and RV mod 4g	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-HGWC-120	WG	G	08/07/2024	1122				22	5	2		3						N	X	X	X	X	N	004
2	HAM-HGWC-124	WG	G	08/07/2024	0921			TK 08/07/2024	19	5	2		3						N	X	X	X	X	N	005
3	HAM-HGWC-125	WG	G	08/07/2024	1301				24	5	2		3						N	X	X	X	X	N	006
4	HAM-HGWC-126	WG	G	08/07/2024	1438				24	5	2		3						N	X	X	X	X	N	007
5	HAM-AP3-FD-01	WG	G	08/07/2024	0000				19	5	2		3						N	X	X	X	X	N	008
6	HAM-AP3-FB-01	WG	G	08/07/2024	1530				10	5	2		3						N	X	X	X	X	N	009
7	HAM-AP3-EB-01	WG	G	08/07/2024	1535				19	5	2		3						N	X	X	X	X	N	010 Last Sample
8																									
9								TK 08/07/2024																	
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-202452	Zeb Lebb / Geosyntec	8/9/2024	1415	Thomas Lee Scales	8/9/2024	1415	
	Thomas Mesh / Geosyntec	8/9/2024	1415	Ryan Williams / Pace	8/9/2024	1415	
	Ryan Williams / Pace	8/9/2024	1655	Charles Hawks	8/9/24	1655	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Zeb Lebb (Geosyntec Consultants, Inc)
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 08/07/24

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

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3361205
MB concentration:	0.078
M/B 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
	LCS80840	LCSD80840
Count Date:	9/2/2024	9/2/2024
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):	0.503	0.504
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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS80840	92746293013
Duplicate Sample I.D.	LCSD80840	92746293013DUP
Sample Result (pCi/L, g, F):	4.300	0.038
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.822	0.117
Sample Duplicate Result (pCi/L, g, F):	4.998	0.096
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.914	0.130
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-1.113	-0.656
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	15.16%	87.10%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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

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

Comments:

CT 9-3-24

LAM 9/3/24

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3361203
MB concentration:	-0.054
M/B 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	LCSD (Y or N)?	Y
	LCS80838	LCSD80838
Count Date:	8/29/2024	8/29/2024
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):	0.508	0.510
Target Conc. (pCi/L, g, F):	4.923	4.910
Uncertainty (Calculated):	0.231	0.231
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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS80838	92746901002
Duplicate Sample I.D.	LCSD80838	92746901002DUP
Sample Result (pCi/L, g, F):	4.245	0.164
Sample Result 2 Sigma CSU (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:	6.86%	39.19%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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

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

Comments:

EJ 8-30-24

LAM 8/30/24

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	Y
	LCS80819	LCSD80819
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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS80819	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD80819	
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%	

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

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

Comments:

VAL
8/27/24

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	Y
	LCS80821	LCSD80821
Count Date:	8/27/2024	8/27/2024
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):	0.816	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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS80821	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD80821	
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	
(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%	

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

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

Comments:

VAL
8/28/24

CT
8-29-24

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(704)875-9092

September 03, 2024

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

RE: Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on August 07, 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

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CERTIFICATIONS

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

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

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SAMPLE SUMMARY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92746297001	**HAM-HGWA-43D**	Water	08/06/24 10:07	08/07/24 12:25
92746297002	**HAM-HGWA-44D**	Water	08/06/24 10:03	08/07/24 12:25
92746297003	**HAM-UGRD-FD-01**	Water	08/06/24 00:00	08/07/24 12:25
92746297004	**HAM-UGRD-EB-01**	Water	08/06/24 17:15	08/07/24 12:25
92746297005	**HAM-UGRD-FB-01**	Water	08/06/24 17:10	08/07/24 12:25
92746297006	**HAM-HGWA-1**	Water	08/05/24 16:37	08/07/24 12:25
92746297007	**HAM-HGWA-2**	Water	08/05/24 16:30	08/07/24 12:25
92746297008	**HAM-HGWA-3**	Water	08/05/24 16:33	08/07/24 12:25

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SAMPLE ANALYTE COUNT

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92746297001	**HAM-HGWA-43D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746297002	**HAM-HGWA-44D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746297003	**HAM-UGRD-FD-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746297004	**HAM-UGRD-EB-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746297005	**HAM-UGRD-FB-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746297006	**HAM-HGWA-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746297007	**HAM-HGWA-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92746297008	**HAM-HGWA-3**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746297001	**HAM-HGWA-43D**					
EPA 9315	Radium-226	0.144U ± 0.222 (0.494) C:94% T:NA	pCi/L		08/29/24 08:40	
EPA 9320	Radium-228	0.530U ± 0.342 (0.643) C:79% T:92%	pCi/L		08/26/24 11:33	
Total Radium Calculation	Total Radium	0.674U ± 0.564 (1.14)	pCi/L		08/30/24 12:31	
92746297002	**HAM-HGWA-44D**					
EPA 9315	Radium-226	0.449 ± 0.235 (0.321) C:97% T:NA	pCi/L		08/29/24 08:39	
EPA 9320	Radium-228	0.0799U ± 0.269 (0.609) C:85% T:91%	pCi/L		08/26/24 11:34	
Total Radium Calculation	Total Radium	0.529U ± 0.504 (0.930)	pCi/L		08/30/24 12:31	
92746297003	**HAM-UGRD-FD-01**					
EPA 9315	Radium-226	0.339U ± 0.235 (0.400) C:94% T:NA	pCi/L		08/29/24 08:40	
EPA 9320	Radium-228	0.746 ± 0.389 (0.669) C:77% T:88%	pCi/L		08/26/24 11:34	
Total Radium Calculation	Total Radium	1.09 ± 0.624 (1.07)	pCi/L		08/30/24 12:31	
92746297004	**HAM-UGRD-EB-01**					
EPA 9315	Radium-226	0.129U ± 0.176 (0.378) C:97% T:NA	pCi/L		08/29/24 08:40	
EPA 9320	Radium-228	0.709 ± 0.342 (0.572) C:82% T:92%	pCi/L		08/26/24 11:34	
Total Radium Calculation	Total Radium	0.838U ± 0.518 (0.950)	pCi/L		08/30/24 12:32	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92746297005	**HAM-UGRD-FB-01**					
EPA 9315	Radium-226	0.223U ± 0.215 (0.424) C:93% T:NA	pCi/L		08/29/24 08:40	
EPA 9320	Radium-228	0.0533U ± 0.296 (0.680) C:83% T:88%	pCi/L		08/26/24 11:34	
Total Radium Calculation	Total Radium	0.276U ± 0.511 (1.10)	pCi/L		08/30/24 12:32	
92746297006	**HAM-HGWA-1**					
EPA 9315	Radium-226	0.161U ± 0.191 (0.397) C:93% T:NA	pCi/L		08/29/24 08:40	
EPA 9320	Radium-228	0.479U ± 0.354 (0.682) C:80% T:84%	pCi/L		08/26/24 11:34	
Total Radium Calculation	Total Radium	0.640U ± 0.545 (1.08)	pCi/L		08/30/24 12:32	
92746297007	**HAM-HGWA-2**					
EPA 9315	Radium-226	0.174U ± 0.194 (0.394) C:92% T:NA	pCi/L		08/29/24 08:40	
EPA 9320	Radium-228	1.10 ± 0.429 (0.641) C:81% T:87%	pCi/L		08/26/24 11:34	
Total Radium Calculation	Total Radium	1.27 ± 0.623 (1.04)	pCi/L		08/30/24 12:32	
92746297008	**HAM-HGWA-3**					
EPA 9315	Radium-226	0.000251U ± 0.162 (0.437) C:91% T:NA	pCi/L		08/29/24 08:41	
EPA 9320	Radium-228	0.371U ± 0.327 (0.657) C:80% T:85%	pCi/L		08/26/24 11:34	
Total Radium Calculation	Total Radium	0.371U ± 0.489 (1.09)	pCi/L		08/30/24 12:32	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Sample: HAM-HGWA-43D **Lab ID: 92746297001** Collected: 08/06/24 10:07 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.
- Upon receipt at the laboratory, 5.0 mls of nitric acid were added to sample 006 (2/2)to meet the sample preservation requirement of pH <2 for radiochemistry analysis, where the method requires preservation, in wastewater. The samples were not preserved pH < 2 within 15 minutes of collection (40CFR136).

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.144U ± 0.222 (0.494) C:94% T:NA**	pCi/L	08/29/24 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.530U ± 0.342 (0.643) C:79% T:92%**	pCi/L	08/26/24 11:33	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.674U ± 0.564 (1.14)**	pCi/L	08/30/24 12:31	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Sample: HAM-HGWA-44D **Lab ID: 92746297002** Collected: 08/06/24 10:03 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	**0.449 ± 0.235 (0.321) C:97% T:NA**	pCi/L	08/29/24 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0799U ± 0.269 (0.609) C:85% T:91%**	pCi/L	08/26/24 11:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.529U ± 0.504 (0.930)**	pCi/L	08/30/24 12:31	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Sample: HAM-UGRD-FD-01 **Lab ID: 92746297003** Collected: 08/06/24 00:00 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	**0.339U ± 0.235 (0.400) C:94% T:NA**	pCi/L	08/29/24 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.746 ± 0.389 (0.669) C:77% T:88%**	pCi/L	08/26/24 11:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.09 ± 0.624 (1.07)**	pCi/L	08/30/24 12:31	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Sample: HAM-UGRD-EB-01 **Lab ID: 92746297004** Collected: 08/06/24 17:15 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	**0.129U ± 0.176 (0.378) C:97% T:NA**	pCi/L	08/29/24 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.709 ± 0.342 (0.572) C:82% T:92%**	pCi/L	08/26/24 11:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.838U ± 0.518 (0.950)**	pCi/L	08/30/24 12:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Sample: HAM-UGRD-FB-01 **Lab ID: 92746297005** Collected: 08/06/24 17:10 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	**0.223U ± 0.215 (0.424) C:93% T:NA**	pCi/L	08/29/24 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0533U ± 0.296 (0.680) C:83% T:88%**	pCi/L	08/26/24 11:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.276U ± 0.511 (1.10)**	pCi/L	08/30/24 12:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Sample: HAM-HGWA-1 **Lab ID: 92746297006** Collected: 08/05/24 16:37 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	**0.161U ± 0.191 (0.397) C:93% T:NA**	pCi/L	08/29/24 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.479U ± 0.354 (0.682) C:80% T:84%**	pCi/L	08/26/24 11:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.640U ± 0.545 (1.08)**	pCi/L	08/30/24 12:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Sample: HAM-HGWA-2 **Lab ID: 92746297007** Collected: 08/05/24 16:30 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	**0.174U ± 0.194 (0.394) C:92% T:NA**	pCi/L	08/29/24 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.10 ± 0.429 (0.641) C:81% T:87%**	pCi/L	08/26/24 11:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.27 ± 0.623 (1.04)**	pCi/L	08/30/24 12:32	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Sample: HAM-HGWA-3 **Lab ID: 92746297008** Collected: 08/05/24 16:33 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	**0.000251U ± 0.162 (0.437) C:91% T:NA**	pCi/L	08/29/24 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.371U ± 0.327 (0.657) C:80% T:85%**	pCi/L	08/26/24 11:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.371U ± 0.489 (1.09)**	pCi/L	08/30/24 12:32	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

QC Batch: 690237
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92746297001, 92746297002, 92746297003, 92746297004, 92746297005, 92746297006, 92746297007, 92746297008

METHOD BLANK: 3361203 Matrix: Water
Associated Lab Samples: 92746297001, 92746297002, 92746297003, 92746297004, 92746297005, 92746297006, 92746297007, 92746297008

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	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

QC Batch: 689870
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92746297001, 92746297002, 92746297003, 92746297004, 92746297005, 92746297006, 92746297007, 92746297008

METHOD BLANK: 3359338 Matrix: Water
Associated Lab Samples: 92746297001, 92746297002, 92746297003, 92746297004, 92746297005, 92746297006, 92746297007, 92746297008

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	

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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond Pooled Upgr-RADs
Pace Project No.: 92746297

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92746297001	**HAM-HGWA-43D**	EPA 9315	690237		
92746297002	**HAM-HGWA-44D**	EPA 9315	690237		
92746297003	**HAM-UGRD-FD-01**	EPA 9315	690237		
92746297004	**HAM-UGRD-EB-01**	EPA 9315	690237		
92746297005	**HAM-UGRD-FB-01**	EPA 9315	690237		
92746297006	**HAM-HGWA-1**	EPA 9315	690237		
92746297007	**HAM-HGWA-2**	EPA 9315	690237		
92746297008	**HAM-HGWA-3**	EPA 9315	690237		
92746297001	**HAM-HGWA-43D**	EPA 9320	689870		
92746297002	**HAM-HGWA-44D**	EPA 9320	689870		
92746297003	**HAM-UGRD-FD-01**	EPA 9320	689870		
92746297004	**HAM-UGRD-EB-01**	EPA 9320	689870		
92746297005	**HAM-UGRD-FB-01**	EPA 9320	689870		
92746297006	**HAM-HGWA-1**	EPA 9320	689870		
92746297007	**HAM-HGWA-2**	EPA 9320	689870		
92746297008	**HAM-HGWA-3**	EPA 9320	689870		
92746297001	**HAM-HGWA-43D**	Total Radium Calculation	693014		
92746297002	**HAM-HGWA-44D**	Total Radium Calculation	693014		
92746297003	**HAM-UGRD-FD-01**	Total Radium Calculation	693014		
92746297004	**HAM-UGRD-EB-01**	Total Radium Calculation	693014		
92746297005	**HAM-UGRD-FB-01**	Total Radium Calculation	693014		
92746297006	**HAM-HGWA-1**	Total Radium Calculation	693014		
92746297007	**HAM-HGWA-2**	Total Radium Calculation	693014		
92746297008	**HAM-HGWA-3**	Total Radium Calculation	693014		

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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 ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92746297**

92746297

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: 8/17/24 CSH

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

Cooler Temp Corrected (°C): 2.3

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

WO#: 92746297

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

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

Section A Required Client Information:

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

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Plant Hammond Pooled Upgradient
Project Number:	GW6581E

Section C Invoice Information:

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER / WATER / WASTE WATER / PRODUCT / SOIL/SOLID / OIL / WIPE / AIR / OTHER / TISSUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N		92746297
1	HAM-HGWA-43D	WG	G	8/6/24	10:07			19	5	2		3							X	X	X	X	N	001
2	HAM-HGWA-44D	WG	G	8/6/24	10:03			19	5	2		3							X	X	X	X	N	002
3	HAM-UGRD-FD-01	WG	G	8/6/24	0:00			19	5	2		3							X	X	X	X	N	003
4	HAM-UGRD-EB-01	WG	G	08/06/24	17:15				5	2		3							X	X	X	X	N	004
5	HAM-UGRD-FB-01	WG	G	8/6/24	17:10	TK 8.6.24			5	2		3							X	X	X	X	N	005 last sample
6																								
7																								
8																								
9					TK 8.6.24																			
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2024S2	Thomas Hessler / Geosyntec	08/07/2024	1700	Ryan William / Pace	8/7/2024	1225	
	Ryan William / Pace	8/7/2024	1505	Charles Hurtz 8/7/24		1505	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: T. Hessler 210660 / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 08/06/2024

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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Copy To:	Geosyntec Contacts
Purchase Order No.:	
Project Name:	Plant Hammond Pooled Upgradient
Project Number:	GW6581E

Section C Invoice Information:

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-HGWA-1	WG	G	8/5/24	16:37			19	5	2		3						N	X	X	X	X	N	
2	HAM-HGWA-2	WG	G	8/5/24	16:30			21	5	2		3						N	X	X	X	X	N	
3	HAM-HGWA-3	WG	G	8/5/24	16:33			20	5	2		3						N	X	X	X	X	N	
4																								
5																								
6																								
7																								
8	TK 8/5/24					TK 8/5/24												TK 8/5/24						
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 Hessler	08/07/2024	1225	Ryan Williams / Pace	8/7/2024	1225	
	Ryan Williams / Pace	8/7/2024	1505	[signature] 8/7/24		1505	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: T. Hessler, Z. Webb, C. Crain / Geosyntec Consultants, Inc.

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

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 NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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	LCSD (Y or N)?	Y
	LCS80819	LCSD80819
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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS80819	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD80819	
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%	

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

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

Comments:

VAL
8/27/24

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3361203
MB concentration:	-0.054
M/B 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	LCSD (Y or N)?	Y
	LCS80838	LCSD80838
Count Date:	8/29/2024	8/29/2024
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):	0.508	0.510
Target Conc. (pCi/L, g, F):	4.923	4.910
Uncertainty (Calculated):	0.231	0.231
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%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS80838	92746901002
Duplicate Sample I.D.	LCSD80838	92746901002DUP
Sample Result (pCi/L, g, F):	4.245	0.164
Sample Result 2 Sigma CSU (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:	6.86%	39.19%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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

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

Comments:

EJ 8-30-24

LAM 8/30/24

February 2025

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 13, 2025

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

RE: Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

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

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CERTIFICATIONS

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

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

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SAMPLE SUMMARY

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92779992001	**HAM-HGWA-1**	Water	02/12/25 13:38	02/14/25 16:10
92779992002	**HAM-HGWA-43D**	Water	02/12/25 14:50	02/14/25 16:10
92779992003	**HAM-HGWA-44D**	Water	02/12/25 15:42	02/14/25 16:10
92779992004	**HAM-UGRD-EB-01**	Water	02/13/25 17:30	02/14/25 16:10
92779992005	**HAM-UGRD-FB-01**	Water	02/13/25 17:25	02/14/25 16:10
92779992006	**HAM-HGWA-2**	Water	02/14/25 09:20	02/17/25 14:45
92779992007	**HAM-HGWA-3**	Water	02/14/25 11:07	02/17/25 14:45
92779992008	**HAM-UGRD-FD-01**	Water	02/14/25 00:00	02/17/25 14:45

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SAMPLE ANALYTE COUNT

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92779992001	**HAM-HGWA-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779992002	**HAM-HGWA-43D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779992003	**HAM-HGWA-44D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779992004	**HAM-UGRD-EB-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779992005	**HAM-UGRD-FB-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779992006	**HAM-HGWA-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779992007	**HAM-HGWA-3**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779992008	**HAM-UGRD-FD-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779992001	**HAM-HGWA-1**					
EPA 9315	Radium-226	0.226U ± 0.230 (0.456) C:63% T:NA	pCi/L		03/11/25 09:55	
EPA 9320	Radium-228	0.398U ± 0.429 (0.896) C:73% T:84%	pCi/L		03/10/25 11:58	
Total Radium Calculation	Total Radium	0.624U ± 0.659 (1.35)	pCi/L		03/11/25 15:09	
92779992002	**HAM-HGWA-43D**					
EPA 9315	Radium-226	0.0667U ± 0.224 (0.551) C:52% T:NA	pCi/L		03/11/25 08:22	
EPA 9320	Radium-228	0.557U ± 0.441 (0.877) C:74% T:76%	pCi/L		03/10/25 11:58	
Total Radium Calculation	Total Radium	0.624U ± 0.665 (1.43)	pCi/L		03/11/25 15:09	
92779992003	**HAM-HGWA-44D**					
EPA 9315	Radium-226	0.269U ± 0.221 (0.430) C:100% T:NA	pCi/L		03/11/25 08:22	
EPA 9320	Radium-228	0.353U ± 0.501 (1.08) C:74% T:79%	pCi/L		03/10/25 11:58	
Total Radium Calculation	Total Radium	0.622U ± 0.722 (1.51)	pCi/L		03/11/25 15:09	
92779992004	**HAM-UGRD-EB-01**					
EPA 9315	Radium-226	0.0565U ± 0.227 (0.553) C:74% T:NA	pCi/L		03/11/25 08:23	
EPA 9320	Radium-228	0.601U ± 0.435 (0.855) C:77% T:88%	pCi/L		03/10/25 11:58	
Total Radium Calculation	Total Radium	0.658U ± 0.662 (1.41)	pCi/L		03/11/25 15:09	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779992005	**HAM-UGRD-FB-01**					
EPA 9315	Radium-226	0.119U ± 0.237 (0.546) C:83% T:NA	pCi/L		03/11/25 08:23	
EPA 9320	Radium-228	0.998U ± 0.566 (1.04) C:72% T:75%	pCi/L		03/10/25 15:00	
Total Radium Calculation	Total Radium	1.12U ± 0.803 (1.59)	pCi/L		03/11/25 15:09	
92779992006	**HAM-HGWA-2**					
EPA 9315	Radium-226	0.294U ± 0.267 (0.531) C:72% T:NA	pCi/L		03/11/25 08:23	
EPA 9320	Radium-228	0.907U ± 0.509 (0.929) C:71% T:80%	pCi/L		03/10/25 15:00	
Total Radium Calculation	Total Radium	1.20U ± 0.776 (1.46)	pCi/L		03/11/25 15:09	
92779992007	**HAM-HGWA-3**					
EPA 9315	Radium-226	0.100U ± 0.145 (0.310) C:81% T:NA	pCi/L		03/11/25 10:00	
EPA 9320	Radium-228	0.506U ± 0.572 (1.21) C:71% T:76%	pCi/L		03/10/25 15:00	
Total Radium Calculation	Total Radium	0.606U ± 0.717 (1.52)	pCi/L		03/11/25 15:09	
92779992008	**HAM-UGRD-FD-01**					
EPA 9315	Radium-226	0.401 ± 0.236 (0.356) C:72% T:NA	pCi/L		03/11/25 10:00	
EPA 9320	Radium-228	1.30 ± 0.581 (0.983) C:75% T:82%	pCi/L		03/10/25 15:00	
Total Radium Calculation	Total Radium	1.70 ± 0.817 (1.34)	pCi/L		03/11/25 15:09	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Sample: HAM-HGWA-1 **Lab ID: 92779992001** Collected: 02/12/25 13:38 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	**0.226U ± 0.230 (0.456) C:63% T:NA**	pCi/L	03/11/25 09:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.398U ± 0.429 (0.896) C:73% T:84%**	pCi/L	03/10/25 11:58	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.624U ± 0.659 (1.35)**	pCi/L	03/11/25 15:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Sample: HAM-HGWA-43D **Lab ID: 92779992002** Collected: 02/12/25 14:50 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	**0.0667U ± 0.224 (0.551) C:52% T:NA**	pCi/L	03/11/25 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.557U ± 0.441 (0.877) C:74% T:76%**	pCi/L	03/10/25 11:58	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.624U ± 0.665 (1.43)**	pCi/L	03/11/25 15:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Sample: HAM-HGWA-44D **Lab ID: 92779992003** Collected: 02/12/25 15:42 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	**0.269U ± 0.221 (0.430) C:100% T:NA**	pCi/L	03/11/25 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.353U ± 0.501 (1.08) C:74% T:79%**	pCi/L	03/10/25 11:58	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.622U ± 0.722 (1.51)**	pCi/L	03/11/25 15:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Sample: HAM-UGRD-EB-01 **Lab ID: 92779992004** Collected: 02/13/25 17:30 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	**0.0565U ± 0.227 (0.553) C:74% T:NA**	pCi/L	03/11/25 08:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.601U ± 0.435 (0.855) C:77% T:88%**	pCi/L	03/10/25 11:58	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.658U ± 0.662 (1.41)**	pCi/L	03/11/25 15:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Sample: HAM-UGRD-FB-01 **Lab ID: 92779992005** Collected: 02/13/25 17:25 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	**0.119U ± 0.237 (0.546) C:83% T:NA**	pCi/L	03/11/25 08:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.998U ± 0.566 (1.04) C:72% T:75%**	pCi/L	03/10/25 15:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.12U ± 0.803 (1.59)**	pCi/L	03/11/25 15:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Sample: HAM-HGWA-2 **Lab ID: 92779992006** Collected: 02/14/25 09:20 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	**0.294U ± 0.267 (0.531) C:72% T:NA**	pCi/L	03/11/25 08:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.907U ± 0.509 (0.929) C:71% T:80%**	pCi/L	03/10/25 15:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.20U ± 0.776 (1.46)**	pCi/L	03/11/25 15:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Sample: HAM-HGWA-3 **Lab ID: 92779992007** Collected: 02/14/25 11:07 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	**0.100U ± 0.145 (0.310) C:81% T:NA**	pCi/L	03/11/25 10:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.506U ± 0.572 (1.21) C:71% T:76%**	pCi/L	03/10/25 15:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.606U ± 0.717 (1.52)**	pCi/L	03/11/25 15:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Sample: HAM-UGRD-FD-01 **Lab ID: 92779992008** Collected: 02/14/25 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	**0.401 ± 0.236 (0.356) C:72% T:NA**	pCi/L	03/11/25 10:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.30 ± 0.581 (0.983) C:75% T:82%**	pCi/L	03/10/25 15:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.70 ± 0.817 (1.34)**	pCi/L	03/11/25 15:09	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

QC Batch: 728168
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92779992001, 92779992002, 92779992003, 92779992004, 92779992005, 92779992006, 92779992007, 92779992008

METHOD BLANK: 3544497 Matrix: Water
Associated Lab Samples: 92779992001, 92779992002, 92779992003, 92779992004, 92779992005, 92779992006, 92779992007, 92779992008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.652 ± 0.323 (0.458) C:64% T:NA	pCi/L	03/11/25 08:21	

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 Pooled Upgradient-RAD
Pace Project No.: 92779992

QC Batch: 728170
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92779992001, 92779992002, 92779992003, 92779992004, 92779992005, 92779992006, 92779992007, 92779992008

METHOD BLANK: 3544499 Matrix: Water
Associated Lab Samples: 92779992001, 92779992002, 92779992003, 92779992004, 92779992005, 92779992006, 92779992007, 92779992008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.679 ± 0.418 (0.785) C:74% T:86%	pCi/L	03/10/25 11:58	

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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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

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.

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond Pooled Upgradient-RAD
Pace Project No.: 92779992

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779992001	**HAM-HGWA-1**	EPA 9315	728168		
92779992002	**HAM-HGWA-43D**	EPA 9315	728168		
92779992003	**HAM-HGWA-44D**	EPA 9315	728168		
92779992004	**HAM-UGRD-EB-01**	EPA 9315	728168		
92779992005	**HAM-UGRD-FB-01**	EPA 9315	728168		
92779992006	**HAM-HGWA-2**	EPA 9315	728168		
92779992007	**HAM-HGWA-3**	EPA 9315	728168		
92779992008	**HAM-UGRD-FD-01**	EPA 9315	728168		
92779992001	**HAM-HGWA-1**	EPA 9320	728170		
92779992002	**HAM-HGWA-43D**	EPA 9320	728170		
92779992003	**HAM-HGWA-44D**	EPA 9320	728170		
92779992004	**HAM-UGRD-EB-01**	EPA 9320	728170		
92779992005	**HAM-UGRD-FB-01**	EPA 9320	728170		
92779992006	**HAM-HGWA-2**	EPA 9320	728170		
92779992007	**HAM-HGWA-3**	EPA 9320	728170		
92779992008	**HAM-UGRD-FD-01**	EPA 9320	728170		
92779992001	**HAM-HGWA-1**	Total Radium Calculation	732070		
92779992002	**HAM-HGWA-43D**	Total Radium Calculation	732070		
92779992003	**HAM-HGWA-44D**	Total Radium Calculation	732070		
92779992004	**HAM-UGRD-EB-01**	Total Radium Calculation	732070		
92779992005	**HAM-UGRD-FB-01**	Total Radium Calculation	732070		
92779992006	**HAM-HGWA-2**	Total Radium Calculation	732070		
92779992007	**HAM-HGWA-3**	Total Radium Calculation	732070		
92779992008	**HAM-UGRD-FD-01**	Total Radium Calculation	732070		

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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 ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92779992

92779992

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: 2/14/25 CH

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: 1.8 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): 1.9

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

Field Data Required? ☐ Yes ☐ No

MMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

NT NOTIFICATION/RESOLUTION

son contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

ltrax ID: 69614

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

Effective Date: 05/24/2024

WO# : 92779992

PM: BV Due Date: 03/10/25

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

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 (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																													
1		2	1		2		2	1																					
2		2	1				2	1																					
3		2	1		2		2	1																					
4		2	1		2		2	1																					
5		1	1		2		2																						
6		1	1		2		2																						
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.

Jaltrax ID: 69614

WO# : 92779992

PM: BV **Due Date: 03/10/25**

CLIENT: 92- GP-HAM

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CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Plant Hammond Pooled Upgradient	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY

NPDES | GROUND WATER | DRINKING WATER

UST | RCRA | ✓ OTHER CCR

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full Acp. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				Y/N	N	N	N	N			
1	HAM-HGWA-1		WG	G	2/12/2025	1338			16	8	3		4		1					X	X	X	X	X	N	001
2	HAM-HGWA-3		WG	G	2/12/2025	1430			16	6	3		2		1					X	X		X	X	N	Radium sent on separate COC
3	HAM-HGWA-43D		WG	G	2/12/2025	1450			16	8	3		4		1					X	X	X	X	X	N	002 limited volume for Alkalinity
4	HAM-HGWA-44D		WG	G	2/12/2025	1542			15	8	3		4		1					X	X	X	X	X	N	003
5	HAM-UGRD-EB-01		WG	G	2/13/2025	1730			15	6	2		4							X	X	X	X		N	Matrix = WQ 004
6	HAM-UGRD-FB-01		WG	G	2/13/2025	1725			15	6	2		4							X	X	X	X		N	Matrix = WQ 005
7																										
8																										
9																										
10																										
11																										
12																										

2/12/13/25

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2025S1(1)	Zain Webb / Geosyntec	2-14-25	1340	Ryan Williams / Pace	2/14/25	1340	
	Ryan Williams / Pace	2/14/25	1610	Chandler Hunt	2/14/25	1610	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Amanda Tomlinson, Zain Webb, Thomas Kessler / Geosyntec Consultants,

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2-13-25

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

DC#_Title: ENV-FRM-HUNT-0083 v03_Sample [illegible]

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 #:

Courier: ☐ Commercial ☐ FedEx ☑ Pace ☐ UPS ☐ USPS ☐ Other:____ ☐ Client

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

Date/Initials Person Examining Contents: 2/17/25 CH

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: 1.7 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): 1.8

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

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Daltrax ID: 69614

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

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: Geosyntec Contacts	Company Name:
		Address:
Email To: SCS Contacts	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Plant Hammond Pooled Upgradient	Pace Project Manager: Bonnie Vang
Requested Due Date/TAT: 10 Day	Project Number:	Pace Profile #: 10839

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA ✓ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-HGWA-2	WG	G	2/14/2025	0920				16	8	3		4		1				N	X	X	X	X	X	N	006
2	HAM-HGWA-3	WG	G	2/14/2025	1107				16	2			2						N			X			N	Last Sample. 007
3	HAM-UGRD-FD-01	WG	G	2/14/2025	0000				16	6	2		4						N	X	X	X	X		N	008
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ART 2/16/2025

ART 2/16/2025

92779992

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2025S1	Zain Webb / Geosyntec	2-17-25	1230	Ryan Williams / Pace	2/17/2025	1230	
	Ryan Williams / Pace	2/17/2025	1445		2/17/25	1445	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Amanda Tominson, Zain Webb, Thomas Kessler / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: Zain Webb (AT) (TK) DATE Signed (MM/DD/YY): 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.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/3/2025
Worklist:	83720
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3544499
MB concentration:	0.679
M/B 2 Sigma CSU:	0.418
MB MDC:	0.785
MB Numerical Performance Indicator:	3.18
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS83720	LCSD83720
Count Date:	3/10/2025	3/10/2025
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	33.291	33.291
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.818	0.819
Target Conc. (pCi/L, g, F):	4.072	4.063
Uncertainty (Calculated):	0.200	0.199
Result (pCi/L, g, F):	4.052	4.826
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.964	1.108
Numerical Performance Indicator:	-0.04	1.33
Percent Recovery:	99.52%	118.77%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS83720	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD83720	
Sample Result (pCi/L, g, F):	4.052	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.964	
Sample Duplicate Result (pCi/L, g, F):	4.826	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.108	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.033	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	17.64%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

~~*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.~~ X MB activity < MDC, Pass

VAL 3/11/25

3/11/25

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	3/8/2025
Worklist:	83719
Matrix:	W

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3544497
MB concentration:	0.652
M/B 2 Sigma CSU:	0.323
MB MDC:	0.458
MB Numerical Performance Indicator:	3.95
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	N/A

OK - less than RL

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS83719	LCSD83719
Count Date:	3/11/2025	3/11/2025
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.014	25.014
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.507
Target Conc. (pCi/L, g, F):	4.945	4.936
Uncertainty (Calculated):	0.232	0.232
Result (pCi/L, g, F):	5.458	5.846
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.037	1.114
Numerical Performance Indicator:	0.95	1.57
Percent Recovery:	110.38%	118.45%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS83719	92779986008
Duplicate Sample I.D.	LCSD83719	92779986008DUP
Sample Result (pCi/L, g, F):	5.458	0.048
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.037	0.216
Sample Duplicate Result (pCi/L, g, F):	5.846	0.085
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.114	0.130
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.500	-0.291
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.06%	56.33%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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

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

Comments:
*If the lowest activity ~~sample in this batch is greater than ten times the blank value, the blank is acceptable, otherwise this batch must be re-prepped.~~ OK less than RL

LAM 3/11/25

LAM 3/11/25

SLC 3/11/25

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 13, 2025

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

RE: Project: Hammond AP-3-RAD
Pace Project No.: 92779986

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

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CERTIFICATIONS

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

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

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SAMPLE SUMMARY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92779986001	**HAM-HGWA-45D**	Water	02/13/25 12:41	02/14/25 16:10
92779986002	**HAM-HGWA-122**	Water	02/13/25 15:02	02/14/25 16:10
92779986003	**HAM-HGWC-120**	Water	02/15/25 15:41	02/17/25 14:45
92779986004	**HAM-HGWC-121A**	Water	02/15/25 09:19	02/17/25 14:45
92779986005	**HAM-HGWC-124**	Water	02/14/25 16:43	02/17/25 14:45
92779986006	**HAM-HGWC-125**	Water	02/15/25 14:01	02/17/25 14:45
92779986007	**HAM-HGWC-126**	Water	02/15/25 12:02	02/17/25 14:45
92779986008	**HAM-AP3-EB-01**	Water	02/15/25 16:35	02/17/25 14:45
92779986009	**HAM-AP3-FB-01**	Water	02/15/25 16:30	02/17/25 14:45
92779986010	**HAM-AP3-FD-01**	Water	02/15/25 00:00	02/17/25 14:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92779986001	**HAM-HGWA-45D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779986002	**HAM-HGWA-122**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779986003	**HAM-HGWC-120**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779986004	**HAM-HGWC-121A**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779986005	**HAM-HGWC-124**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779986006	**HAM-HGWC-125**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779986007	**HAM-HGWC-126**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779986008	**HAM-AP3-EB-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779986009	**HAM-AP3-FB-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92779986010	**HAM-AP3-FD-01**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779986001	**HAM-HGWA-45D**					
EPA 9315	Radium-226	0.438 ± 0.246 (0.366) C:70% T:NA	pCi/L		03/07/25 09:39	
EPA 9320	Radium-228	0.433U ± 0.357 (0.713) C:78% T:90%	pCi/L		03/06/25 10:46	
Total Radium Calculation	Total Radium	0.871U ± 0.603 (1.08)	pCi/L		03/07/25 13:48	
92779986002	**HAM-HGWA-122**					
EPA 9315	Radium-226	0.165U ± 0.158 (0.298) C:77% T:NA	pCi/L		03/07/25 09:40	
EPA 9320	Radium-228	0.497U ± 0.349 (0.670) C:78% T:84%	pCi/L		03/06/25 10:45	
Total Radium Calculation	Total Radium	0.662U ± 0.507 (0.968)	pCi/L		03/07/25 13:48	
92779986003	**HAM-HGWC-120**					
EPA 9315	Radium-226	0.133U ± 0.169 (0.360) C:80% T:NA	pCi/L		03/07/25 09:35	
EPA 9320	Radium-228	0.373U ± 0.350 (0.714) C:78% T:85%	pCi/L		03/06/25 10:46	
Total Radium Calculation	Total Radium	0.506U ± 0.519 (1.07)	pCi/L		03/07/25 13:48	
92779986004	**HAM-HGWC-121A**					
EPA 9315	Radium-226	0.108U ± 0.161 (0.352) C:70% T:NA	pCi/L		03/07/25 09:35	
EPA 9320	Radium-228	0.766 ± 0.406 (0.708) C:76% T:83%	pCi/L		03/06/25 10:46	
Total Radium Calculation	Total Radium	0.874U ± 0.567 (1.06)	pCi/L		03/07/25 13:48	

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SUMMARY OF DETECTION

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779986005	**HAM-HGWC-124**					
EPA 9315	Radium-226	0.102U ± 0.189 (0.433) C:82% T:NA	pCi/L		03/07/25 08:30	
EPA 9320	Radium-228	-0.0435U ± 0.362 (0.854) C:72% T:82%	pCi/L		03/06/25 10:46	
Total Radium Calculation	Total Radium	0.102U ± 0.551 (1.29)	pCi/L		03/07/25 13:48	
92779986006	**HAM-HGWC-125**					
EPA 9315	Radium-226	0.316U ± 0.252 (0.472) C:71% T:NA	pCi/L		03/11/25 09:31	
EPA 9320	Radium-228	0.970U ± 0.552 (1.01) C:72% T:74%	pCi/L		03/10/25 15:28	
Total Radium Calculation	Total Radium	1.29U ± 0.804 (1.48)	pCi/L		03/11/25 15:09	
92779986007	**HAM-HGWC-126**					
EPA 9315	Radium-226	0.525 ± 0.280 (0.434) C:78% T:NA	pCi/L		03/11/25 09:31	
EPA 9320	Radium-228	0.683U ± 0.488 (0.941) C:69% T:78%	pCi/L		03/10/25 15:28	
Total Radium Calculation	Total Radium	1.21U ± 0.768 (1.38)	pCi/L		03/11/25 15:09	
92779986008	**HAM-AP3-EB-01**					
EPA 9315	Radium-226	0.0477U ± 0.216 (0.530) C:78% T:NA	pCi/L		03/11/25 09:31	
EPA 9320	Radium-228	0.781U ± 0.450 (0.809) C:73% T:80%	pCi/L		03/10/25 15:28	
Total Radium Calculation	Total Radium	0.829U ± 0.666 (1.34)	pCi/L		03/11/25 15:09	

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SUMMARY OF DETECTION

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779986009	**HAM-AP3-FB-01**					
EPA 9315	Radium-226	0.241U ± 0.202 (0.376) C:89% T:NA	pCi/L		03/12/25 08:26	
EPA 9320	Radium-228	0.712 ± 0.399 (0.702) C:74% T:83%	pCi/L		03/10/25 15:25	
Total Radium Calculation	Total Radium	0.953U ± 0.601 (1.08)	pCi/L		03/12/25 13:31	
92779986010	**HAM-AP3-FD-01**					
EPA 9315	Radium-226	0.404U ± 0.257 (0.436) C:81% T:NA	pCi/L		03/12/25 09:25	
EPA 9320	Radium-228	1.21 ± 0.483 (0.708) C:70% T:84%	pCi/L		03/10/25 15:25	
Total Radium Calculation	Total Radium	1.61 ± 0.740 (1.14)	pCi/L		03/12/25 13:31	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Sample: HAM-HGWA-45D **Lab ID: 92779986001** Collected: 02/13/25 12:41 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	**0.438 ± 0.246 (0.366) C:70% T:NA**	pCi/L	03/07/25 09:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.433U ± 0.357 (0.713) C:78% T:90%**	pCi/L	03/06/25 10:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.871U ± 0.603 (1.08)**	pCi/L	03/07/25 13:48	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Sample: HAM-HGWA-122 **Lab ID: 92779986002** Collected: 02/13/25 15:02 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	**0.165U ± 0.158 (0.298) C:77% T:NA**	pCi/L	03/07/25 09:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.497U ± 0.349 (0.670) C:78% T:84%**	pCi/L	03/06/25 10:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.662U ± 0.507 (0.968)**	pCi/L	03/07/25 13:48	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Sample: HAM-HGWC-120 **Lab ID: 92779986003** Collected: 02/15/25 15:41 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	**0.133U ± 0.169 (0.360) C:80% T:NA**	pCi/L	03/07/25 09:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.373U ± 0.350 (0.714) C:78% T:85%**	pCi/L	03/06/25 10:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.506U ± 0.519 (1.07)**	pCi/L	03/07/25 13:48	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Sample: HAM-HGWC-121A **Lab ID: 92779986004** Collected: 02/15/25 09:19 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	**0.108U ± 0.161 (0.352) C:70% T:NA**	pCi/L	03/07/25 09:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.766 ± 0.406 (0.708) C:76% T:83%**	pCi/L	03/06/25 10:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.874U ± 0.567 (1.06)**	pCi/L	03/07/25 13:48	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Sample: HAM-HGWC-124 **Lab ID: 92779986005** Collected: 02/14/25 16:43 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	**0.102U ± 0.189 (0.433) C:82% T:NA**	pCi/L	03/07/25 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0435U ± 0.362 (0.854) C:72% T:82%**	pCi/L	03/06/25 10:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.102U ± 0.551 (1.29)**	pCi/L	03/07/25 13:48	7440-14-4	

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Sample: HAM-HGWC-125 **Lab ID: 92779986006** Collected: 02/15/25 14:01 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	**0.316U ± 0.252 (0.472) C:71% T:NA**	pCi/L	03/11/25 09:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.970U ± 0.552 (1.01) C:72% T:74%**	pCi/L	03/10/25 15:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.29U ± 0.804 (1.48)**	pCi/L	03/11/25 15:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Sample: HAM-HGWC-126 **Lab ID: 92779986007** Collected: 02/15/25 12:02 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	**0.525 ± 0.280 (0.434) C:78% T:NA**	pCi/L	03/11/25 09:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.683U ± 0.488 (0.941) C:69% T:78%**	pCi/L	03/10/25 15:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.21U ± 0.768 (1.38)**	pCi/L	03/11/25 15:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Sample: HAM-AP3-EB-01 **Lab ID: 92779986008** Collected: 02/15/25 16:35 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	**0.0477U ± 0.216 (0.530) C:78% T:NA**	pCi/L	03/11/25 09:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.781U ± 0.450 (0.809) C:73% T:80%**	pCi/L	03/10/25 15:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.829U ± 0.666 (1.34)**	pCi/L	03/11/25 15:09	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Sample: HAM-AP3-FB-01 **Lab ID: 92779986009** Collected: 02/15/25 16:30 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	**0.241U ± 0.202 (0.376) C:89% T:NA**	pCi/L	03/12/25 08:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.712 ± 0.399 (0.702) C:74% T:83%**	pCi/L	03/10/25 15:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.953U ± 0.601 (1.08)**	pCi/L	03/12/25 13:31	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Sample: HAM-AP3-FD-01 **Lab ID: 92779986010** 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	**0.404U ± 0.257 (0.436) C:81% T:NA**	pCi/L	03/12/25 09:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.21 ± 0.483 (0.708) C:70% T:84%**	pCi/L	03/10/25 15:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.61 ± 0.740 (1.14)**	pCi/L	03/12/25 13:31	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

QC Batch:	728158	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92779986001, 92779986002, 92779986003, 92779986004, 92779986005

METHOD BLANK: 3544456 Matrix: Water

Associated Lab Samples: 92779986001, 92779986002, 92779986003, 92779986004, 92779986005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0276 ± 0.149 (0.405) C:88% T:NA	pCi/L	03/07/25 08:07	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

QC Batch:	728168	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92779986006, 92779986007, 92779986008

METHOD BLANK: 3544497 Matrix: Water

Associated Lab Samples: 92779986006, 92779986007, 92779986008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.652 ± 0.323 (0.458) C:64% T:NA	pCi/L	03/11/25 08:21	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

QC Batch: 728160
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92779986001, 92779986002, 92779986003, 92779986004, 92779986005

METHOD BLANK: 3544458 Matrix: Water
Associated Lab Samples: 92779986001, 92779986002, 92779986003, 92779986004, 92779986005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.397 ± 0.348 (0.699) C:74% T:84%	pCi/L	03/06/25 10:43	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

QC Batch: 729141
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92779986009, 92779986010

METHOD BLANK: 3549310 Matrix: Water
Associated Lab Samples: 92779986009, 92779986010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.192 ± 0.350 (0.767) C:73% T:80%	pCi/L	03/10/25 15:25	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

QC Batch: 728170
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92779986006, 92779986007, 92779986008

METHOD BLANK: 3544499 Matrix: Water
Associated Lab Samples: 92779986006, 92779986007, 92779986008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.679 ± 0.418 (0.785) C:74% T:86%	pCi/L	03/10/25 11:58	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

QC Batch: 729140
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92779986009, 92779986010

METHOD BLANK: 3549309 Matrix: Water
Associated Lab Samples: 92779986009, 92779986010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0236 ± 0.117 (0.342) C:89% T:NA	pCi/L	03/12/25 08:25	

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QUALIFIERS

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-3-RAD
Pace Project No.: 92779986

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779986001	**HAM-HGWA-45D**	EPA 9315	728158		
92779986002	**HAM-HGWA-122**	EPA 9315	728158		
92779986003	**HAM-HGWC-120**	EPA 9315	728158		
92779986004	**HAM-HGWC-121A**	EPA 9315	728158		
92779986005	**HAM-HGWC-124**	EPA 9315	728158		
92779986006	**HAM-HGWC-125**	EPA 9315	728168		
92779986007	**HAM-HGWC-126**	EPA 9315	728168		
92779986008	**HAM-AP3-EB-01**	EPA 9315	728168		
92779986009	**HAM-AP3-FB-01**	EPA 9315	729140		
92779986010	**HAM-AP3-FD-01**	EPA 9315	729140		
92779986001	**HAM-HGWA-45D**	EPA 9320	728160		
92779986002	**HAM-HGWA-122**	EPA 9320	728160		
92779986003	**HAM-HGWC-120**	EPA 9320	728160		
92779986004	**HAM-HGWC-121A**	EPA 9320	728160		
92779986005	**HAM-HGWC-124**	EPA 9320	728160		
92779986006	**HAM-HGWC-125**	EPA 9320	728170		
92779986007	**HAM-HGWC-126**	EPA 9320	728170		
92779986008	**HAM-AP3-EB-01**	EPA 9320	728170		
92779986009	**HAM-AP3-FB-01**	EPA 9320	729141		
92779986010	**HAM-AP3-FD-01**	EPA 9320	729141		
92779986001	**HAM-HGWA-45D**	Total Radium Calculation	731413		
92779986002	**HAM-HGWA-122**	Total Radium Calculation	731413		
92779986003	**HAM-HGWC-120**	Total Radium Calculation	731413		
92779986004	**HAM-HGWC-121A**	Total Radium Calculation	731413		
92779986005	**HAM-HGWC-124**	Total Radium Calculation	731413		
92779986006	**HAM-HGWC-125**	Total Radium Calculation	732070		
92779986007	**HAM-HGWC-126**	Total Radium Calculation	732070		
92779986008	**HAM-AP3-EB-01**	Total Radium Calculation	732070		
92779986009	**HAM-AP3-FB-01**	Total Radium Calculation	732353		
92779986010	**HAM-AP3-FD-01**	Total Radium Calculation	732353		

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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 ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: G A Power

Project #:

WO# : 92779986

92779986

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

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

Date/Initials Person Examining Contents: 2/19/25 LH

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: 2.3 Correction Factor: Add/Subtract (°C) -0.1

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

Cooler Temp Corrected (°C): 2.4

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Daltrax ID: 69614

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

Effective Date: 05/24/2024

WO# : 92779986

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)	BP6N	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)
CC																														
1		2	1		2		2	1																						
2		2	1		2		2	1																						
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

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

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

Daltrax ID: 69614

WO#: 92779986

PM: BV **Due Date: 03/10/25**

CLIENT: 92- GP-HAM

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Hammond AP-3	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA ✓ OTHER CCR

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX / CODE: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				Y/N	N	N	N	N	N		92779986
1	HAM-HGWA-45D		WG	G	2/13/2025	1241				16	8	3		4		1				X	X	X	X	X		N	001
2	HAM-HGWA-122		~~WG~~ GW	G	2/13/2025	1502	ZW 2/13/25			17	8	3		4		1				X	X	X	X	X		N	Matrix = WG 002
3																											
4																											
5																											
6																											
7							ZW 2/13/25																				
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2025S1U	Zain Webb / Geosyntec	2-14-25	1340	Ryan Williams / Pace	2/14/25	1340	
	Ryan Williams / Pace	2/14/25	1610	Charles Henley	2/14/25	1610	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Amanda Tomlinson, Zain Webb, Thomas Kessler / Geosyntec Consultants,

SIGNATURE of SAMPLER: Zain Webb (TO AT) DATE Signed (MM/DD/YY): 2-13-25

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

Pace

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 #:

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: 2/17/25 CH

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: 2.3 Correction Factor: Add/Subtract (°C) +0.1

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

Cooler Temp Corrected (°C): 2.4

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

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Daltrax ID: 69614

*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 #

aboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

lient_____ 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)	BP42-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC			1																									
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		1	1		2	2																						
7		1	1		2	2																						
8		1	1		2	2																						
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 #

lote: 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.)ut of hold, incorrect preservative, out of temp, incorrect containers.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Hammond AP-3	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA ✓ OTHER CCR

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

Section D Required Client Information

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

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test → Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2):	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92779986
1	HAM-HGWC-120	WG	G	2/15/2025	1541			17	8	3		4		1				N	X	X	X	X	X	N	Last Sample. 003
2	HAM-HGWC-121A	WG	G	2/15/2025	0919			17	8	3		4		1				N	X	X	X	X	X	N	004
3	HAM-HGWC-124	WG	G	2/14/2025	1643			17	8	3		4		1				N	X	X	X	X	X	N	005
4	HAM-HGWC-125	WG	G	2/15/2025	1401			17	8	3		4		1				N	X	X	X	X	X	N	006
5	HAM-HGWC-126	WG	G	2/15/2025	1202			17	8	3		4		1				N	X	X	X	X	X	N	007
6	HAM-AP3-EB-01	WQ	G	2/15/2025	1635			17	6	2		4						N	X	X	X	X		N	008
7	HAM-AP3-FB-01	WQ	G	2/15/2025	1630			17	6	2		4						N	X	X	X	X		N	009
8	HAM-AP3-FD-01	WG	G	2/15/2025	0000			17	6	2		4						N	X	X	X	X		N	010
9																									
10																									
11																									
12																									

2W 2-16-25

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2025S1[illegible]	Zain Webb / Geosyntec	2-17-25	1230	Ryan Williams / Pace	2/17/2025	1230	
	Ryan Williams / Pace	2/17/2025	1445	[signature]	2/17/25	1445	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Amanda Tomlinson, Thomas Kessler, Zain Webb / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signature] (AOR) DATE Signed (MM/DD/YY): 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.

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	2/26/2025
Worklist:	83714
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3544458
MB concentration:	0.397
M/B 2 Sigma CSU:	0.348
MB MDC:	0.699
MB Numerical Performance Indicator:	2.24
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS83714	LCSD83714
Count Date:	3/6/2025	3/6/2025
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	33.337	33.337
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.819	0.820
Target Conc. (pCi/L, g, F):	4.071	4.068
Uncertainty (Calculated):	0.199	0.199
Result (pCi/L, g, F):	3.147	3.279
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.783	0.812
Numerical Performance Indicator:	-2.24	-1.85
Percent Recovery:	77.30%	80.62%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS83714	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD83714	
Sample Result (pCi/L, g, F):	3.147	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.783	
Sample Duplicate Result (pCi/L, g, F):	3.279	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.812	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.230	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.20%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

3/7/25

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/3/2025
Worklist:	83720
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3544499
MB concentration:	0.679
M/B 2 Sigma CSU:	0.418
MB MDC:	0.785
MB Numerical Performance Indicator:	3.18
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS83720	LCSD83720
Count Date:	3/10/2025	3/10/2025
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	33.291	33.291
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.818	0.819
Target Conc. (pCi/L, g, F):	4.072	4.063
Uncertainty (Calculated):	0.200	0.199
Result (pCi/L, g, F):	4.052	4.826
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.964	1.108
Numerical Performance Indicator:	-0.04	1.33
Percent Recovery:	99.52%	118.77%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS83720	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD83720	
Sample Result (pCi/L, g, F):	4.052	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.964	
Sample Duplicate Result (pCi/L, g, F):	4.826	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.108	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.033	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	17.64%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

~~*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.~~ X MB activity < MDC, Pass

3/11/25

VAL

3/11/25

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	ZPC
Date:	3/3/2025
Worklist:	83787
Matrix:	WT

Method Blank Assessment	
MB Sample ID	3549310
MB concentration:	0.192
M/B 2 Sigma CSU:	0.350
MB MDC:	0.767
MB Numerical Performance Indicator:	1.07
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS83787	**LCSD83787**
Count Date:	3/10/2025	3/10/2025
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	33.291	33.291
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.820	0.818
Target Conc. (pCi/L, g, F):	4.060	4.068
Uncertainty (Calculated):	0.199	0.199
Result (pCi/L, g, F):	4.016	4.709
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.971	1.066
Numerical Performance Indicator:	-0.09	1.16
Percent Recovery:	98.93%	115.78%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS83787	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD83787	
Sample Result (pCi/L, g, F):	4.016	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.971	
Sample Duplicate Result (pCi/L, g, F):	4.709	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.066	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.942	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	15.70%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

VAL
3/11/25

Quality Control Sample Performance Assessment

Pace Analytical
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Test:	Ra-226
Analyst:	SLC
Date:	3/3/2025
Worklist:	83713
Matrix:	W

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3544456
MB concentration:	-0.028
M/B 2 Sigma CSU:	0.149
MB MDC:	0.405
MB Numerical Performance Indicator:	-0.36
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS83713	LCSD83713
Count Date:	3/7/2025	3/7/2025
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.015	25.015
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.510	0.505
Target Conc. (pCi/L, g, F):	4.908	4.957
Uncertainty (Calculated):	0.231	0.233
Result (pCi/L, g, F):	5.873	4.536
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.087	0.893
Numerical Performance Indicator:	1.70	-0.89
Percent Recovery:	119.68%	91.51%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS83713	92779986005
Duplicate Sample I.D.	LCSD83713	92779986005DUP
Sample Result (pCi/L, g, F):	5.873	0.102
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.087	0.189
Sample Duplicate Result (pCi/L, g, F):	4.536	0.129
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.893	0.143
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.863	-0.221
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	26.68%	23.07%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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

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

Comments:

SLC 3/7/25

VAM 3/7/25

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	3/8/2025
Worklist:	83719
Matrix:	W

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3544497
MB concentration:	0.652
M/B 2 Sigma CSU:	0.323
MB MDC:	0.458
MB Numerical Performance Indicator:	3.95
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	N/A

OK - less than RL

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS83719	LCSD83719
Count Date:	3/11/2025	3/11/2025
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.014	25.014
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.507
Target Conc. (pCi/L, g, F):	4.945	4.936
Uncertainty (Calculated):	0.232	0.232
Result (pCi/L, g, F):	5.458	5.846
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.037	1.114
Numerical Performance Indicator:	0.95	1.57
Percent Recovery:	110.38%	118.45%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS83719	92779986008
Duplicate Sample I.D.	LCSD83719	92779986008DUP
Sample Result (pCi/L, g, F):	5.458	0.048
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.037	0.216
Sample Duplicate Result (pCi/L, g, F):	5.846	0.085
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.114	0.130
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.500	-0.291
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.06%	56.33%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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

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

Comments:
*If the lowest activity ~~sample in this batch is greater than ten times the blank value, the blank is acceptable, otherwise this batch must be re-prepped~~. OK less than RL

LAM 3/11/25

SLC 3/11/25

LAM 3/11/25

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	3/9/2025
Worklist:	83786
Matrix:	W

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3549309
MB concentration:	-0.024
M/B 2 Sigma CSU:	0.117
MB MDC:	0.342
MB Numerical Performance Indicator:	-0.40
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS83786	LCSD83786
Count Date:	3/12/2025	3/12/2025
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.014	25.014
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.524	0.522
Target Conc. (pCi/L, g, F):	4.776	4.796
Uncertainty (Calculated):	0.224	0.225
Result (pCi/L, g, F):	4.500	5.030
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.883	0.971
Numerical Performance Indicator:	-0.59	0.46
Percent Recovery:	94.24%	104.86%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS83786	92779982016
Duplicate Sample I.D.	LCSD83786	92779982016DUP
Sample Result (pCi/L, g, F):	4.500	0.482
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.883	0.259 ✓
Sample Duplicate Result (pCi/L, g, F):	5.030	0.019 ✓
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.971	0.098
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.790	3.284
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.67%	184.96%
Duplicate Status vs Numerical Indicator:	Pass	Fail***
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	~~25%~~	~~25%~~

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 3/12/25 LAM 3/12/25

Activity below RL

LAM 3/12/25

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 20, 2025

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

RE: Project: Hammond AP-3
Pace Project No.: 92779985

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
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

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(704)875-9092

CERTIFICATIONS

Project: Hammond AP-3
Pace Project No.: 92779985

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 Certification #: T 104704245-17-14
Texas Mold Certification #: LAB0152
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Virginia Certification #: VT2006
Vermont Dept. of Health: ID# VT-2006
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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Hammond AP-3
Pace Project No.: 92779985

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92779985001	**HAM-HGWA-45D**	Water	02/13/25 12:41	02/14/25 16:10
92779985002	**HAM-HGWA-122**	Water	02/13/25 15:02	02/14/25 16:10
92779985003	**HAM-HGWC-120**	Water	02/15/25 15:41	02/17/25 14:45
92779985004	**HAM-HGWC-121A**	Water	02/15/25 09:19	02/17/25 14:45
92779985005	**HAM-HGWC-124**	Water	02/14/25 16:43	02/17/25 14:45
92779985006	**HAM-HGWC-125**	Water	02/15/25 14:01	02/17/25 14:45
92779985007	**HAM-HGWC-126**	Water	02/15/25 12:02	02/17/25 14:45
92779985008	**HAM-AP3-EB-01**	Water	02/15/25 16:35	02/17/25 14:45
92779985009	**HAM-AP3-FB-01**	Water	02/15/25 16:30	02/17/25 14:45
92779985010	**HAM-AP3-FD-01**	Water	02/15/25 00:00	02/17/25 14:45

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SAMPLE ANALYTE COUNT

Project: Hammond AP-3
Pace Project No.: 92779985

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92779985001	**HAM-HGWA-45D**	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
92779985002	**HAM-HGWA-122**	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
92779985003	**HAM-HGWC-120**	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
92779985004	**HAM-HGWC-121A**	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
92779985005	**HAM-HGWC-124**	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
92779985006	**HAM-HGWC-125**	EPA 6020B	JPD	1	PAN
		EPA 7470A	MAB2	1	PASI-A

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-3
Pace Project No.: 92779985

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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
92779985007	**HAM-HGWC-126**	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
92779985008	**HAM-AP3-EB-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
92779985009	**HAM-AP3-FB-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
92779985010	**HAM-AP3-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

PAN = Pace National - Mt. Juliet
PASI-A = Pace Analytical Services - Asheville
PASI-WC = Pace Analytical Services - West Columbia

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SUMMARY OF DETECTION

Project: Hammond AP-3
Pace Project No.: 92779985

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779985001	**HAM-HGWA-45D**					
EPA 6020B	Lithium	0.00456J	mg/L	0.0300	03/19/25 14:46	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	267	mg/L	5.0	02/22/25 17:50	
SM 2320B-2011	Alkalinity, Total as CaCO3	267	mg/L	5.0	02/22/25 17:50	
SM 2540C-2015	Total Dissolved Solids	272	mg/L	25.0	02/20/25 13:07	
SM 4500-S2D-2011	Sulfide	0.12	mg/L	0.10	02/19/25 01:55	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	02/18/25 11:38	
EPA 300.0 Rev 2.1 1993	Fluoride	0.22	mg/L	0.10	02/18/25 11:38	
EPA 300.0 Rev 2.1 1993	Sulfate	9.5	mg/L	1.0	02/18/25 11:38	
EPA 6020B	Barium	0.57	mg/L	0.050	03/12/25 12:05	
EPA 6020B	Boron	0.18	mg/L	0.040	03/11/25 19:59	
EPA 6020B	Calcium	55.9	mg/L	10.0	03/12/25 12:05	
EPA 6020B	Iron	0.26	mg/L	0.040	03/11/25 19:59	
EPA 6020B	Magnesium	20.6	mg/L	0.050	03/11/25 19:59	
EPA 6020B	Manganese	0.014J	mg/L	0.040	03/11/25 19:59	
EPA 6020B	Potassium	1.9	mg/L	0.50	03/11/25 19:59	
EPA 6020B	Sodium	21.9	mg/L	1.0	03/11/25 19:59	
92779985002	**HAM-HGWA-122**					
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	157	mg/L	5.0	02/25/25 12:13	
SM 2320B-2011	Alkalinity, Total as CaCO3	157	mg/L	5.0	02/25/25 12:13	
SM 2540C-2015	Total Dissolved Solids	206	mg/L	25.0	02/20/25 13:07	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	02/18/25 11:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	02/18/25 11:54	
EPA 300.0 Rev 2.1 1993	Sulfate	32.7	mg/L	1.0	02/18/25 11:54	
EPA 6020B	Barium	0.033	mg/L	0.0050	03/11/25 20:08	
EPA 6020B	Boron	0.15	mg/L	0.040	03/11/25 20:08	
EPA 6020B	Calcium	68.8	mg/L	10.0	03/12/25 12:14	
EPA 6020B	Iron	0.028J	mg/L	0.040	03/11/25 20:08	
EPA 6020B	Magnesium	5.1	mg/L	0.050	03/11/25 20:08	
EPA 6020B	Manganese	0.0022J	mg/L	0.040	03/11/25 20:08	
EPA 6020B	Molybdenum	0.0050J	mg/L	0.010	03/11/25 20:08	
EPA 6020B	Potassium	0.79	mg/L	0.50	03/11/25 20:08	
EPA 6020B	Selenium	0.0013J	mg/L	0.0050	03/11/25 20:08	
EPA 6020B	Sodium	5.5	mg/L	1.0	03/11/25 20:08	
92779985003	**HAM-HGWC-120**					
EPA 6020B	Lithium	0.0200J	mg/L	0.0300	03/19/25 15:02	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	283	mg/L	5.0	02/25/25 18:33	
SM 2320B-2011	Alkalinity, Total as CaCO3	283	mg/L	5.0	02/25/25 18:33	
SM 2540C-2015	Total Dissolved Solids	626	mg/L	25.0	02/21/25 12:16	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	02/18/25 08:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.34	mg/L	0.10	02/18/25 08:11	
EPA 300.0 Rev 2.1 1993	Sulfate	175	mg/L	4.0	02/18/25 18:19	
EPA 6020B	Barium	0.050	mg/L	0.0050	03/11/25 20:26	
EPA 6020B	Boron	1.2	mg/L	0.40	03/12/25 12:32	
EPA 6020B	Calcium	162	mg/L	10.0	03/12/25 12:32	
EPA 6020B	Cobalt	0.0046J	mg/L	0.0050	03/11/25 20:26	
EPA 6020B	Iron	0.52	mg/L	0.040	03/11/25 20:26	

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SUMMARY OF DETECTION

Project: Hammond AP-3
Pace Project No.: 92779985

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779985003	**HAM-HGWC-120**					
EPA 6020B	Magnesium	21.1	mg/L	0.050	03/11/25 20:26	
EPA 6020B	Manganese	1.2	mg/L	0.40	03/12/25 12:32	
EPA 6020B	Molybdenum	0.033	mg/L	0.010	03/11/25 20:26	
EPA 6020B	Potassium	6.8	mg/L	0.50	03/11/25 20:26	
EPA 6020B	Sodium	8.4	mg/L	1.0	03/11/25 20:26	
92779985004	**HAM-HGWC-121A**					
EPA 6020B	Lithium	0.00449J	mg/L	0.0300	03/19/25 15:05	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	324	mg/L	5.0	02/25/25 18:41	
SM 2320B-2011	Alkalinity, Total as CaCO3	324	mg/L	5.0	02/25/25 18:41	
SM 2540C-2015	Total Dissolved Solids	457	mg/L	25.0	02/21/25 12:17	
EPA 300.0 Rev 2.1 1993	Chloride	5.6	mg/L	1.0	02/18/25 08:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.18	mg/L	0.10	02/18/25 08:24	
EPA 300.0 Rev 2.1 1993	Sulfate	73.1	mg/L	1.0	02/18/25 08:24	
EPA 6020B	Barium	0.044	mg/L	0.0050	03/11/25 20:35	
EPA 6020B	Boron	0.85	mg/L	0.40	03/12/25 12:41	
EPA 6020B	Calcium	125	mg/L	10.0	03/12/25 12:41	
EPA 6020B	Iron	0.093	mg/L	0.040	03/11/25 20:35	
EPA 6020B	Magnesium	16.2	mg/L	0.050	03/11/25 20:35	
EPA 6020B	Manganese	0.43	mg/L	0.40	03/12/25 12:41	
EPA 6020B	Potassium	0.86	mg/L	0.50	03/11/25 20:35	
EPA 6020B	Sodium	19.0	mg/L	1.0	03/11/25 20:35	
92779985005	**HAM-HGWC-124**					
EPA 6020B	Lithium	0.00104J	mg/L	0.0300	03/19/25 15:08	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	203	mg/L	5.0	02/25/25 17:07	
SM 2320B-2011	Alkalinity, Total as CaCO3	203	mg/L	5.0	02/25/25 17:07	
SM 2540C-2015	Total Dissolved Solids	317	mg/L	25.0	02/21/25 12:15	
EPA 300.0 Rev 2.1 1993	Chloride	2.1	mg/L	1.0	02/18/25 08:38	
EPA 300.0 Rev 2.1 1993	Sulfate	61.4	mg/L	1.0	02/18/25 08:38	
EPA 6020B	Barium	0.060	mg/L	0.0050	03/11/25 20:44	
EPA 6020B	Boron	0.33J	mg/L	0.40	03/12/25 13:08	
EPA 6020B	Calcium	95.1	mg/L	10.0	03/12/25 13:08	
EPA 6020B	Iron	0.41	mg/L	0.040	03/11/25 20:44	
EPA 6020B	Magnesium	8.6	mg/L	0.050	03/11/25 20:44	
EPA 6020B	Manganese	0.15	mg/L	0.040	03/11/25 20:44	
EPA 6020B	Potassium	0.87	mg/L	0.50	03/11/25 20:44	
EPA 6020B	Sodium	4.7	mg/L	1.0	03/11/25 20:44	
92779985006	**HAM-HGWC-125**					
EPA 6020B	Lithium	0.00823J	mg/L	0.0300	03/19/25 15:21	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	255	mg/L	5.0	02/25/25 18:49	
SM 2320B-2011	Alkalinity, Total as CaCO3	255	mg/L	5.0	02/25/25 18:49	
SM 2540C-2015	Total Dissolved Solids	640	mg/L	25.0	02/21/25 12:17	
EPA 300.0 Rev 2.1 1993	Chloride	3.6	mg/L	1.0	02/18/25 08:51	
EPA 300.0 Rev 2.1 1993	Fluoride	0.19	mg/L	0.10	02/18/25 08:51	
EPA 300.0 Rev 2.1 1993	Sulfate	201	mg/L	5.0	02/18/25 18:33	
EPA 6020B	Barium	0.038	mg/L	0.0050	03/11/25 20:53	
EPA 6020B	Boron	1.5	mg/L	0.40	03/12/25 13:17	M1

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SUMMARY OF DETECTION

Project: Hammond AP-3
Pace Project No.: 92779985

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779985006	**HAM-HGWC-125**					
EPA 6020B	Calcium	169	mg/L	10.0	03/12/25 13:17	M1
EPA 6020B	Cobalt	0.0030J	mg/L	0.0050	03/11/25 20:53	
EPA 6020B	Iron	0.056	mg/L	0.040	03/11/25 20:53	
EPA 6020B	Magnesium	24.9	mg/L	0.050	03/11/25 20:53	
EPA 6020B	Manganese	0.93	mg/L	0.40	03/12/25 13:17	
EPA 6020B	Molybdenum	0.028	mg/L	0.010	03/11/25 20:53	
EPA 6020B	Potassium	3.7	mg/L	0.50	03/11/25 20:53	
EPA 6020B	Sodium	10.4	mg/L	1.0	03/11/25 20:53	M1
92779985007	**HAM-HGWC-126**					
EPA 6020B	Lithium	0.00401J	mg/L	0.0300	03/19/25 15:24	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	414	mg/L	5.0	02/25/25 18:58	
SM 2320B-2011	Alkalinity, Total as CaCO3	414	mg/L	5.0	02/25/25 18:58	
SM 2540C-2015	Total Dissolved Solids	525	mg/L	25.0	02/21/25 12:17	
EPA 300.0 Rev 2.1 1993	Chloride	8.8	mg/L	1.0	02/18/25 09:05	
EPA 300.0 Rev 2.1 1993	Fluoride	0.49	mg/L	0.10	02/18/25 09:05	
EPA 300.0 Rev 2.1 1993	Sulfate	64.8	mg/L	1.0	02/18/25 09:05	
EPA 6020B	Barium	0.24	mg/L	0.0050	03/11/25 21:56	
EPA 6020B	Boron	0.016J	mg/L	0.040	03/11/25 21:56	
EPA 6020B	Calcium	143	mg/L	10.0	03/12/25 14:02	
EPA 6020B	Iron	1.4	mg/L	0.040	03/11/25 21:56	
EPA 6020B	Magnesium	26.6	mg/L	0.050	03/11/25 21:56	
EPA 6020B	Manganese	0.16	mg/L	0.040	03/11/25 21:56	
EPA 6020B	Potassium	0.80	mg/L	0.50	03/11/25 21:56	
EPA 6020B	Selenium	0.0013J	mg/L	0.0050	03/11/25 21:56	
EPA 6020B	Sodium	31.5	mg/L	10.0	03/12/25 14:02	
92779985010	**HAM-AP3-FD-01**					
EPA 6020B	Lithium	0.00459J	mg/L	0.0300	03/19/25 15:34	J
SM 2540C-2015	Total Dissolved Solids	455	mg/L	25.0	02/21/25 12:18	
EPA 300.0 Rev 2.1 1993	Chloride	6.0	mg/L	1.0	02/18/25 09:45	
EPA 300.0 Rev 2.1 1993	Fluoride	0.19	mg/L	0.10	02/18/25 09:45	
EPA 300.0 Rev 2.1 1993	Sulfate	76.0	mg/L	1.0	02/18/25 09:45	
EPA 6020B	Barium	0.044	mg/L	0.0050	03/11/25 23:27	
EPA 6020B	Boron	0.89	mg/L	0.40	03/12/25 14:20	
EPA 6020B	Calcium	124	mg/L	10.0	03/12/25 14:20	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWA-45D **Lab ID: 92779985001** Collected: 02/13/25 12:41 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	**0.00456J**	mg/L	0.0300	0.000600	1	03/19/25 11:25	03/19/25 14:46	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	02/18/25 17:23	02/21/25 16:15	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**267**	mg/L	5.0	5.0	1		02/22/25 17:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/22/25 17:50		
Alkalinity, Total as CaCO3	**267**	mg/L	5.0	5.0	1		02/22/25 17:50		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**272**	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	**0.12**	mg/L	0.10	0.022	1		02/19/25 01:55	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.2**	mg/L	1.0	0.60	1		02/18/25 11:38	16887-00-6	
Fluoride	**0.22**	mg/L	0.10	0.050	1		02/18/25 11:38	16984-48-8	
Sulfate	**9.5**	mg/L	1.0	0.50	1		02/18/25 11:38	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 19:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 19:59	7440-38-2	
Barium	**0.57**	mg/L	0.050	0.012	10	03/10/25 10:48	03/12/25 12:05	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 19:59	7440-41-7	
Boron	**0.18**	mg/L	0.040	0.0062	1	03/10/25 10:48	03/11/25 19:59	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 19:59	7440-43-9	
Calcium	**55.9**	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 12:05	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 19:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 19:59	7440-48-4	
Iron	**0.26**	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 19:59	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 19:59	7439-92-1	
Magnesium	**20.6**	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 19:59	7439-95-4	
Manganese	**0.014J**	mg/L	0.040	0.0012	1	03/10/25 10:48	03/11/25 19:59	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 19:59	7439-98-7	
Potassium	**1.9**	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 19:59	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 19:59	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWA-45D **Lab ID: 92779985001** Collected: 02/13/25 12:41 Received: 02/14/25 16:10 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	**21.9**	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 19:59	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 19:59	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWA-122 **Lab ID: 92779985002** Collected: 02/13/25 15:02 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	ND	mg/L	0.0300	0.000600	1	03/19/25 11:25	03/19/25 14:59	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	02/18/25 17:23	02/21/25 16:17	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**157**	mg/L	5.0	5.0	1		02/25/25 12:13		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 12:13		
Alkalinity, Total as CaCO3	**157**	mg/L	5.0	5.0	1		02/25/25 12:13		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**206**	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	**1.6**	mg/L	1.0	0.60	1		02/18/25 11:54	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		02/18/25 11:54	16984-48-8	
Sulfate	**32.7**	mg/L	1.0	0.50	1		02/18/25 11:54	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 20:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:08	7440-38-2	
Barium	**0.033**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:08	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 20:08	7440-41-7	
Boron	**0.15**	mg/L	0.040	0.0062	1	03/10/25 10:48	03/11/25 20:08	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 20:08	7440-43-9	
Calcium	**68.8**	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 12:14	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:08	7440-48-4	
Iron	**0.028J**	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 20:08	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 20:08	7439-92-1	
Magnesium	**5.1**	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 20:08	7439-95-4	
Manganese	**0.0022J**	mg/L	0.040	0.0012	1	03/10/25 10:48	03/11/25 20:08	7439-96-5	
Molybdenum	**0.0050J**	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 20:08	7439-98-7	
Potassium	**0.79**	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 20:08	7440-09-7	
Selenium	**0.0013J**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:08	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWA-122 **Lab ID: 92779985002** Collected: 02/13/25 15:02 Received: 02/14/25 16:10 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	**5.5**	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 20:08	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 20:08	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWC-120 **Lab ID: 92779985003** Collected: 02/15/25 15:41 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	**0.0200J**	mg/L	0.0300	0.000600	1	03/19/25 11:25	03/19/25 15:02	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	02/19/25 18:51	02/23/25 14:03	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**283**	mg/L	5.0	5.0	1		02/25/25 18:33		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 18:33		
Alkalinity, Total as CaCO3	**283**	mg/L	5.0	5.0	1		02/25/25 18:33		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**626**	mg/L	25.0	25.0	1		02/21/25 12:16		
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 02:08	18496-25-8	
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		02/18/25 08:11	16887-00-6	
Fluoride	**0.34**	mg/L	0.10	0.050	1		02/18/25 08:11	16984-48-8	
Sulfate	**175**	mg/L	4.0	2.0	4		02/18/25 18:19	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	03/11/25 20:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:26	7440-38-2	
Barium	**0.050**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:26	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 20:26	7440-41-7	
Boron	**1.2**	mg/L	0.40	0.062	10	03/10/25 10:48	03/12/25 12:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 20:26	7440-43-9	
Calcium	**162**	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 12:32	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:26	7440-47-3	
Cobalt	**0.0046J**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:26	7440-48-4	
Iron	**0.52**	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 20:26	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 20:26	7439-92-1	
Magnesium	**21.1**	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 20:26	7439-95-4	
Manganese	**1.2**	mg/L	0.40	0.012	10	03/10/25 10:48	03/12/25 12:32	7439-96-5	
Molybdenum	**0.033**	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 20:26	7439-98-7	
Potassium	**6.8**	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 20:26	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:26	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWC-120 **Lab ID: 92779985003** Collected: 02/15/25 15:41 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	**8.4**	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 20:26	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 20:26	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWC-121A **Lab ID: 92779985004** Collected: 02/15/25 09:19 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	**0.00449J**	mg/L	0.0300	0.000600	1	03/19/25 11:25	03/19/25 15:05	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	02/19/25 18:51	02/23/25 14:05	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**324**	mg/L	5.0	5.0	1		02/25/25 18:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 18:41		
Alkalinity, Total as CaCO3	**324**	mg/L	5.0	5.0	1		02/25/25 18:41		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**457**	mg/L	25.0	25.0	1		02/21/25 12:17		
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 02:09	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 08:24	16887-00-6	
Fluoride	**0.18**	mg/L	0.10	0.050	1		02/18/25 08:24	16984-48-8	
Sulfate	**73.1**	mg/L	1.0	0.50	1		02/18/25 08:24	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 20:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:35	7440-38-2	
Barium	**0.044**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 20:35	7440-41-7	
Boron	**0.85**	mg/L	0.40	0.062	10	03/10/25 10:48	03/12/25 12:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 20:35	7440-43-9	
Calcium	**125**	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 12:41	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:35	7440-48-4	
Iron	**0.093**	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 20:35	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 20:35	7439-92-1	
Magnesium	**16.2**	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 20:35	7439-95-4	
Manganese	**0.43**	mg/L	0.40	0.012	10	03/10/25 10:48	03/12/25 12:41	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 20:35	7439-98-7	
Potassium	**0.86**	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 20:35	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:35	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWC-121A **Lab ID: 92779985004** Collected: 02/15/25 09:19 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	**19.0**	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 20:35	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 20:35	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWC-124 **Lab ID: 92779985005** Collected: 02/14/25 16:43 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	**0.00104J**	mg/L	0.0300	0.000600	1	03/19/25 11:25	03/19/25 15:08	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	02/19/25 18:51	02/23/25 14:07	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**203**	mg/L	5.0	5.0	1		02/25/25 17:07		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 17:07		
Alkalinity, Total as CaCO3	**203**	mg/L	5.0	5.0	1		02/25/25 17:07		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**317**	mg/L	25.0	25.0	1		02/21/25 12:15		
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 02:04	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.1**	mg/L	1.0	0.60	1		02/18/25 08:38	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 08:38	16984-48-8	
Sulfate	**61.4**	mg/L	1.0	0.50	1		02/18/25 08:38	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 20:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:44	7440-38-2	
Barium	**0.060**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 20:44	7440-41-7	
Boron	**0.33J**	mg/L	0.40	0.062	10	03/10/25 10:48	03/12/25 13:08	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 20:44	7440-43-9	
Calcium	**95.1**	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 13:08	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:44	7440-48-4	
Iron	**0.41**	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 20:44	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 20:44	7439-92-1	
Magnesium	**8.6**	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 20:44	7439-95-4	
Manganese	**0.15**	mg/L	0.040	0.0012	1	03/10/25 10:48	03/11/25 20:44	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 20:44	7439-98-7	
Potassium	**0.87**	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 20:44	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:44	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWC-124 **Lab ID: 92779985005** Collected: 02/14/25 16:43 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	**4.7**	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 20:44	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 20:44	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWC-125 **Lab ID: 92779985006** Collected: 02/15/25 14:01 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	**0.00823J**	mg/L	0.0300	0.000600	1	03/19/25 11:25	03/19/25 15:21	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	02/19/25 18:51	02/23/25 14:09	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**255**	mg/L	5.0	5.0	1		02/25/25 18:49		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 18:49		
Alkalinity, Total as CaCO3	**255**	mg/L	5.0	5.0	1		02/25/25 18:49		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**640**	mg/L	25.0	25.0	1		02/21/25 12:17		
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 02:09	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.6**	mg/L	1.0	0.60	1		02/18/25 08:51	16887-00-6	
Fluoride	**0.19**	mg/L	0.10	0.050	1		02/18/25 08:51	16984-48-8	
Sulfate	**201**	mg/L	5.0	2.5	5		02/18/25 18:33	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	03/11/25 20:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:53	7440-38-2	
Barium	**0.038**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:53	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 20:53	7440-41-7	
Boron	**1.5**	mg/L	0.40	0.062	10	03/10/25 10:48	03/12/25 13:17	7440-42-8	M1
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 20:53	7440-43-9	
Calcium	**169**	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 13:17	7440-70-2	M1
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:53	7440-47-3	
Cobalt	**0.0030J**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:53	7440-48-4	
Iron	**0.056**	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 20:53	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 20:53	7439-92-1	
Magnesium	**24.9**	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 20:53	7439-95-4	
Manganese	**0.93**	mg/L	0.40	0.012	10	03/10/25 10:48	03/12/25 13:17	7439-96-5	
Molybdenum	**0.028**	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 20:53	7439-98-7	
Potassium	**3.7**	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 20:53	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 20:53	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWC-125 **Lab ID: 92779985006** Collected: 02/15/25 14:01 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	**10.4**	mg/L	1.0	0.15	1	03/10/25 10:48	03/11/25 20:53	7440-23-5	M1
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 20:53	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWC-126 **Lab ID: 92779985007** Collected: 02/15/25 12:02 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	**0.00401J**	mg/L	0.0300	0.000600	1	03/19/25 11:25	03/19/25 15:24	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	02/19/25 18:51	02/23/25 14:12	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**414**	mg/L	5.0	5.0	1		02/25/25 18:58		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 18:58		
Alkalinity, Total as CaCO3	**414**	mg/L	5.0	5.0	1		02/25/25 18:58		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**525**	mg/L	25.0	25.0	1		02/21/25 12:17		
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	**8.8**	mg/L	1.0	0.60	1		02/18/25 09:05	16887-00-6	
Fluoride	**0.49**	mg/L	0.10	0.050	1		02/18/25 09:05	16984-48-8	
Sulfate	**64.8**	mg/L	1.0	0.50	1		02/18/25 09:05	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 21:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 21:56	7440-38-2	
Barium	**0.24**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 21:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 21:56	7440-41-7	
Boron	**0.016J**	mg/L	0.040	0.0062	1	03/10/25 10:48	03/11/25 21:56	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 21:56	7440-43-9	
Calcium	**143**	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 14:02	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 21:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 21:56	7440-48-4	
Iron	**1.4**	mg/L	0.040	0.012	1	03/10/25 10:48	03/11/25 21:56	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 21:56	7439-92-1	
Magnesium	**26.6**	mg/L	0.050	0.010	1	03/10/25 10:48	03/11/25 21:56	7439-95-4	
Manganese	**0.16**	mg/L	0.040	0.0012	1	03/10/25 10:48	03/11/25 21:56	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 21:56	7439-98-7	
Potassium	**0.80**	mg/L	0.50	0.10	1	03/10/25 10:48	03/11/25 21:56	7440-09-7	
Selenium	**0.0013J**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 21:56	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-HGWC-126 **Lab ID: 92779985007** Collected: 02/15/25 12:02 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	**31.5**	mg/L	10.0	1.5	10	03/10/25 10:48	03/12/25 14:02	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 21:56	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-AP3-EB-01 **Lab ID: 92779985008** Collected: 02/15/25 16:35 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	03/19/25 11:25	03/19/25 15:27	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	02/19/25 18:51	02/23/25 14:14	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 12:17		
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 02:57	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 02:57	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/18/25 02:57	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	03/11/25 22:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 22:06	7440-41-7	
Boron	ND	mg/L	0.040	0.0062	1	03/10/25 10:48	03/11/25 22:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 22:06	7440-43-9	
Calcium	ND	mg/L	1.0	0.10	1	03/10/25 10:48	03/11/25 22:06	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 22:06	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 22:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 22:06	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-AP3-FB-01 **Lab ID: 92779985009** Collected: 02/15/25 16:30 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	ND	mg/L	0.0300	0.000600	1	03/19/25 11:25	03/19/25 15:31	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	02/19/25 18:51	02/23/25 14:20	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 12:17		
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 03:11	16887-00-6	M1
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 03:11	16984-48-8	M1,R1
Sulfate	ND	mg/L	1.0	0.50	1		02/18/25 03:11	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	03/11/25 22:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:15	7440-38-2	
Barium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:15	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 22:15	7440-41-7	
Boron	ND	mg/L	0.040	0.0062	1	03/10/25 10:48	03/11/25 22:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 22:15	7440-43-9	
Calcium	ND	mg/L	1.0	0.10	1	03/10/25 10:48	03/11/25 22:15	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 22:15	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 22:15	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 22:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 22:15	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond AP-3
Pace Project No.: 92779985

Sample: HAM-AP3-FD-01 **Lab ID: 92779985010** 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	**0.00459J**	mg/L	0.0300	0.000600	1	03/19/25 11:25	03/19/25 15:34	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	02/19/25 18:51	02/23/25 14:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**455**	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	**6.0**	mg/L	1.0	0.60	1		02/18/25 09:45	16887-00-6	
Fluoride	**0.19**	mg/L	0.10	0.050	1		02/18/25 09:45	16984-48-8	
Sulfate	**76.0**	mg/L	1.0	0.50	1		02/18/25 09:45	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 23:27	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:27	7440-38-2	
Barium	**0.044**	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:27	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 10:48	03/11/25 23:27	7440-41-7	
Boron	**0.89**	mg/L	0.40	0.062	10	03/10/25 10:48	03/12/25 14:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 10:48	03/11/25 23:27	7440-43-9	
Calcium	**124**	mg/L	10.0	1.0	10	03/10/25 10:48	03/12/25 14:20	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:27	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:27	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 10:48	03/11/25 23:27	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 10:48	03/11/25 23:27	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 10:48	03/11/25 23:27	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 10:48	03/11/25 23:27	7440-28-0	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

QC Batch: 2469182
QC Batch Method: 3015
Analysis Method: EPA 6020B
Analysis Description: Metals (ICPMS) 6020B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 92779985001, 92779985002, 92779985003, 92779985004, 92779985005, 92779985006, 92779985007, 92779985008, 92779985009, 92779985010

METHOD BLANK: R4188377-1 Matrix: Water
Associated Lab Samples: 92779985001, 92779985002, 92779985003, 92779985004, 92779985005, 92779985006, 92779985007, 92779985008, 92779985009, 92779985010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.0300	0.000600	03/19/25 14:40	

LABORATORY CONTROL SAMPLE: R4188377-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.0500	0.0456	91.3	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4188377-4 R4188377-5

Parameter	Units	92779985001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium	mg/L	0.00456	0.0500	0.0500	0.0483	0.0475	87.5	85.9	75.0-125	1.68	20	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

QC Batch: 916870
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779985001, 92779985002

METHOD BLANK: 4711924 Matrix: Water
Associated Lab Samples: 92779985001, 92779985002

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	92779246001 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	0.0025	0.0025	97	97	75-125	0	25	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

QC Batch: 917240
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779985003, 92779985004, 92779985005, 92779985006, 92779985007, 92779985008, 92779985009, 92779985010

METHOD BLANK: 4713992 Matrix: Water
Associated Lab Samples: 92779985003, 92779985004, 92779985005, 92779985006, 92779985007, 92779985008, 92779985009, 92779985010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00012	02/23/25 13:30	

LABORATORY CONTROL SAMPLE: 4713993

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: 4713994 4713995

Parameter	Units	92779981002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	97	98	75-125	1	25	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

QC Batch: 917923
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779985001

METHOD BLANK: 4717861 Matrix: Water
Associated Lab Samples: 92779985001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	02/22/25 14:57	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	02/22/25 14:57	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	02/22/25 14:57	

LABORATORY CONTROL SAMPLE: 4717862

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: 4717863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4717864 4717865

Parameter	Units	92779260002 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	ND	50	50	52.8	52.9	99	99	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4717866 4717867

Parameter	Units	92780100001 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	8.7	50	50	60.6	60.7	104	104	80-120	0	25	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

QC Batch: 918322
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779985002

METHOD BLANK: 4719398 Matrix: Water
Associated Lab Samples: 92779985002

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	92780435004 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	35.9	50	50	84.4	85.3	97	99	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4719403 4719404

Parameter	Units	92780435005 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	35.4	50	50	85.8	85.6	101	100	80-120	0	25	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

QC Batch: 918325
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779985003, 92779985004, 92779985005, 92779985006, 92779985007

METHOD BLANK: 4719412 Matrix: Water
Associated Lab Samples: 92779985003, 92779985004, 92779985005, 92779985006, 92779985007

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	92779983010 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	143	50	50	191	193	97	100	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4719417 4719418

Parameter	Units	92779983011 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	ND	50	50	51.6	51.6	102	102	80-120	0	25	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

QC Batch: 917325
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779985001, 92779985002

METHOD BLANK: 4714805 Matrix: Water
Associated Lab Samples: 92779985001, 92779985002

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-3
Pace Project No.: 92779985

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: 92779985003, 92779985004, 92779985005, 92779985006, 92779985007, 92779985008, 92779985009, 92779985010

METHOD BLANK: 4716350 Matrix: Water
Associated Lab Samples: 92779985003, 92779985004, 92779985005, 92779985006, 92779985007, 92779985008, 92779985009, 92779985010

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-3
Pace Project No.: 92779985

QC Batch: 916812
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779985001, 92779985002

METHOD BLANK: 4711805 Matrix: Water
Associated Lab Samples: 92779985001, 92779985002

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711809 4711810

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

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

QC Batch: 916813
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779985003, 92779985004, 92779985005, 92779985006, 92779985007

METHOD BLANK: 4711811 Matrix: Water
Associated Lab Samples: 92779985003, 92779985004, 92779985005, 92779985006, 92779985007

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711815 4711816

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

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

QC Batch: 916738
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779985001, 92779985002

METHOD BLANK: 4711421 Matrix: Water
Associated Lab Samples: 92779985001, 92779985002

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.8	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-3
Pace Project No.: 92779985

QC Batch: 916791
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779985003, 92779985004, 92779985005, 92779985006, 92779985007, 92779985008, 92779985009, 92779985010

METHOD BLANK: 4711726 Matrix: Water
Associated Lab Samples: 92779985003, 92779985004, 92779985005, 92779985006, 92779985007, 92779985008, 92779985009, 92779985010

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-3
Pace Project No.: 92779985

QC Batch: 921052
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: WC 6020B MET
Laboratory: Pace Analytical Services - West Columbia
Associated Lab Samples: 92779985001, 92779985002, 92779985003, 92779985004, 92779985005, 92779985006, 92779985007, 92779985008, 92779985009

METHOD BLANK: 4732986 Matrix: Water
Associated Lab Samples: 92779985001, 92779985002, 92779985003, 92779985004, 92779985005, 92779985006, 92779985007, 92779985008, 92779985009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00050	03/11/25 17:53	
Arsenic	mg/L	ND	0.0050	0.0012	03/11/25 17:53	
Barium	mg/L	ND	0.0050	0.0012	03/11/25 17:53	
Beryllium	mg/L	ND	0.00050	0.00015	03/11/25 17:53	
Boron	mg/L	ND	0.040	0.0062	03/11/25 17:53	
Cadmium	mg/L	ND	0.00050	0.00012	03/11/25 17:53	
Calcium	mg/L	ND	1.0	0.10	03/11/25 17:53	
Chromium	mg/L	ND	0.0050	0.0012	03/11/25 17:53	
Cobalt	mg/L	ND	0.0050	0.0012	03/11/25 17:53	
Iron	mg/L	ND	0.040	0.012	03/11/25 17:53	
Lead	mg/L	ND	0.0010	0.00025	03/11/25 17:53	
Magnesium	mg/L	ND	0.050	0.010	03/11/25 17:53	
Manganese	mg/L	ND	0.040	0.0012	03/11/25 17:53	
Molybdenum	mg/L	ND	0.010	0.0025	03/11/25 17:53	
Potassium	mg/L	ND	0.50	0.10	03/11/25 17:53	
Selenium	mg/L	ND	0.0050	0.0012	03/11/25 17:53	
Sodium	mg/L	ND	1.0	0.15	03/11/25 17:53	
Thallium	mg/L	ND	0.0010	0.00015	03/11/25 17:53	

LABORATORY CONTROL SAMPLE: 4732987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.097	97	80-120	
Arsenic	mg/L	0.1	0.093	93	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Boron	mg/L	0.1	0.097	97	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Calcium	mg/L	1	1.2	116	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Iron	mg/L	1	1.1	106	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Magnesium	mg/L	1	1.1	106	80-120	
Manganese	mg/L	0.1	0.12	120	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Potassium	mg/L	1	1.0	105	80-120	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

LABORATORY CONTROL SAMPLE: 4732987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	0.1	0.092	92	80-120	
Sodium	mg/L	1	1.0	104	80-120	
Thallium	mg/L	0.1	0.10	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4732988 4732989

Parameter	Units	92779985006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.090	0.088	90	88	75-125	2	20	
Barium	mg/L	0.038	0.1	0.1	0.14	0.14	105	104	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20	
Boron	mg/L	1.5	0.1	0.1	1.6	1.6	134	137	75-125	0	20	M1
Cadmium	mg/L	ND	0.1	0.1	0.098	0.097	98	97	75-125	1	20	
Calcium	mg/L	169	1	1	167	163	-154	-590	75-125	3	20	M1
Chromium	mg/L	ND	0.1	0.1	0.096	0.095	95	95	75-125	0	20	
Cobalt	mg/L	0.0030J	0.1	0.1	0.096	0.095	94	92	75-125	1	20	
Iron	mg/L	0.056	1	1	1.0	1.0	98	97	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.093	94	93	75-125	1	20	
Magnesium	mg/L	24.9	1	1	25.8	25.9	86	100	75-125	1	20	
Manganese	mg/L	0.93	0.1	0.1	1.0	1.0	109	97	75-125	1	20	
Molybdenum	mg/L	0.028	0.1	0.1	0.13	0.13	100	100	75-125	1	20	
Potassium	mg/L	3.7	1	1	4.8	4.8	102	108	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.084	0.084	83	84	75-125	0	20	
Sodium	mg/L	10.4	1	1	11.7	11.9	126	149	75-125	2	20	M1
Thallium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	

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QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

QC Batch: 921053
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: WC 6020B MET
Laboratory: Pace Analytical Services - West Columbia

Associated Lab Samples: 92779985010

METHOD BLANK: 4732992 Matrix: Water
Associated Lab Samples: 92779985010

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	
Lead	mg/L	ND	0.0010	0.00025	03/11/25 22:24	
Molybdenum	mg/L	ND	0.010	0.0025	03/11/25 22:24	
Selenium	mg/L	ND	0.0050	0.0012	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	
Lead	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.095	95	80-120	
Selenium	mg/L	0.1	0.090	90	80-120	
Thallium	mg/L	0.1	0.11	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4732994 4732995

Parameter	Units	92779987016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.089	0.089	89	89	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-3
Pace Project No.: 92779985

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4732994 4732995

Parameter	Units	92779987016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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	
Lead	mg/L	ND	0.1	0.1	0.094	0.094	94	93	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.098	0.096	98	96	75-125	2	20	

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

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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Hammond AP-3
Pace Project No.: 92779985

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

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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-3
Pace Project No.: 92779985

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779985001	**HAM-HGWA-45D**	3015	2469182	EPA 6020B	2469182
92779985002	**HAM-HGWA-122**	3015	2469182	EPA 6020B	2469182
92779985003	**HAM-HGWC-120**	3015	2469182	EPA 6020B	2469182
92779985004	**HAM-HGWC-121A**	3015	2469182	EPA 6020B	2469182
92779985005	**HAM-HGWC-124**	3015	2469182	EPA 6020B	2469182
92779985006	**HAM-HGWC-125**	3015	2469182	EPA 6020B	2469182
92779985007	**HAM-HGWC-126**	3015	2469182	EPA 6020B	2469182
92779985008	**HAM-AP3-EB-01**	3015	2469182	EPA 6020B	2469182
92779985009	**HAM-AP3-FB-01**	3015	2469182	EPA 6020B	2469182
92779985010	**HAM-AP3-FD-01**	3015	2469182	EPA 6020B	2469182
92779985001	**HAM-HGWA-45D**	EPA 7470A	916870	EPA 7470A	917066
92779985002	**HAM-HGWA-122**	EPA 7470A	916870	EPA 7470A	917066
92779985003	**HAM-HGWC-120**	EPA 7470A	917240	EPA 7470A	917352
92779985004	**HAM-HGWC-121A**	EPA 7470A	917240	EPA 7470A	917352
92779985005	**HAM-HGWC-124**	EPA 7470A	917240	EPA 7470A	917352
92779985006	**HAM-HGWC-125**	EPA 7470A	917240	EPA 7470A	917352
92779985007	**HAM-HGWC-126**	EPA 7470A	917240	EPA 7470A	917352
92779985008	**HAM-AP3-EB-01**	EPA 7470A	917240	EPA 7470A	917352
92779985009	**HAM-AP3-FB-01**	EPA 7470A	917240	EPA 7470A	917352
92779985010	**HAM-AP3-FD-01**	EPA 7470A	917240	EPA 7470A	917352
92779985001	**HAM-HGWA-45D**	SM 2320B-2011	917923		
92779985002	**HAM-HGWA-122**	SM 2320B-2011	918322		
92779985003	**HAM-HGWC-120**	SM 2320B-2011	918325		
92779985004	**HAM-HGWC-121A**	SM 2320B-2011	918325		
92779985005	**HAM-HGWC-124**	SM 2320B-2011	918325		
92779985006	**HAM-HGWC-125**	SM 2320B-2011	918325		
92779985007	**HAM-HGWC-126**	SM 2320B-2011	918325		
92779985001	**HAM-HGWA-45D**	SM 2540C-2015	917325		
92779985002	**HAM-HGWA-122**	SM 2540C-2015	917325		
92779985003	**HAM-HGWC-120**	SM 2540C-2015	917626		
92779985004	**HAM-HGWC-121A**	SM 2540C-2015	917626		
92779985005	**HAM-HGWC-124**	SM 2540C-2015	917626		
92779985006	**HAM-HGWC-125**	SM 2540C-2015	917626		
92779985007	**HAM-HGWC-126**	SM 2540C-2015	917626		
92779985008	**HAM-AP3-EB-01**	SM 2540C-2015	917626		
92779985009	**HAM-AP3-FB-01**	SM 2540C-2015	917626		
92779985010	**HAM-AP3-FD-01**	SM 2540C-2015	917626		
92779985001	**HAM-HGWA-45D**	SM 4500-S2D-2011	916812		
92779985002	**HAM-HGWA-122**	SM 4500-S2D-2011	916812		
92779985003	**HAM-HGWC-120**	SM 4500-S2D-2011	916813		
92779985004	**HAM-HGWC-121A**	SM 4500-S2D-2011	916813		
92779985005	**HAM-HGWC-124**	SM 4500-S2D-2011	916813		
92779985006	**HAM-HGWC-125**	SM 4500-S2D-2011	916813		
92779985007	**HAM-HGWC-126**	SM 4500-S2D-2011	916813		

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-3
Pace Project No.: 92779985

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779985001	**HAM-HGWA-45D**	EPA 300.0 Rev 2.1 1993	916738		
92779985002	**HAM-HGWA-122**	EPA 300.0 Rev 2.1 1993	916738		
92779985003	**HAM-HGWC-120**	EPA 300.0 Rev 2.1 1993	916791		
92779985004	**HAM-HGWC-121A**	EPA 300.0 Rev 2.1 1993	916791		
92779985005	**HAM-HGWC-124**	EPA 300.0 Rev 2.1 1993	916791		
92779985006	**HAM-HGWC-125**	EPA 300.0 Rev 2.1 1993	916791		
92779985007	**HAM-HGWC-126**	EPA 300.0 Rev 2.1 1993	916791		
92779985008	**HAM-AP3-EB-01**	EPA 300.0 Rev 2.1 1993	916791		
92779985009	**HAM-AP3-FB-01**	EPA 300.0 Rev 2.1 1993	916791		
92779985010	**HAM-AP3-FD-01**	EPA 300.0 Rev 2.1 1993	916791		
92779985001	**HAM-HGWA-45D**	EPA 3005A	921052	EPA 6020B	921508
92779985002	**HAM-HGWA-122**	EPA 3005A	921052	EPA 6020B	921508
92779985003	**HAM-HGWC-120**	EPA 3005A	921052	EPA 6020B	921508
92779985004	**HAM-HGWC-121A**	EPA 3005A	921052	EPA 6020B	921508
92779985005	**HAM-HGWC-124**	EPA 3005A	921052	EPA 6020B	921508
92779985006	**HAM-HGWC-125**	EPA 3005A	921052	EPA 6020B	921508
92779985007	**HAM-HGWC-126**	EPA 3005A	921052	EPA 6020B	921508
92779985008	**HAM-AP3-EB-01**	EPA 3005A	921052	EPA 6020B	921508
92779985009	**HAM-AP3-FB-01**	EPA 3005A	921052	EPA 6020B	921508
92779985010	**HAM-AP3-FD-01**	EPA 3005A	921053	EPA 6020B	921527

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

Effective Date: 05/24/2024

aboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92779985**

92779985

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: 2/14/25 LH

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: 2.3 Correction Factor: Add/Subtract (°C) -0.1

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

Cooler Temp Corrected (°C): 2.4

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

OMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

ENT NOTIFICATION/RESOLUTION

erson contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

ialtrax ID: 69614

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

Effective Date: 05/24/2024

WO# : 92779985

PM: BV Due Date: 03/03/25

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

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)	BP1N	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																														
1		2	1		2		2	1																						
2		2	1		2		2	1																						
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

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

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

Jaltrax ID: 69614

WO#: 92779985

PM: BV **Due Date: 03/03/25**

CLIENT: 92- GP-HAM

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Hammond AP-3	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA ✓ OTHER CCR

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
		DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS																	N	N	N	N	N	N		
1	HAM-HGWA-45D		WG	G	2/13/2025	1241				16	8	3		4		1			X	X	X	X	X	N	001
2	HAM-HGWA-122		~~WG~~ ZW	G	2/13/2025	1502	ZW 2/13/25			17	8	3		4		1			X	X	X	X	X	N	Matrix = WG 002
3																										
4																										
5																										
6																										
7							ZW 2/13/25																			
8																										
9																										
10																										
11																										
12																										

92779985

Pace Project No./ Lab I.D.

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2025S1	Zain Webb / Geosyntec	2-14-25	1340	Ryan Williams / Pace	2/14/25	1340	
	Ryan Williams / Pace	2/14/25	1610	Charles Henley	2/14/25	1610	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Amanda Tomlinson, Zain Webb, Thomas Kessler / Geosyntec Consultants,

SIGNATURE of SAMPLER: Zain Webb TD AT — DATE Signed (MM/DD/YY): 2-13-25

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

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

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: 2/17/25 CAS

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: 2.3 Correction Factor: Add/Subtract (°C) +0.1

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

Cooler Temp Corrected (°C): 2.4

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

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Daltrax ID: 69614

*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 #

aboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

lient_____ 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)	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 (9.3-9.7)	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		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		1	1		2		2																							
7		1	1		2		2																							
8		1	1		2		2																							
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 #

lote: 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.)ut of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Hammond AP-3	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY

NPDES | GROUND WATER | DRINKING WATER
UST | RCRA | ✓ OTHER | CCR

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test → Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RA3 226/228	TDS	Major Ions (Profile 10839-2):									Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92779985
1	HAM-HGWC-120	WG	G	2/15/2025	1541				17	8	3		4		1				X	X	X	X	X								N	Last Sample. 003
2	HAM-HGWC-121A	WG	G	2/15/2025	0919				17	8	3		4		1				X	X	X	X	X								N	004
3	HAM-HGWC-124	WG	G	2/14/2025	1643				17	8	3		4		1				X	X	X	X	X								N	005
4	HAM-HGWC-125	WG	G	2/15/2025	1401				17	8	3		4		1				X	X	X	X	X								N	006
5	HAM-HGWC-126	WG	G	2/15/2025	1202				17	8	3		4		1				X	X	X	X	X								N	007
6	HAM-AP3-EB-01	WQ	G	2/15/2025	1635				17	6	2		4						X	X	X	X									N	008
7	HAM-AP3-FB-01	WQ	G	2/15/2025	1630				17	6	2		4						X	X	X	X									N	009
8	HAM-AP3-FD-01	WG	G	2/15/2025	0000				17	6	2		4						X	X	X	X									N	010
9																																
10																																
11																																
12																																

2W 2-16-25

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2025S1	Zain Webb / Geosyntec	2-17-25	1230	Ryan Williams / Pace	2/17/25	1230	
	Ryan Williams / Pace	2/17/25	1445	Amanda Tomlinson / Geosyntec	2/17/25	1445	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Amanda Tomlinson, Thomas Kessler, Zain Webb / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: [signature] (AT)(TK) DATE Signed (MM/DD/YY): 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.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 27, 2025

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

RE: Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

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
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

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CERTIFICATIONS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

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 Certification #: T 104704245-17-14
Texas Mold Certification #: LAB0152
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Virginia Certification #: VT2006
Vermont Dept. of Health: ID# VT-2006
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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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92779989001	**HAM-HGWA-1**	Water	02/12/25 13:38	02/14/25 16:10
92779989002	**HAM-HGWA-3**	Water	02/12/25 14:30	02/14/25 16:10
92779989003	**HAM-HGWA-43D**	Water	02/12/25 14:50	02/14/25 16:10
92779989004	**HAM-HGWA-44D**	Water	02/12/25 15:42	02/14/25 16:10
92779989005	**HAM-UGRD-EB-01**	Water	02/13/25 17:30	02/14/25 16:10
92779989006	**HAM-UGRD-FB-01**	Water	02/13/25 17:25	02/14/25 16:10
92779989007	**HAM-HGWA-2**	Water	02/14/25 09:20	02/17/25 14:45
92779989008	**HAM-UGRD-FD-01**	Water	02/14/25 00:00	02/17/25 14:45

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SAMPLE ANALYTE COUNT

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92779989001	**HAM-HGWA-1**	EPA 6020B	LD	1	PAN
		EPA 7470A	MAB2	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
92779989002	**HAM-HGWA-3**	EPA 6020B	SJM	1	PAN
		EPA 7470A	MAB2	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
92779989003	**HAM-HGWA-43D**	EPA 6020B	SJM	1	PAN
		EPA 7470A	MAB2	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
92779989004	**HAM-HGWA-44D**	EPA 6020B	SJM	1	PAN
		EPA 7470A	MAB2	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
92779989005	**HAM-UGRD-EB-01**	EPA 6020B	UNP	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2540C-2015	HCH	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
		EPA 6020B	BK1	13	PASI-WC
92779989006	**HAM-UGRD-FB-01**	EPA 6020B	SJM	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		SM 2540C-2015	HCH	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	BK1	13	PASI-WC
92779989007	**HAM-HGWA-2**	EPA 6020B	SJM	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
92779989008	**HAM-UGRD-FD-01**	EPA 6020B	SJM	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

PAN = Pace National - Mt. Juliet
PASI-A = Pace Analytical Services - Asheville
PASI-WC = Pace Analytical Services - West Columbia

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SUMMARY OF DETECTION

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779989001	**HAM-HGWA-1**					
EPA 6020B	Lithium	0.00119J	mg/L	0.0300	03/19/25 23:57	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	283	mg/L	5.0	02/20/25 14:38	
SM 2320B-2011	Alkalinity, Total as CaCO3	283	mg/L	5.0	02/20/25 14:38	
SM 2540C-2015	Total Dissolved Solids	374	mg/L	25.0	02/18/25 17:54	
EPA 300.0 Rev 2.1 1993	Chloride	4.8	mg/L	1.0	02/18/25 14:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	02/18/25 14:32	
EPA 300.0 Rev 2.1 1993	Sulfate	43.8	mg/L	1.0	02/18/25 14:32	
EPA 6020B	Barium	0.034	mg/L	0.0050	03/13/25 09:40	
EPA 6020B	Boron	0.021J	mg/L	0.040	03/13/25 09:40	
EPA 6020B	Calcium	125	mg/L	10.0	03/12/25 18:52	
EPA 6020B	Iron	0.023J	mg/L	0.040	03/13/25 09:40	
EPA 6020B	Magnesium	4.7	mg/L	0.050	03/13/25 09:40	
EPA 6020B	Manganese	0.063	mg/L	0.040	03/13/25 09:40	
EPA 6020B	Potassium	0.48J	mg/L	0.50	03/13/25 09:40	
EPA 6020B	Sodium	14.7	mg/L	1.0	03/13/25 09:40	
92779989002	**HAM-HGWA-3**					
EPA 6020B	Lithium	0.00331J	mg/L	0.0300	03/19/25 12:43	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	223	mg/L	5.0	02/20/25 14:46	
SM 2320B-2011	Alkalinity, Total as CaCO3	223	mg/L	5.0	02/20/25 14:46	
SM 2540C-2015	Total Dissolved Solids	267	mg/L	25.0	02/18/25 17:55	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	02/18/25 14:48	
EPA 300.0 Rev 2.1 1993	Fluoride	0.073J	mg/L	0.10	02/18/25 14:48	
EPA 300.0 Rev 2.1 1993	Sulfate	28.0	mg/L	1.0	02/18/25 14:48	
EPA 6020B	Barium	0.13	mg/L	0.0050	03/13/25 09:49	
EPA 6020B	Boron	0.011J	mg/L	0.040	03/13/25 09:49	
EPA 6020B	Calcium	86.6	mg/L	10.0	03/12/25 19:01	
EPA 6020B	Iron	0.91	mg/L	0.040	03/13/25 09:49	
EPA 6020B	Magnesium	5.5	mg/L	0.050	03/13/25 09:49	
EPA 6020B	Manganese	0.25	mg/L	0.040	03/13/25 09:49	
EPA 6020B	Potassium	0.46J	mg/L	0.50	03/13/25 09:49	
EPA 6020B	Sodium	5.7	mg/L	1.0	03/13/25 09:49	
92779989003	**HAM-HGWA-43D**					
EPA 6020B	Lithium	0.00266J	mg/L	0.0300	03/19/25 12:46	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	237	mg/L	5.0	02/20/25 14:54	
SM 2320B-2011	Alkalinity, Total as CaCO3	237	mg/L	5.0	02/20/25 14:54	
SM 2540C-2015	Total Dissolved Solids	273	mg/L	25.0	02/18/25 17:55	
SM 4500-S2D-2011	Sulfide	0.025J	mg/L	0.10	02/19/25 01:49	
EPA 300.0 Rev 2.1 1993	Chloride	3.8	mg/L	1.0	02/18/25 15:04	
EPA 300.0 Rev 2.1 1993	Fluoride	0.21	mg/L	0.10	02/18/25 15:04	
EPA 300.0 Rev 2.1 1993	Sulfate	25.2	mg/L	1.0	02/18/25 15:04	
EPA 6020B	Barium	0.30	mg/L	0.0050	03/13/25 09:58	
EPA 6020B	Boron	0.040J	mg/L	0.040	03/13/25 09:58	
EPA 6020B	Calcium	61.8	mg/L	10.0	03/12/25 19:10	
EPA 6020B	Iron	0.27	mg/L	0.040	03/13/25 09:58	
EPA 6020B	Magnesium	19.3	mg/L	0.050	03/13/25 09:58	
EPA 6020B	Manganese	0.015J	mg/L	0.040	03/13/25 09:58	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779989003	**HAM-HGWA-43D**					
EPA 6020B	Potassium	0.86	mg/L	0.50	03/13/25 09:58	
EPA 6020B	Sodium	19.8	mg/L	1.0	03/13/25 09:58	
92779989004	**HAM-HGWA-44D**					
EPA 6020B	Lithium	0.101	mg/L	0.0300	03/19/25 12:49	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	294	mg/L	5.0	02/20/25 15:02	
SM 2320B-2011	Alkalinity, Total as CaCO3	294	mg/L	5.0	02/20/25 15:02	
SM 2540C-2015	Total Dissolved Solids	363	mg/L	25.0	02/18/25 17:55	
SM 4500-S2D-2011	Sulfide	0.10	mg/L	0.10	02/19/25 01:51	
EPA 300.0 Rev 2.1 1993	Chloride	30.7	mg/L	1.0	02/18/25 15:20	
EPA 300.0 Rev 2.1 1993	Fluoride	1.1	mg/L	0.10	02/18/25 15:20	
EPA 300.0 Rev 2.1 1993	Sulfate	0.51J	mg/L	1.0	02/18/25 15:20	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	03/12/25 23:41	
EPA 6020B	Barium	0.095	mg/L	0.0050	03/12/25 23:41	
EPA 6020B	Boron	0.54	mg/L	0.40	03/12/25 19:19	
EPA 6020B	Calcium	7.2	mg/L	1.0	03/12/25 23:41	
EPA 6020B	Iron	0.19	mg/L	0.040	03/12/25 23:41	
EPA 6020B	Magnesium	3.5	mg/L	0.050	03/12/25 23:41	
EPA 6020B	Manganese	0.0058J	mg/L	0.040	03/12/25 23:41	
EPA 6020B	Potassium	2.3J	mg/L	5.0	03/12/25 19:19	1g
EPA 6020B	Sodium	141	mg/L	10.0	03/12/25 19:19	
92779989007	**HAM-HGWA-2**					
EPA 6020B	Lithium	0.00183J	mg/L	0.0300	03/19/25 12:56	J
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	58.3	mg/L	5.0	02/25/25 17:18	
SM 2320B-2011	Alkalinity, Total as CaCO3	58.3	mg/L	5.0	02/25/25 17:18	
SM 2540C-2015	Total Dissolved Solids	242	mg/L	25.0	02/21/25 12:15	
EPA 300.0 Rev 2.1 1993	Chloride	8.5	mg/L	1.0	02/18/25 14:01	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	02/18/25 14:01	
EPA 300.0 Rev 2.1 1993	Sulfate	94.5	mg/L	1.0	02/18/25 14:01	M1
EPA 6020B	Barium	0.057	mg/L	0.0050	03/13/25 02:15	
EPA 6020B	Beryllium	0.00023J	mg/L	0.00050	03/13/25 02:15	
EPA 6020B	Boron	0.053	mg/L	0.040	03/13/25 02:15	
EPA 6020B	Cadmium	0.00028J	mg/L	0.00050	03/13/25 02:15	
EPA 6020B	Calcium	51.5	mg/L	10.0	03/12/25 21:53	
EPA 6020B	Cobalt	0.030	mg/L	0.0050	03/13/25 02:15	
EPA 6020B	Iron	0.068	mg/L	0.040	03/13/25 02:15	
EPA 6020B	Magnesium	5.0	mg/L	0.050	03/13/25 02:15	
EPA 6020B	Manganese	0.84	mg/L	0.40	03/12/25 21:53	
EPA 6020B	Potassium	1.5	mg/L	0.50	03/13/25 02:15	
EPA 6020B	Selenium	0.0043J	mg/L	0.0050	03/14/25 18:01	
EPA 6020B	Sodium	12.5	mg/L	1.0	03/13/25 02:15	
92779989008	**HAM-UGRD-FD-01**					
EPA 6020B	Lithium	0.00182J	mg/L	0.0300	03/19/25 12:59	J
SM 2540C-2015	Total Dissolved Solids	230	mg/L	25.0	02/21/25 12:16	
EPA 300.0 Rev 2.1 1993	Chloride	8.5	mg/L	1.0	02/18/25 15:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.096J	mg/L	0.10	02/18/25 15:08	
EPA 300.0 Rev 2.1 1993	Sulfate	94.9	mg/L	1.0	02/18/25 15:08	

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SUMMARY OF DETECTION

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92779989008	**HAM-UGRD-FD-01**					
EPA 6020B	Barium	0.052	mg/L	0.0050	03/13/25 02:24	
EPA 6020B	Beryllium	0.00023J	mg/L	0.00050	03/13/25 02:24	
EPA 6020B	Boron	0.050	mg/L	0.040	03/13/25 02:24	
EPA 6020B	Cadmium	0.00026J	mg/L	0.00050	03/13/25 02:24	
EPA 6020B	Calcium	45.9	mg/L	10.0	03/12/25 22:02	
EPA 6020B	Cobalt	0.028	mg/L	0.0050	03/13/25 02:24	
EPA 6020B	Selenium	0.0040J	mg/L	0.0050	03/14/25 18:10	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-HGWA-1 **Lab ID: 92779989001** Collected: 02/12/25 13:38 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	**0.00119J**	mg/L	0.0300	0.000600	1	03/18/25 08:25	03/19/25 23:57	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	02/23/25 12:33	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**283**	mg/L	5.0	5.0	1		02/20/25 14:38		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/20/25 14:38		
Alkalinity, Total as CaCO3	**283**	mg/L	5.0	5.0	1		02/20/25 14:38		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**374**	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 01:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.8**	mg/L	1.0	0.60	1		02/18/25 14:32	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		02/18/25 14:32	16984-48-8	
Sulfate	**43.8**	mg/L	1.0	0.50	1		02/18/25 14:32	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 11:48	03/13/25 09:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:40	7440-38-2	
Barium	**0.034**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:40	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 11:48	03/13/25 09:40	7440-41-7	
Boron	**0.021J**	mg/L	0.040	0.0062	1	03/10/25 11:48	03/13/25 09:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 11:48	03/13/25 09:40	7440-43-9	
Calcium	**125**	mg/L	10.0	1.0	10	03/10/25 11:48	03/12/25 18:52	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:40	7440-48-4	
Iron	**0.023J**	mg/L	0.040	0.012	1	03/10/25 11:48	03/13/25 09:40	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 11:48	03/13/25 09:40	7439-92-1	
Magnesium	**4.7**	mg/L	0.050	0.010	1	03/10/25 11:48	03/13/25 09:40	7439-95-4	
Manganese	**0.063**	mg/L	0.040	0.0012	1	03/10/25 11:48	03/13/25 09:40	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 11:48	03/13/25 09:40	7439-98-7	
Potassium	**0.48J**	mg/L	0.50	0.10	1	03/10/25 11:48	03/13/25 09:40	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:40	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-HGWA-1 **Lab ID: 92779989001** Collected: 02/12/25 13:38 Received: 02/14/25 16:10 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	**14.7**	mg/L	1.0	0.15	1	03/10/25 11:48	03/13/25 09:40	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 11:48	03/13/25 09:40	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-HGWA-3 **Lab ID: 92779989002** Collected: 02/12/25 14:30 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	**0.00331J**	mg/L	0.0300	0.000600	1	03/18/25 13:14	03/19/25 12:43	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	02/23/25 12:39	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**223**	mg/L	5.0	5.0	1		02/20/25 14:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/20/25 14:46		
Alkalinity, Total as CaCO3	**223**	mg/L	5.0	5.0	1		02/20/25 14:46		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**267**	mg/L	25.0	25.0	1		02/18/25 17:55		
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 01:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.0**	mg/L	1.0	0.60	1		02/18/25 14:48	16887-00-6	
Fluoride	**0.073J**	mg/L	0.10	0.050	1		02/18/25 14:48	16984-48-8	
Sulfate	**28.0**	mg/L	1.0	0.50	1		02/18/25 14:48	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 11:48	03/13/25 09:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:49	7440-38-2	
Barium	**0.13**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 11:48	03/13/25 09:49	7440-41-7	
Boron	**0.011J**	mg/L	0.040	0.0062	1	03/10/25 11:48	03/13/25 09:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 11:48	03/13/25 09:49	7440-43-9	
Calcium	**86.6**	mg/L	10.0	1.0	10	03/10/25 11:48	03/12/25 19:01	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:49	7440-48-4	
Iron	**0.91**	mg/L	0.040	0.012	1	03/10/25 11:48	03/13/25 09:49	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 11:48	03/13/25 09:49	7439-92-1	
Magnesium	**5.5**	mg/L	0.050	0.010	1	03/10/25 11:48	03/13/25 09:49	7439-95-4	
Manganese	**0.25**	mg/L	0.040	0.0012	1	03/10/25 11:48	03/13/25 09:49	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 11:48	03/13/25 09:49	7439-98-7	
Potassium	**0.46J**	mg/L	0.50	0.10	1	03/10/25 11:48	03/13/25 09:49	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:49	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-HGWA-3 **Lab ID: 92779989002** Collected: 02/12/25 14:30 Received: 02/14/25 16:10 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	**5.7**	mg/L	1.0	0.15	1	03/10/25 11:48	03/13/25 09:49	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 11:48	03/13/25 09:49	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-HGWA-43D **Lab ID: 92779989003** Collected: 02/12/25 14:50 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	**0.00266J**	mg/L	0.0300	0.000600	1	03/18/25 13:14	03/19/25 12:46	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	02/18/25 17:23	02/23/25 12:41	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**237**	mg/L	5.0	5.0	1		02/20/25 14:54		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/20/25 14:54		
Alkalinity, Total as CaCO3	**237**	mg/L	5.0	5.0	1		02/20/25 14:54		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**273**	mg/L	25.0	25.0	1		02/18/25 17:55		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.025J**	mg/L	0.10	0.022	1		02/19/25 01:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.8**	mg/L	1.0	0.60	1		02/18/25 15:04	16887-00-6	
Fluoride	**0.21**	mg/L	0.10	0.050	1		02/18/25 15:04	16984-48-8	
Sulfate	**25.2**	mg/L	1.0	0.50	1		02/18/25 15:04	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 11:48	03/13/25 09:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:58	7440-38-2	
Barium	**0.30**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:58	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 11:48	03/13/25 09:58	7440-41-7	
Boron	**0.040J**	mg/L	0.040	0.0062	1	03/10/25 11:48	03/13/25 09:58	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 11:48	03/13/25 09:58	7440-43-9	
Calcium	**61.8**	mg/L	10.0	1.0	10	03/10/25 11:48	03/12/25 19:10	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:58	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:58	7440-48-4	
Iron	**0.27**	mg/L	0.040	0.012	1	03/10/25 11:48	03/13/25 09:58	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 11:48	03/13/25 09:58	7439-92-1	
Magnesium	**19.3**	mg/L	0.050	0.010	1	03/10/25 11:48	03/13/25 09:58	7439-95-4	
Manganese	**0.015J**	mg/L	0.040	0.0012	1	03/10/25 11:48	03/13/25 09:58	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 11:48	03/13/25 09:58	7439-98-7	
Potassium	**0.86**	mg/L	0.50	0.10	1	03/10/25 11:48	03/13/25 09:58	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 09:58	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-HGWA-43D **Lab ID: 92779989003** Collected: 02/12/25 14:50 Received: 02/14/25 16:10 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	**19.8**	mg/L	1.0	0.15	1	03/10/25 11:48	03/13/25 09:58	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 11:48	03/13/25 09:58	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-HGWA-44D **Lab ID: 92779989004** Collected: 02/12/25 15:42 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	**0.101**	mg/L	0.0300	0.000600	1	03/18/25 13:14	03/19/25 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	02/18/25 17:23	02/23/25 12:43	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**294**	mg/L	5.0	5.0	1		02/20/25 15:02		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/20/25 15:02		
Alkalinity, Total as CaCO3	**294**	mg/L	5.0	5.0	1		02/20/25 15:02		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**363**	mg/L	25.0	25.0	1		02/18/25 17:55		
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	**0.10**	mg/L	0.10	0.022	1		02/19/25 01:51	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**30.7**	mg/L	1.0	0.60	1		02/18/25 15:20	16887-00-6	
Fluoride	**1.1**	mg/L	0.10	0.050	1		02/18/25 15:20	16984-48-8	
Sulfate	**0.51J**	mg/L	1.0	0.50	1		02/18/25 15:20	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 11:48	03/12/25 23:41	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/12/25 23:41	7440-38-2	
Barium	**0.095**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/12/25 23:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 11:48	03/12/25 23:41	7440-41-7	
Boron	**0.54**	mg/L	0.40	0.062	10	03/10/25 11:48	03/12/25 19:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 11:48	03/12/25 23:41	7440-43-9	
Calcium	**7.2**	mg/L	1.0	0.10	1	03/10/25 11:48	03/12/25 23:41	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/12/25 23:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/12/25 23:41	7440-48-4	
Iron	**0.19**	mg/L	0.040	0.012	1	03/10/25 11:48	03/12/25 23:41	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 11:48	03/12/25 23:41	7439-92-1	
Magnesium	**3.5**	mg/L	0.050	0.010	1	03/10/25 11:48	03/12/25 23:41	7439-95-4	
Manganese	**0.0058J**	mg/L	0.040	0.0012	1	03/10/25 11:48	03/12/25 23:41	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 11:48	03/12/25 23:41	7439-98-7	
Potassium	**2.3J**	mg/L	5.0	1.0	10	03/10/25 11:48	03/12/25 19:19	7440-09-7	1g
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/12/25 23:41	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-HGWA-44D **Lab ID: 92779989004** Collected: 02/12/25 15:42 Received: 02/14/25 16:10 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	**141**	mg/L	10.0	1.5	10	03/10/25 11:48	03/12/25 19:19	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 11:48	03/12/25 23:41	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-UGRD-EB-01 **Lab ID: 92779989005** Collected: 02/13/25 17:30 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	ND	mg/L	0.0300	0.000600	1	03/26/25 19:19	03/27/25 00:09	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	02/18/25 17:23	02/23/25 12:45	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		02/20/25 13:08		
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 00:18	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 00:18	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/18/25 00:18	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	03/17/25 17:45	03/20/25 10:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/17/25 17:45	03/20/25 10:09	7440-38-2	
Barium	ND	mg/L	0.0050	0.0012	1	03/17/25 17:45	03/20/25 10:09	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/17/25 17:45	03/20/25 10:09	7440-41-7	
Boron	ND	mg/L	0.040	0.0062	1	03/17/25 17:45	03/20/25 18:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/17/25 17:45	03/20/25 10:09	7440-43-9	
Calcium	ND	mg/L	1.0	0.10	1	03/17/25 17:45	03/20/25 10:09	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/17/25 17:45	03/20/25 10:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/17/25 17:45	03/20/25 10:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/17/25 17:45	03/20/25 10:09	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/17/25 17:45	03/20/25 10:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/17/25 17:45	03/20/25 10:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/17/25 17:45	03/20/25 10:09	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-UGRD-FB-01 **Lab ID: 92779989006** Collected: 02/13/25 17:25 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	ND	mg/L	0.0300	0.000600	1	03/18/25 13:14	03/19/25 12:53	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	02/18/25 17:23	02/23/25 12:47	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		02/20/25 13:08		
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 00:34	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/18/25 00:34	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/18/25 00:34	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 11:48	03/13/25 10:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 10:07	7440-38-2	
Barium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 10:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 11:48	03/13/25 10:07	7440-41-7	
Boron	ND	mg/L	0.040	0.0062	1	03/10/25 11:48	03/13/25 10:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 11:48	03/13/25 10:07	7440-43-9	
Calcium	ND	mg/L	1.0	0.10	1	03/10/25 11:48	03/13/25 10:07	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 10:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 10:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 11:48	03/13/25 10:07	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 11:48	03/13/25 10:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 10:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 11:48	03/13/25 10:07	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-HGWA-2 **Lab ID: 92779989007** Collected: 02/14/25 09:20 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	**0.00183J**	mg/L	0.0300	0.000600	1	03/18/25 13:14	03/19/25 12:56	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 12:17	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**58.3**	mg/L	5.0	5.0	1		02/25/25 17:18		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		02/25/25 17:18		
Alkalinity, Total as CaCO3	**58.3**	mg/L	5.0	5.0	1		02/25/25 17:18		
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**242**	mg/L	25.0	25.0	1		02/21/25 12:15		
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 02:05	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 14:01	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		02/18/25 14:01	16984-48-8	
Sulfate	**94.5**	mg/L	1.0	0.50	1		02/18/25 14:01	14808-79-8	M1
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 11:48	03/13/25 02:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 02:15	7440-38-2	
Barium	**0.057**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 02:15	7440-39-3	
Beryllium	**0.00023J**	mg/L	0.00050	0.00015	1	03/10/25 11:48	03/13/25 02:15	7440-41-7	
Boron	**0.053**	mg/L	0.040	0.0062	1	03/10/25 11:48	03/13/25 02:15	7440-42-8	
Cadmium	**0.00028J**	mg/L	0.00050	0.00012	1	03/10/25 11:48	03/13/25 02:15	7440-43-9	
Calcium	**51.5**	mg/L	10.0	1.0	10	03/10/25 11:48	03/12/25 21:53	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 02:15	7440-47-3	
Cobalt	**0.030**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 02:15	7440-48-4	
Iron	**0.068**	mg/L	0.040	0.012	1	03/10/25 11:48	03/13/25 02:15	7439-89-6	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 11:48	03/13/25 02:15	7439-92-1	
Magnesium	**5.0**	mg/L	0.050	0.010	1	03/10/25 11:48	03/13/25 02:15	7439-95-4	
Manganese	**0.84**	mg/L	0.40	0.012	10	03/10/25 11:48	03/12/25 21:53	7439-96-5	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 11:48	03/13/25 02:15	7439-98-7	
Potassium	**1.5**	mg/L	0.50	0.10	1	03/10/25 11:48	03/13/25 02:15	7440-09-7	
Selenium	**0.0043J**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/14/25 18:01	7782-49-2	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-HGWA-2 **Lab ID: 92779989007** Collected: 02/14/25 09:20 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	**12.5**	mg/L	1.0	0.15	1	03/10/25 11:48	03/13/25 02:15	7440-23-5	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 11:48	03/13/25 02:15	7440-28-0	

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ANALYTICAL RESULTS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Sample: HAM-UGRD-FD-01 **Lab ID: 92779989008** Collected: 02/14/25 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	**0.00182J**	mg/L	0.0300	0.000600	1	03/18/25 13:14	03/19/25 12:59	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 12:19	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**230**	mg/L	25.0	25.0	1		02/21/25 12:16		
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 15:08	16887-00-6	
Fluoride	**0.096J**	mg/L	0.10	0.050	1		02/18/25 15:08	16984-48-8	
Sulfate	**94.9**	mg/L	1.0	0.50	1		02/18/25 15:08	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 11:48	03/13/25 02:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 02:24	7440-38-2	
Barium	**0.052**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 02:24	7440-39-3	
Beryllium	**0.00023J**	mg/L	0.00050	0.00015	1	03/10/25 11:48	03/13/25 02:24	7440-41-7	
Boron	**0.050**	mg/L	0.040	0.0062	1	03/10/25 11:48	03/13/25 02:24	7440-42-8	
Cadmium	**0.00026J**	mg/L	0.00050	0.00012	1	03/10/25 11:48	03/13/25 02:24	7440-43-9	
Calcium	**45.9**	mg/L	10.0	1.0	10	03/10/25 11:48	03/12/25 22:02	7440-70-2	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 02:24	7440-47-3	
Cobalt	**0.028**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/13/25 02:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00025	1	03/10/25 11:48	03/13/25 02:24	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 11:48	03/13/25 02:24	7439-98-7	
Selenium	**0.0040J**	mg/L	0.0050	0.0012	1	03/10/25 11:48	03/14/25 18:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 11:48	03/13/25 02:24	7440-28-0	

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 2469158
QC Batch Method: 3015
Analysis Method: EPA 6020B
Analysis Description: Metals (ICPMS) 6020B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 92779989002, 92779989003, 92779989004, 92779989006, 92779989007, 92779989008

METHOD BLANK: R4188214-1 Matrix: Water
Associated Lab Samples: 92779989002, 92779989003, 92779989004, 92779989006, 92779989007, 92779989008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.0300	0.000600	03/19/25 11:29	

LABORATORY CONTROL SAMPLE: R4188214-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.0500	0.0447	89.5	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4188214-4 R4188214-5

Parameter	Units	L1835821-49 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium	mg/L	0.00218	0.0500	0.0500	0.0484	0.0497	92.3	95.0	75.0-125	2.69	20	

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 2469175
QC Batch Method: 3015
Analysis Method: EPA 6020B
Analysis Description: Metals (ICPMS) 6020B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 92779989001

METHOD BLANK: R4188590-1 Matrix: Water
Associated Lab Samples: 92779989001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.0300	0.000600	03/19/25 23:38	

LABORATORY CONTROL SAMPLE: R4188590-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.0500	0.0510	102	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4188590-4 R4188590-5

Parameter	Units	L1836006-05 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium	mg/L	ND	0.0500	0.0500	0.0503	0.0511	101	102	75.0-125	1.59	20	

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 2476791
QC Batch Method: 3015
Analysis Method: EPA 6020B
Analysis Description: Metals (ICPMS) 6020B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 92779989005

METHOD BLANK: R4191612-1 Matrix: Water
Associated Lab Samples: 92779989005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.0300	0.000600	03/27/25 00:03	

LABORATORY CONTROL SAMPLE: R4191612-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.0500	0.0470	94.1	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4191612-4 R4191612-5

Parameter	Units	L1839658-04 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium	mg/L	0.00782	0.0500	0.0500	0.0534	0.0524	91.2	89.1	75.0-125	1.98	20	

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 916942
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004, 92779989005, 92779989006

METHOD BLANK: 4712332 Matrix: Water
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004, 92779989005, 92779989006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00012	02/23/25 12:29	

LABORATORY CONTROL SAMPLE: 4712333

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: 4712334 4712335

Parameter	Units	92779989001 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	0.0024	94	98	75-125	4	25	

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 917537
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779989007, 92779989008

METHOD BLANK: 4715919 Matrix: Water
Associated Lab Samples: 92779989007, 92779989008

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 Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 917443
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004

METHOD BLANK: 4715340 Matrix: Water
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004

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	92778538048 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	102	50	50	148	148	91	92	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4715345 4715346

Parameter	Units	92778538049 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	166	50	50	208	211	83	90	80-120	2	25	

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 918325
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779989007

METHOD BLANK: 4719412 Matrix: Water
Associated Lab Samples: 92779989007

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	92779983010 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	143	50	50	191	193	97	100	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4719417 4719418

Parameter	Units	92779983011 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	ND	50	50	51.6	51.6	102	102	80-120	0	25	

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

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: 92779989001, 92779989002, 92779989003, 92779989004

METHOD BLANK: 4712793 Matrix: Water
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004

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 Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 917325
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779989005, 92779989006

METHOD BLANK: 4714805 Matrix: Water
Associated Lab Samples: 92779989005, 92779989006

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 Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 917626
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779989007, 92779989008

METHOD BLANK: 4716350 Matrix: Water
Associated Lab Samples: 92779989007, 92779989008

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 Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 916812
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004

METHOD BLANK: 4711805 Matrix: Water
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711809 4711810

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

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 916813
QC Batch Method: SM 4500-S2D-2011
Analysis Method: SM 4500-S2D-2011
Analysis Description: 4500S2D Sulfide Water
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779989007

METHOD BLANK: 4711811 Matrix: Water
Associated Lab Samples: 92779989007

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4711815 4711816

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

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 916738
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004, 92779989005, 92779989006

METHOD BLANK: 4711421 Matrix: Water
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004, 92779989005, 92779989006

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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.8	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 Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 916792
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92779989007, 92779989008

METHOD BLANK: 4711732 Matrix: Water
Associated Lab Samples: 92779989007, 92779989008

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 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	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 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 921054
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: WC 6020B MET
Laboratory: Pace Analytical Services - West Columbia
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004, 92779989006, 92779989007, 92779989008

METHOD BLANK: 4732998 Matrix: Water
Associated Lab Samples: 92779989001, 92779989002, 92779989003, 92779989004, 92779989006, 92779989007, 92779989008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00050	03/13/25 08:35	
Arsenic	mg/L	ND	0.0050	0.0012	03/13/25 08:35	
Barium	mg/L	ND	0.0050	0.0012	03/13/25 08:35	
Beryllium	mg/L	ND	0.00050	0.00015	03/13/25 08:35	
Boron	mg/L	ND	0.040	0.0062	03/13/25 08:35	
Cadmium	mg/L	ND	0.00050	0.00012	03/13/25 08:35	
Calcium	mg/L	ND	1.0	0.10	03/13/25 08:35	
Chromium	mg/L	ND	0.0050	0.0012	03/13/25 08:35	
Cobalt	mg/L	ND	0.0050	0.0012	03/13/25 08:35	
Iron	mg/L	ND	0.040	0.012	03/13/25 08:35	
Lead	mg/L	ND	0.0010	0.00025	03/13/25 08:35	
Magnesium	mg/L	ND	0.050	0.010	03/13/25 08:35	
Manganese	mg/L	ND	0.040	0.0012	03/13/25 08:35	
Molybdenum	mg/L	ND	0.010	0.0025	03/13/25 08:35	
Potassium	mg/L	ND	0.50	0.10	03/13/25 08:35	
Selenium	mg/L	ND	0.0050	0.0012	03/13/25 08:35	
Sodium	mg/L	ND	1.0	0.15	03/13/25 08:35	
Thallium	mg/L	ND	0.0010	0.00015	03/13/25 08:35	

LABORATORY CONTROL SAMPLE: 4732999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.097	97	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.093	93	80-120	
Boron	mg/L	0.1	0.10	100	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Calcium	mg/L	1	1.1	111	80-120	
Chromium	mg/L	0.1	0.11	108	80-120	
Cobalt	mg/L	0.1	0.11	111	80-120	
Iron	mg/L	1	1.1	110	80-120	
Lead	mg/L	0.1	0.11	111	80-120	
Magnesium	mg/L	1	1.1	108	80-120	
Manganese	mg/L	0.1	0.11	111	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Potassium	mg/L	1	1.1	109	80-120	
Selenium	mg/L	0.1	0.091	91	80-120	
Sodium	mg/L	1	1.0	101	80-120	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

LABORATORY CONTROL SAMPLE: 4732999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Thallium	mg/L	0.1	0.11	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4733000 4733001

Parameter	Units	92779977007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20	
Barium	mg/L	0.048	0.1	0.1	0.15	0.15	103	103	75-125	0	20	
Beryllium	mg/L	0.00017J	0.1	0.1	0.097	0.097	97	97	75-125	0	20	
Boron	mg/L	1.4	0.1	0.1	1.6	1.5	167	69	75-125	6	20	M1
Cadmium	mg/L	0.00022J	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Calcium	mg/L	83.3	1	1	87.0	88.6	373	537	75-125	2	20	M1
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Cobalt	mg/L	0.0021J	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Iron	mg/L	0.023J	1	1	1.0	1.0	99	99	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Magnesium	mg/L	11.7	1	1	12.6	12.7	89	97	75-125	1	20	
Manganese	mg/L	0.39J	0.1	0.1	0.51	0.51	121	117	75-125	1	20	
Molybdenum	mg/L	0.17	0.1	0.1	0.27	0.27	107	106	75-125	0	20	
Potassium	mg/L	5.6	1	1	6.7	6.8	104	119	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.097	0.097	97	96	75-125	1	20	
Sodium	mg/L	8.6	1	1	9.8	9.8	120	120	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

QC Batch: 922646
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: WC 6020B MET
Laboratory: Pace Analytical Services - West Columbia
Associated Lab Samples: 92779989005

METHOD BLANK: 4740655 Matrix: Water
Associated Lab Samples: 92779989005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00050	03/20/25 10:00	
Arsenic	mg/L	ND	0.0050	0.0012	03/20/25 10:00	
Barium	mg/L	ND	0.0050	0.0012	03/20/25 10:00	
Beryllium	mg/L	ND	0.00050	0.00015	03/20/25 10:00	
Boron	mg/L	ND	0.040	0.0062	03/20/25 16:38	
Cadmium	mg/L	ND	0.00050	0.00012	03/20/25 10:00	
Calcium	mg/L	ND	1.0	0.10	03/20/25 10:00	
Chromium	mg/L	ND	0.0050	0.0012	03/20/25 10:00	
Cobalt	mg/L	ND	0.0050	0.0012	03/20/25 10:00	
Lead	mg/L	ND	0.0010	0.00025	03/20/25 10:00	
Molybdenum	mg/L	ND	0.010	0.0025	03/20/25 10:00	
Selenium	mg/L	ND	0.0050	0.0012	03/20/25 10:00	
Thallium	mg/L	ND	0.0010	0.00015	03/20/25 10:00	

LABORATORY CONTROL SAMPLE: 4740656

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	0.10	103	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	0.1	0.099	99	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Calcium	mg/L	1	1.0	105	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Lead	mg/L	0.1	0.11	106	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4740667 4740668

Parameter	Units	92779989005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	

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QUALITY CONTROL DATA

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4740667 4740668

Parameter	Units	92779989005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	ND	0.1	0.1	0.098	0.098	98	97	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20	
Boron	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Calcium	mg/L	ND	1	1	1.0	1.0	104	101	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	2	20	

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QUALIFIERS

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

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	This analyte is being reported from a diluted analysis since the original undiluted analysis was bracketed by a CCV that was outside 6020B acceptance limits. The reporting limit has been adjusted accordingly.
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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779989001	**HAM-HGWA-1**	3015	2469175	EPA 6020B	2469175
92779989002	**HAM-HGWA-3**	3015	2469158	EPA 6020B	2469158
92779989003	**HAM-HGWA-43D**	3015	2469158	EPA 6020B	2469158
92779989004	**HAM-HGWA-44D**	3015	2469158	EPA 6020B	2469158
92779989005	**HAM-UGRD-EB-01**	3015	2476791	EPA 6020B	2476791
92779989006	**HAM-UGRD-FB-01**	3015	2469158	EPA 6020B	2469158
92779989007	**HAM-HGWA-2**	3015	2469158	EPA 6020B	2469158
92779989008	**HAM-UGRD-FD-01**	3015	2469158	EPA 6020B	2469158
92779989001	**HAM-HGWA-1**	EPA 7470A	916942	EPA 7470A	917067
92779989002	**HAM-HGWA-3**	EPA 7470A	916942	EPA 7470A	917067
92779989003	**HAM-HGWA-43D**	EPA 7470A	916942	EPA 7470A	917067
92779989004	**HAM-HGWA-44D**	EPA 7470A	916942	EPA 7470A	917067
92779989005	**HAM-UGRD-EB-01**	EPA 7470A	916942	EPA 7470A	917067
92779989006	**HAM-UGRD-FB-01**	EPA 7470A	916942	EPA 7470A	917067
92779989007	**HAM-HGWA-2**	EPA 7470A	917537	EPA 7470A	917800
92779989008	**HAM-UGRD-FD-01**	EPA 7470A	917537	EPA 7470A	917800
92779989001	**HAM-HGWA-1**	SM 2320B-2011	917443		
92779989002	**HAM-HGWA-3**	SM 2320B-2011	917443		
92779989003	**HAM-HGWA-43D**	SM 2320B-2011	917443		
92779989004	**HAM-HGWA-44D**	SM 2320B-2011	917443		
92779989007	**HAM-HGWA-2**	SM 2320B-2011	918325		
92779989001	**HAM-HGWA-1**	SM 2540C-2015	917012		
92779989002	**HAM-HGWA-3**	SM 2540C-2015	917012		
92779989003	**HAM-HGWA-43D**	SM 2540C-2015	917012		
92779989004	**HAM-HGWA-44D**	SM 2540C-2015	917012		
92779989005	**HAM-UGRD-EB-01**	SM 2540C-2015	917325		
92779989006	**HAM-UGRD-FB-01**	SM 2540C-2015	917325		
92779989007	**HAM-HGWA-2**	SM 2540C-2015	917626		
92779989008	**HAM-UGRD-FD-01**	SM 2540C-2015	917626		
92779989001	**HAM-HGWA-1**	SM 4500-S2D-2011	916812		
92779989002	**HAM-HGWA-3**	SM 4500-S2D-2011	916812		
92779989003	**HAM-HGWA-43D**	SM 4500-S2D-2011	916812		
92779989004	**HAM-HGWA-44D**	SM 4500-S2D-2011	916812		
92779989007	**HAM-HGWA-2**	SM 4500-S2D-2011	916813		
92779989001	**HAM-HGWA-1**	EPA 300.0 Rev 2.1 1993	916738		
92779989002	**HAM-HGWA-3**	EPA 300.0 Rev 2.1 1993	916738		
92779989003	**HAM-HGWA-43D**	EPA 300.0 Rev 2.1 1993	916738		
92779989004	**HAM-HGWA-44D**	EPA 300.0 Rev 2.1 1993	916738		
92779989005	**HAM-UGRD-EB-01**	EPA 300.0 Rev 2.1 1993	916738		
92779989006	**HAM-UGRD-FB-01**	EPA 300.0 Rev 2.1 1993	916738		
92779989007	**HAM-HGWA-2**	EPA 300.0 Rev 2.1 1993	916792		
92779989008	**HAM-UGRD-FD-01**	EPA 300.0 Rev 2.1 1993	916792		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond Pooled Upgradient
Pace Project No.: 92779989

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92779989001	**HAM-HGWA-1**	EPA 3005A	921054	EPA 6020B	921709
92779989002	**HAM-HGWA-3**	EPA 3005A	921054	EPA 6020B	921709
92779989003	**HAM-HGWA-43D**	EPA 3005A	921054	EPA 6020B	921709
92779989004	**HAM-HGWA-44D**	EPA 3005A	921054	EPA 6020B	921709
92779989005	**HAM-UGRD-EB-01**	EPA 3005A	922646	EPA 6020B	923912
92779989006	**HAM-UGRD-FB-01**	EPA 3005A	921054	EPA 6020B	921709
92779989007	**HAM-HGWA-2**	EPA 3005A	921054	EPA 6020B	921709
92779989008	**HAM-UGRD-FD-01**	EPA 3005A	921054	EPA 6020B	921709

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

Effective Date: 05/24/2024

aboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

WO# : 92779989

92779989

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

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: 2/14/25 LH

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: 1.8 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): 1.9

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

Field Data Required? ☐ Yes ☐ No

MMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

NT NOTIFICATION/RESOLUTION

·son contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

iltrax ID: 69614

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

Effective Date: 05/24/2024

WO# : 92779989

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

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)	AGDU-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	1		2	2	1																						
2		2	1			2	1																						
3		2	1		2	2	1																						
4		2	1		2	2	1																						
5		1	1		2	2																							
6		1	1		2	2																							
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.

Jaltrax ID: 69614

WO# : 92779989

PM: BV **Due Date: 03/03/25**

CLIENT: 92- GP-HAM

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CHAIN-OF-CUSTODY / Analytical Request Document

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

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:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference:	
Phone:	Fax:	Project Name:	Plant Hammond Pooled Upgradient	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY

NPDES | GROUND WATER | DRINKING WATER

UST | RCRA | ✓ OTHER CCR

Site Location STATE: GA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX / CODE: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: Chloride, Fluorice, Sulfate	Ful Acp., III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				N	N	N	N	N		
1	HAM-HGWA-1		WG	G	2/12/2025	1338				16	8	3		4		1				X	X	X	X	X	N	001
2	HAM-HGWA-3		WG	G	2/12/2025	1430				16	6	3		2		1				X	X		X	X	N	Radium sent on separate COC 002
3	HAM-HGWA-43D		WG	G	2/12/2025	1450				16	8	3		4		1				X	X	X	X	X	N	limited volume for Alkalinity 003
4	HAM-HGWA-44D		WG	G	2/12/2025	1542				15	8	3		4		1				X	X	X	X	X	N	004
5	HAM-UGRD-EB-01		WG	G	2/13/2025	1730				15	6	2		4						X	X	X	X		N	Matrix = WQ 005
6	HAM-UGRD-FB-01		WG	G	2/13/2025	1725				15	6	2		4						X	X	X	X		N	Matrix = WQ 006
7																										
8																										
9																										
10																										
11																										
12																										

2/12/25 2/13/25

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2025S1(1)	Zain Webb / Geosyntec	2-14-25	1340	Ryan Williams / Pace	2/14/25	1340	
	Ryan Williams / Pace	2/14/25	1610	Amanda Tomlinson / Geosyntec	2/14/25	1610	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Amanda Tomlinson, Zain Webb, Thomas Kessler / Geosyntec Consultants,

SIGNATURE of SAMPLER: Zain Webb (AT) DATE Signed (MM/DD/YY): 2-13-25

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.

aboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

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: 2/17/25 CH

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: 1.7 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): 1.8

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

Field Data Required? ☐ Yes ☐ No

OMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

ENT NOTIFICATION/RESOLUTION

erson contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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

pH Adjustment Log for Preserved Samples

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

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

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Page: 1 of 1

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Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Geosyntec Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order No.:		Pace Quote Reference	
Phone:	Fax:	Project Name:	Plant Hammond Pooled Upgradient	Pace Project Manager:	Bonnie Vang
Requested Due Date/TAT:	10 Day	Project Number:		Pace Profile #:	10839

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA ✓ OTHER CCR

Site Location STATE: GA

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END DATE	COLLECTED COMPOSITE END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N	N	N				
1	HAM-HGWA-2	WG	G	2/14/2025	0920			16	8	3		4		1					X	X	X	X	X	N	92779989 007
2	HAM-HGWA-3	WG	G	2/14/2025	1107			16	2			2									X			N	Last Sample.
3	HAM-UGRD-FD-01	WG	G	2/14/2025	0000			16	6	2		4							X	X	X	X		N	008
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ART 2/16/2025

ART 2/16/2025

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2025S1	Zain Webb / Geosyntec	2-17-25	1230	Ryan Williams / Pace	2/17/2025	1230	✓
	Ryan Williams / Pace	2/17/2025	1445		2/17/25	1445	

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Amanda Tominson, Zain Webb, Thomas Kessler	/ Geosyntec Consultants, Inc.		Temp in °C	Received on Ice (Y/N)
SIGNATURE of SAMPLER:	Zain Webb (AT) (TK)	DATE Signed (MM/DD/YY):	2-17-25	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

February 2025
Surface Water Sampling

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 24, 2025

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

RE: Project: Hammond AP-3 SW
Pace Project No.: 92780677

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on February 19, 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

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Huntersville, NC 28078
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CERTIFICATIONS

Project: Hammond AP-3 SW
Pace Project No.: 92780677

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 Certification #: T 104704245-17-14
Texas Mold Certification #: LAB0152
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Virginia Certification #: VT2006
Vermont Dept. of Health: ID# VT-2006
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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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Hammond AP-3 SW
Pace Project No.: 92780677

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92780677001	**HAM-SW-1**	Water	02/16/25 17:40	02/19/25 15:25
92780677002	**HAM-SW-2**	Water	02/16/25 17:30	02/19/25 15:25

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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Hammond AP-3 SW
Pace Project No.: 92780677

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92780677001	**HAM-SW-1**	EPA 6020B	LD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		EPA 300.0 Rev 2.1 1993	JCM	1	PASI-A
		EPA 6020B	BK1	11	PASI-WC
92780677002	**HAM-SW-2**	EPA 6020B	LD	1	PAN
		EPA 7470A	MAB2	1	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
		EPA 6020B	BK1	11	PASI-WC

PAN = Pace National - Mt. Juliet
PASI-A = Pace Analytical Services - Asheville
PASI-WC = Pace Analytical Services - West Columbia

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Huntersville, NC 28078
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SUMMARY OF DETECTION

Project: Hammond AP-3 SW
Pace Project No.: 92780677

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92780677001	**HAM-SW-1**					
EPA 6020B	Lithium	0.00141J	mg/L	0.0300	03/11/25 23:02	J
EPA 6020B	Barium	0.011	mg/L	0.0050	03/19/25 00:32	
EPA 6020B	Lead	0.00081J	mg/L	0.0010	03/19/25 00:32	
92780677002	**HAM-SW-2**					
EPA 6020B	Lithium	0.000920J	mg/L	0.0300	03/11/25 23:05	J
EPA 300.0 Rev 2.1 1993	Fluoride	0.064J	mg/L	0.10	02/20/25 08:23	
EPA 6020B	Barium	0.0083	mg/L	0.0050	03/19/25 00:59	
EPA 6020B	Lead	0.00058J	mg/L	0.0010	03/19/25 00:59	

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ANALYTICAL RESULTS

Project: Hammond AP-3 SW
Pace Project No.: 92780677

Sample: HAM-SW-1 **Lab ID: 92780677001** Collected: 02/16/25 17:40 Received: 02/19/25 15:25 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	**0.00141J**	mg/L	0.0300	0.000600	1	03/11/25 13:35	03/11/25 23:02	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	02/22/25 19:50	02/24/25 13:24	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/20/25 13:01	16984-48-8	
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 12:15	03/19/25 00:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 12:15	03/19/25 00:32	7440-38-2	
Barium	**0.011**	mg/L	0.0050	0.0012	1	03/10/25 12:15	03/19/25 00:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 12:15	03/19/25 00:32	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 12:15	03/19/25 00:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 12:15	03/19/25 00:32	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 12:15	03/19/25 00:32	7440-48-4	
Lead	**0.00081J**	mg/L	0.0010	0.00025	1	03/10/25 12:15	03/19/25 00:32	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 12:15	03/19/25 00:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 12:15	03/19/25 00:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 12:15	03/19/25 00:32	7440-28-0	

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

ANALYTICAL RESULTS

Project: Hammond AP-3 SW
Pace Project No.: 92780677

Sample: HAM-SW-2 **Lab ID: 92780677002** Collected: 02/16/25 17:30 Received: 02/19/25 15:25 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	**0.000920J**	mg/L	0.0300	0.000600	1	03/11/25 13:35	03/11/25 23:05	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	02/22/25 19:50	02/24/25 13:26	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.064J**	mg/L	0.10	0.050	1		02/20/25 08:23	16984-48-8	
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 12:15	03/19/25 00:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0012	1	03/10/25 12:15	03/19/25 00:59	7440-38-2	
Barium	**0.0083**	mg/L	0.0050	0.0012	1	03/10/25 12:15	03/19/25 00:59	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.00015	1	03/10/25 12:15	03/19/25 00:59	7440-41-7	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/10/25 12:15	03/19/25 00:59	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0012	1	03/10/25 12:15	03/19/25 00:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.0012	1	03/10/25 12:15	03/19/25 00:59	7440-48-4	
Lead	**0.00058J**	mg/L	0.0010	0.00025	1	03/10/25 12:15	03/19/25 00:59	7439-92-1	
Molybdenum	ND	mg/L	0.010	0.0025	1	03/10/25 12:15	03/19/25 00:59	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0012	1	03/10/25 12:15	03/19/25 00:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00015	1	03/10/25 12:15	03/19/25 00:59	7440-28-0	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Hammond AP-3 SW
Pace Project No.: 92780677

QC Batch: 2465903
QC Batch Method: 3015
Analysis Method: EPA 6020B
Analysis Description: Metals (ICPMS) 6020B
Laboratory: Pace National - Mt. Juliet
Associated Lab Samples: 92780677001, 92780677002

METHOD BLANK: R4185216-1 Matrix: Water
Associated Lab Samples: 92780677001, 92780677002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.0300	0.000600	03/11/25 19:48	

LABORATORY CONTROL SAMPLE: R4185216-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.0500	0.0481	96.1	80.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4185216-4 R4185216-5

Parameter	Units	L1833761-13 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium	mg/L	0.191	0.0500	0.0500	0.244	0.244	106	107	75.0-125	0.030	20	

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QUALITY CONTROL DATA

Project: Hammond AP-3 SW
Pace Project No.: 92780677

QC Batch: 917873
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92780677001, 92780677002

METHOD BLANK: 4717713 Matrix: Water
Associated Lab Samples: 92780677001, 92780677002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00012	02/24/25 12:43	

LABORATORY CONTROL SAMPLE: 4717714

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4717717 4717718

Parameter	Units	92780474002 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	0.0026	0.0025	102	101	75-125	1	25	

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QUALITY CONTROL DATA

Project: Hammond AP-3 SW
Pace Project No.: 92780677

QC Batch: 917314
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92780677002

METHOD BLANK: 4714678 Matrix: Water
Associated Lab Samples: 92780677002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/19/25 20:47	

LABORATORY CONTROL SAMPLE: 4714679

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.5	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4714680 4714681

Parameter	Units	92780480003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.16	2.5	2.5	2.8	2.8	107	105	90-110	2	10	

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QUALITY CONTROL DATA

Project: Hammond AP-3 SW
Pace Project No.: 92780677

QC Batch: 917348
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92780677001

METHOD BLANK: 4715005 Matrix: Water
Associated Lab Samples: 92780677001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/19/25 22:03	

LABORATORY CONTROL SAMPLE: 4715006

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.4	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4715007 4715008

Parameter	Units	92779977023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.40	2.5	2.5	2.9	2.9	99	101	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4715009 4715010

Parameter	Units	92779981017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	95	98	90-110	3	10	

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QUALITY CONTROL DATA

Project: Hammond AP-3 SW
Pace Project No.: 92780677

QC Batch: 921056
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: WC 6020B MET
Laboratory: Pace Analytical Services - West Columbia
Associated Lab Samples: 92780677001, 92780677002

METHOD BLANK: 4733010 Matrix: Water
Associated Lab Samples: 92780677001, 92780677002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00050	03/18/25 21:21	
Arsenic	mg/L	ND	0.0050	0.0012	03/18/25 21:21	
Barium	mg/L	ND	0.0050	0.0012	03/18/25 21:21	
Beryllium	mg/L	ND	0.00050	0.00015	03/18/25 21:21	
Cadmium	mg/L	ND	0.00050	0.00012	03/18/25 21:21	
Chromium	mg/L	ND	0.0050	0.0012	03/18/25 21:21	
Cobalt	mg/L	ND	0.0050	0.0012	03/18/25 21:21	
Lead	mg/L	ND	0.0010	0.00025	03/18/25 21:21	
Molybdenum	mg/L	ND	0.010	0.0025	03/18/25 21:21	
Selenium	mg/L	ND	0.0050	0.0012	03/18/25 21:21	
Thallium	mg/L	ND	0.0010	0.00015	03/18/25 21:21	

LABORATORY CONTROL SAMPLE: 4733011

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.083	83	80-120	
Arsenic	mg/L	0.1	0.087	87	80-120	
Barium	mg/L	0.1	0.087	87	80-120	
Beryllium	mg/L	0.1	0.090	90	80-120	
Cadmium	mg/L	0.1	0.081	81	80-120	
Chromium	mg/L	0.1	0.086	86	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Molybdenum	mg/L	0.1	0.082	82	80-120	
Selenium	mg/L	0.1	0.087	87	80-120	
Thallium	mg/L	0.1	0.091	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4733012 4733013

Parameter	Units	92780677002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.086	0.089	86	88	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.088	0.093	88	93	75-125	5	20	
Barium	mg/L	0.0083	0.1	0.1	0.094	0.099	86	91	75-125	5	20	
Beryllium	mg/L	ND	0.1	0.1	0.093	0.10	93	100	75-125	7	20	
Cadmium	mg/L	ND	0.1	0.1	0.086	0.090	86	90	75-125	4	20	
Chromium	mg/L	ND	0.1	0.1	0.086	0.092	85	91	75-125	7	20	

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QUALITY CONTROL DATA

Project: Hammond AP-3 SW
Pace Project No.: 92780677

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4733012 4733013

Parameter	Units	92780677002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	mg/L	ND	0.1	0.1	0.093	0.098	92	98	75-125	6	20	
Lead	mg/L	0.00058J	0.1	0.1	0.092	0.095	92	94	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.082	0.086	81	85	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.091	0.097	91	97	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.091	0.093	91	93	75-125	2	20	

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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Hammond AP-3 SW
Pace Project No.: 92780677

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

J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-3 SW
Pace Project No.: 92780677

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92780677001	**HAM-SW-1**	3015	2465903	EPA 6020B	2465903
92780677002	**HAM-SW-2**	3015	2465903	EPA 6020B	2465903
92780677001	**HAM-SW-1**	EPA 7470A	917873	EPA 7470A	918003
92780677002	**HAM-SW-2**	EPA 7470A	917873	EPA 7470A	918003
92780677001	**HAM-SW-1**	EPA 300.0 Rev 2.1 1993	917348		
92780677002	**HAM-SW-2**	EPA 300.0 Rev 2.1 1993	917314		
92780677001	**HAM-SW-1**	EPA 3005A	921056	EPA 6020B	923257
92780677002	**HAM-SW-2**	EPA 3005A	921056	EPA 6020B	923257

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

Effective Date: 05/24/2024

aboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92780677

92780677

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: 2/19/25 TAT

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: _____ 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): _____

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

Field Data Required? ☐ Yes ☐ No

OMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

ENT NOTIFICATION/RESOLUTION

erson contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

Pace

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

Effective Date: 05/24/2024

WO# : 92780677

PM: BV Due Date: 03/06/25

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, LI Hg

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

pH Adjustment Log for Preserved Samples

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

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

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: Geosyntec Contacts	Company Name:
		Address:
Email To: SCS Contacts	Purchase Order No:	Pace Quote Reference:
Phone: Fax:	Project Name: Hammond AP-3 SW	Pace Project Manager: Bonnie Vang
Requested Due Date/TAT: 10 Day	Project Number:	Pace Profile #: 10839

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Full App IV metals	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)			92780677
1	HAM-SW-1	WS	G	2/16/2025	1740			17	4			4						N	X	N	001
2	HAM-SW-2	WS	G	2/16/2025	1730	ART 2/19/2025		17	4			4						N	X	N	002

ART 2/19/2025

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Template: HAM-CCR-ASSMT-2025S1	Geosyntec	2/19/2025	1726	Ryan William / Pace	2/19/2025	1226	
	Ryan William / Pace	2/19/2025	1525		2/19/25	1525	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler, Zain Webb, Amanda Tomlinson / Geosyntec Consultants, Inc

SIGNATURE of SAMPLER: (TK) (ZW) (AT) DATE Signed (MM/DD/YY): 2/19/2025

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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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(704)875-9092

March 13, 2025

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

RE: Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on February 19, 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

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

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

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SAMPLE SUMMARY

Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92780680001	**HAM-SW-1**	Water	02/16/25 17:40	02/19/25 15:25
92780680002	**HAM-SW-2**	Water	02/16/25 17:30	02/19/25 15:25

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92780680001	**HAM-SW-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92780680002	**HAM-SW-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92780680001	**HAM-SW-1**					
EPA 9315	Radium-226	0.493 ± 0.223 (0.289) C:116% T:NA	pCi/L		03/12/25 08:27	
EPA 9320	Radium-228	0.745U ± 0.561 (1.10) C:67% T:72%	pCi/L		03/10/25 15:25	
Total Radium Calculation	Total Radium	1.24U ± 0.784 (1.39)	pCi/L		03/12/25 13:31	
92780680002	**HAM-SW-2**					
EPA 9315	Radium-226	0.374 ± 0.204 (0.301) C:108% T:NA	pCi/L		03/12/25 08:27	
EPA 9320	Radium-228	0.610U ± 0.436 (0.834) C:70% T:79%	pCi/L		03/10/25 15:25	
Total Radium Calculation	Total Radium	0.984U ± 0.640 (1.14)	pCi/L		03/12/25 13:31	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

Sample: HAM-SW-1 **Lab ID: 92780680001** Collected: 02/16/25 17:40 Received: 02/19/25 15:25 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	**0.493 ± 0.223 (0.289) C:116% T:NA**	pCi/L	03/12/25 08:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.745U ± 0.561 (1.10) C:67% T:72%**	pCi/L	03/10/25 15:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.24U ± 0.784 (1.39)**	pCi/L	03/12/25 13:31	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

Sample: HAM-SW-2 **Lab ID: 92780680002** Collected: 02/16/25 17:30 Received: 02/19/25 15:25 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	**0.374 ± 0.204 (0.301) C:108% T:NA**	pCi/L	03/12/25 08:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.610U ± 0.436 (0.834) C:70% T:79%**	pCi/L	03/10/25 15:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.984U ± 0.640 (1.14)**	pCi/L	03/12/25 13:31	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

QC Batch: 729141
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92780680001, 92780680002

METHOD BLANK: 3549310 Matrix: Water
Associated Lab Samples: 92780680001, 92780680002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.192 ± 0.350 (0.767) C:73% T:80%	pCi/L	03/10/25 15:25	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

QC Batch: 729140
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92780680001, 92780680002

METHOD BLANK: 3549309 Matrix: Water
Associated Lab Samples: 92780680001, 92780680002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0236 ± 0.117 (0.342) C:89% T:NA	pCi/L	03/12/25 08:25	

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

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QUALIFIERS

Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-3 SW-RAD
Pace Project No.: 92780680

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92780680001	**HAM-SW-1**	EPA 9315	729140		
92780680002	**HAM-SW-2**	EPA 9315	729140		
92780680001	**HAM-SW-1**	EPA 9320	729141		
92780680002	**HAM-SW-2**	EPA 9320	729141		
92780680001	**HAM-SW-1**	Total Radium Calculation	732353		
92780680002	**HAM-SW-2**	Total Radium Calculation	732353		

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Pace

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

Effective Date: 05/24/2024

aboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92780680

92780680

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: 2/19/25 DIT

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: _____ 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): _____

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

Field Data Required? ☐ Yes ☐ No

OMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

ENT NOTIFICATION/RESOLUTION

erson contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

WO# : 92780680

PM: BV Due Date: 03/13/25

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, LI Hg

**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)	BP1S-1 liter Plastic H2SO4 (pH < 2) (Cl-)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG8U-40 mL Amber Unpreserved vials (N/A)
CC					BP1U																									
1		1			2		2																							
2		1			2		2																							
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

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

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

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-3 SW
Project Number:	

Section C Invoice Information:

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

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

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

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: Full App IV metals	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	HAM-SW-1	WS	G	2/16/2025	1740			17	4			4						N	X	N	9278680 01
2	HAM-SW-2	WS	G	2/16/2025	1730			17	4			4						N	X	N	02
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ART 2/19/2025

ART 2/19/2025

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2025S1	ART / Geosyntec	2/19/2025	1220	Ryan William / Pace	2/19/2025	1226	
	Ryan William / Pace	2/19/2025	1525	Charles Hales	2/19/25	1525	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Thomas Kessler, Zain Webb, Amanda Tomlinson / Geosyntec Consultants, Inc.

SIGNATURE of SAMPLER: TK ZW AT DATE Signed (MM/DD/YY): 2/19/2025

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.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	ZPC
Date:	3/3/2025
Worklist:	83787
Matrix:	WT

Method Blank Assessment	
MB Sample ID	3549310
MB concentration:	0.192
M/B 2 Sigma CSU:	0.350
MB MDC:	0.767
MB Numerical Performance Indicator:	1.07
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS83787	**LCSD83787**
Count Date:	3/10/2025	3/10/2025
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	33.291	33.291
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.820	0.818
Target Conc. (pCi/L, g, F):	4.060	4.068
Uncertainty (Calculated):	0.199	0.199
Result (pCi/L, g, F):	4.016	4.709
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.971	1.066
Numerical Performance Indicator:	-0.09	1.16
Percent Recovery:	98.93%	115.78%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS83787	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD83787	
Sample Result (pCi/L, g, F):	4.016	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.971	
Sample Duplicate Result (pCi/L, g, F):	4.709	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.066	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.942	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	15.70%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

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

Comments:

VAL
3/11/25

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	3/9/2025
Worklist:	83786
Matrix:	W

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3549309
MB concentration:	-0.024
M/B 2 Sigma CSU:	0.117
MB MDC:	0.342
MB Numerical Performance Indicator:	-0.40
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS83786	LCSD83786
Count Date:	3/12/2025	3/12/2025
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.014	25.014
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.524	0.522
Target Conc. (pCi/L, g, F):	4.776	4.796
Uncertainty (Calculated):	0.224	0.225
Result (pCi/L, g, F):	4.500	5.030
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.883	0.971
Numerical Performance Indicator:	-0.59	0.46
Percent Recovery:	94.24%	104.86%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

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

Duplicate Sample Assessment		
Sample I.D.:	LCS83786	92779982016
Duplicate Sample I.D.	LCSD83786	92779982016DUP
Sample Result (pCi/L, g, F):	4.500	0.482
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.883	0.259 ✓
Sample Duplicate Result (pCi/L, g, F):	5.030	0.019 ✓
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.971	0.098
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.790	3.284
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.67%	184.96%
Duplicate Status vs Numerical Indicator:	Pass	Fail***
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	~~25%~~	~~25%~~

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

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

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 3/12/25 Activity below RL

LAM 3/12/25

LAM 3/12/25

VALIDATION REPORTS

August 2024

Geosyntec consultants

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Knoxville, TN 37922
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Memorandum

Date:	5 December 2024
To:	Caroline Nelson
	Christine Hug
From:	Ashley Wilson
CC:	Kristoffer Henderson
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Project Services, Project Numbers: 92746292 and 92746286**

SITE: Plant Hammond AP-3

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twelve aqueous samples, two field duplicates, two field blanks and two equipment blanks, collected 5-7 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
- Calcium 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
92746292001	HAM-HGWA-43D
92746292002	HAM-HGWA-44D
92746292003	HAM-UGRD-FD-01
92746292004	HAM-UGRD-EB-01
92746292005	HAM-UGRD-FB-01
92746292006	HAM-HGWA-1
92746292007	HAM-HGWA-2
92746292008	HAM-HGWA-3
92746286001	HAM-HGWA-45D

Laboratory IDs	Client IDs
92746286002	HAM-HGWC-121A
92746286003	HAM-HGWA-122
92746286004	HAM-HGWC-120
92746286005	HAM-HGWC-124
92746286006	HAM-HGWC-125
92746286007	HAM-HGWC-126
92746286008	HAM-AP3-FD-01
92746286009	HAM-AP3-FB-01
92746286010	HAM-AP3-EB-01

The chain of custody (COC) indicates the samples were received between 0-6 ºC. 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

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-HGWA-1, HAM-HGWA-45D and HAM-HGWC-120. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions.

92746292: The recovery of calcium in the MS using sample HAM-HGWA-1 was low and outside of laboratory specified acceptance criteria. Since the calcium concentration in sample HAM-MW-1 was greater than four times the spiked concentration, no qualifications were applied to the data based on the MS/MSD recovery results.

92746286: The MSD recovery of barium in the MS/MSD pair using sample HAM-HGWA-45D was high and outside of laboratory specified acceptance criteria. Therefore, the concentration of barium in sample HAM-HGWA-45D was J+ qualified as estimated with a high bias.

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.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HAM-HGWA-45D	Barium	0.50	M1	0.50	J+	MS1

mg/L- milligram per liter
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

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 results were within the laboratory specified acceptance criteria.

1.6 Equipment Blank

Two equipment blanks were collected with the sample set, HAM-UGRD-EB-01 and HAM-AP3-EB-01. 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-UGRD-FB-01 and HAM-AP3-FB-01. 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-UGRD-FD-01 and HAM-AP3-FD-01. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original samples, HAM-HGWA-43D and HAM-HGWC-124, respectively, with the following exception.

Antimony was not detected in field duplicate HAM-AP3-FD-01 and detected in sample HAM-HGWC-124, resulting in a noncalculable RPD. Therefore, based on professional and technical judgment, the antimony concentration in sample HAM-HGWC-124 was J qualified as estimated and the non-detect result in field duplicate HAM-AP3-FD-01 was UJ qualified as estimated less than the MDL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-AP3-FD-01	Antimony	0.0030	U	NC	0.0030	UJ	RPDF2
HAM-HGWC-124	Antimony	0.0020	J		0.0020	J	RPDF2

mg/L- milligram per liter
U-not detected at or above the MDL
J-the result is less than RL but greater than the MDL and the concentration is an approximate value
NC-noncalculable

1.9 Sensitivity

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

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

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).

92746286: One sample set specific MS/MSD pair was reported, using sample HAM-HGWA-45D. The recovery and RPD results were within laboratory specified acceptance criteria.

Batch MS/MSDs were also reported for mercury. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). The recovery results were within the laboratory specified acceptance criteria.

2.6 Equipment Blank

Two equipment blanks were collected with the sample set, HAM-UGRD-EB-01 and HAM-AP3-EB-01. 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-UGRD-FB-01 and HAM-AP3-FB-01. 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-UGRD-FD-01 and HAM-AP3-FD-01. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original samples, HAM-HGWA-43D and HAM-HGWC-124, respectively.

2.9 Sensitivity

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

3.0 WET CHEMISTRY

The samples were analyzed for chloride, fluoride and sulfate by US EPA method 300.0 Rev 2.1 1993 and TDS by SM 2540C-2015.

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

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). Four sample set specific MS/MSD pairs were reported for chloride, fluoride and sulfate using samples HAM-HGWA-1 and HAM-HGWC-121A. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

92746292: The recoveries of sulfate in the MS/MSD pair using sample HAM-HGWA-1 were low and outside of laboratory specified acceptance criteria. Therefore, the concentration of sulfate in sample HAM-HGWA-1 was J- qualified as estimated with a low bias.

92746286: The MS recovery of sulfate in the MS/MSD pair using sample HAM-HGWC-121A was low and outside of laboratory specified acceptance criteria. Therefore, the concentration of sulfate in sample HAM-HGWC-121A was J- qualified as estimated with a low bias.

Batch MS/MSD pairs were also reported. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-HGWA-1	Sulfate	49.4	M1	49.4	J-	MS1
HAM-HGWC-121A	Sulfate	127	M1	127	J-	MS1

mg/L- milligram per liter
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). The recovery results were within the laboratory specified acceptance criteria.

3.6 Laboratory Duplicate

Three laboratory duplicates were reported for TDS using samples HAM-HGWC-120, HAM-UGRD-EB-01, HAM-HGWA-42D and HAM-HGWC-17. The RPD results were within the laboratory specified acceptance criteria, with the following exception.

92746292: The RPD of TDS in the laboratory duplicate pair using sample HAM-UGRD-EB-01 was high and outside of laboratory specified acceptance criteria. Since the TDS concentration for sample HAM-UGRD-EB-01 was less than five times the RL and the absolute difference between the original result and laboratory duplicate was less than the RL, no qualifications were applied to the data.

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-UGRD-EB-01 and HAM-AP3-EB-01. The wet chemistry parameters were not detected in the equipment blank at or above the MDLs, with the following exceptions.

92746292: TDS (41.0 mg/L) was detected in HAM-UGRD-EB-01 at a concentration greater than the RL. Since HAM-UGRD-EB-01 was qualified due to field blank contamination in HAM-AP1-FB-01, and based on professional and technical judgment, no additional qualifications were applied to the data.

92746286: TDS (34.0 mg/L) was detected in HAM-AP3-EB-01 at a concentration greater than the RL. Since HAM-AP3-EB-01 was qualified due to field blank contamination in HAM-AP3-FB-01, and based on professional and technical judgment, no additional qualifications were applied to the data.

3.8 Field Blank

Two field blanks were collected with the sample set, HAM-UGRD-FB-01 and HAM-AP3-FB-01. The wet chemistry parameters were not detected in the field blank at or above the MDLs, with the following exception.

92746292: TDS (135 mg/L) was detected in HAM-UGRD-FB-01 at a concentration greater than the RL. Therefore, the concentrations of TDS in samples HAM-HGWA-1, HAM-HGWA-2, HAM-HGWA-3, HAM-HGWA-43D, HAM-HGWA-44D and HAM-UGRD-FD-01 were J+ qualified as estimated with a high bias. The concentration in sample HAM-UGRD-EB-01 was U qualified as not detected at or above the reported concentration.

92746286: TDS (33.0 mg/L) was detected in HAM-AP3-FB-01 at a concentration greater than the RL. Since the associated samples were qualified due to equipment blank contamination in HAM-AP3-EB-01, and based on professional and technical judgment, no additional qualifications were applied to the data.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-AP3-EB-01	TDS	34.0	NA	34.0	U	BFH
HAM-HGWA-122	TDS	270	NA	270	J+	BFH
HAM-HGWA-45D	TDS	256	NA	256	J+	BFH
HAM-HGWC-124	TDS	337	NA	337	J+	BFH
HAM-HGWA-1	TDS	444	NA	444	J+	BFH
HAM-HGWA-2	TDS	217	NA	217	J+	BFH
HAM-HGWA-3	TDS	304	NA	304	J+	BFH
HAM-HGWA-43D	TDS	283	NA	283	J+	BFH
HAM-HGWA-44D	TDS	380	NA	380	J+	BFH
HAM-UGRD-EB-01	TDS	41.0	D6	41.0	U	BFH
HAM-UGRD-FD-01	TDS	295	NA	295	J+	BFH

mg/L- milligram per liter
NA-not applicable
D6-Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference

3.9 Field Duplicate

Two field duplicate samples were collected with the sample set, HAM-UGRD-FD-01 and HAM-AP3-FD-01. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original samples, HAM-HGWA-43D and HAM-HGWC-124, respectively.

3.10 Sensitivity

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

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* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected at or above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

DQM Reason Code	Description
AB1	> Samples in batch
AB2	QC sample missing
AB3	Batch analysis time exceeded
BAH	Contamination detected in the Ambient Blank greater than or equal to the Quantitation Limit.
BAL	Contamination detected in the Ambient Blank less than the Quantitation Limit.
BC	Calibration blank contamination
BC1	assoc. result < RL
BC2	assoc. result > RL < mult.
BC3	assoc. result > RL > mult.
BEH	Contamination detected in the Equipment Blank greater than or equal to the Quantitation Limit.
BEL	Contamination detected in the Equipment Blank less than the Quantitation Limit.
BF	Field blank contamination
BF1	assoc. result < RL
BF2	assoc. result > RL < mult.
BF3	assoc. result > RL > mult.
BFH	Contamination detected in the Field Blank greater than or equal to the Quantitation Limit.
BFL	Contamination detected in the Field Blank less than the Quantitation Limit.
BL	Laboratory blank contamination
BL1	assoc. result < RL
BL2	assoc. result > RL < mult.
BL3	assoc. result > RL > mult.
BLH	Contamination detected in the Lab Blank greater than or equal to the Quantitation Limit.
BLL	Contamination detected in the Lab Blank less than the Quantitation Limit.
BT	Trip blank contamination
BT1	assoc. result < RL
BT2	assoc. result > RL < mult.
BT3	assoc. result > RL > mult.
BTH	Contamination detected in the Trip Blank greater than or equal to the Quantitation Limit.
BTL	Contamination detected in the Trip Blank less than the Quantitation Limit.
CA1	Column difference
CC1	CCV %D
CC2	CCV %R
CC3	CCV RRF
CI1	IC RSD
CI2	IC RRF
CR1	Calibration range

DQM Reason Code	Description
CV1	ICV or CCV %D
CV2	ICV or CCV %R
CV3	ICV CCV RRF
DF1	Dilution Factor > 1
DL	Dilution Factor > 1
DVT1	The Dissolved Result > Total Result and the absolute difference > the AD_MULTIPLIER_CL * Detection Limit
DVT2	The Dissolved Result > Total Result and the absolute difference > AD_MULTIPLIER_UCO * Detection Limit
DVT3	The Dissolved Result > Total Result and the relative percent difference (RPD) > RPD_CL
DVT4	The Dissolved Result > Total Result and the relative percent difference (RPD) > RPD_UCO
ER1	MDL=<RESULT<RL (INORGANIC)
ER2	MDL=<RESULT<RL (ORGANIC)
FBC1	BLANK CONTAMINATION
FBC2	RESULT < BLANK * MULTIPLIER
FBC3	RESULT > BLANK * MULTIPLIER
FD1	Field duplicate RPD
FD2	Field duplicate abs. diff.
GHT1	GROSS_QUALIFIER_HIT
GHT2	GROSS_QUALIFIER_NON_DETECT
HP1	Hydrocarbon pattern
HT1	Holding time samp. to preservation
HT2	Holding time samp. to analysis
HT3	Holding time gros. samp. to pres.
HT4	Holding time gros. samp. to analysis
IS1	Internal standard
LBC1	BLANK CONTAMINATION
LBC2	RESULT < BLANK * MULTIPLIER
LBC3	RESULT > BLANK * MULTIPLIER
LD1	Lab duplicate RPD
LD2	Lab duplicate abs. diff.
LS1	LS %R
LS2	LS RPD
MS1	MS %R
MS2	MS RPD
MS3	Parent >4x spike
MS4	Spike diluted out

DQM Reason Code	Description
NP1	Non-Preferred Result
NR1	NUMERIC RESULTS
OT1	Other quality issue
PS1	BETWEEN CONTROL AND WARNING LIMITS
PS2	INVALID
PS3	LESS THAN LOWER CONTROL LIMIT
PS4	LESS THAN LOWER WARNING LIMIT
PT1	The preservative for this test id does not match the required preservative in RT_HOLDING_TIME.
RDL1	EXCEEDS REQUIRED DETECTION LIMIT
RL1	ND > project limit
RO1	Other rad. issue
RPD1	LCS/LCSD
RPD2	LCS/LCSD_NON_DETECT
RPD3	MS/MSD
RPD4	MS/MSD_NON_DETECT
RPD5	Orig/Dup
RPD6	Orig/Dup_NON_DETECT
RPDF1	FIELD DUPLICATE
RPDF2	FIELD DUPLICATE NON_DETECT
RQ1	Rad. quantitation issue
RR1	Repeated result same method
RR2	Repeated result diff. method
RSD1	RSD exceeds CL for LCS sample
RSD2	RSD exceeds CL for MS sample
RSD3	RSD exceeds CL for Lab sample
RSD4	RSD exceeds CL for Field sample
RY1	Tracer or carrier
SD1	Serial dilution
SO1	High moisture
SO2	Wet weight
SP1	Preservation, temp
SP2	Preservation, pH
SP3	Preservation, headspace
SPR1	BLANK SPIKE > UCL
SPR10	EarthSoft.DQM.SpikeRecovery2
SPR11	EarthSoft.DQM.SpikeRecovery2
SPR12	EarthSoft.DQM.SpikeRecovery2
SPR2	INORGANIC SPIKE > UCL

DQM Reason Code	Description
SPR3	ORGANIC SPIKE > UCL
SPR4	LCL > BLANK > LOW_CUTOFF
SPR5	LCL > INORG > LOW_CUTOFF
SPR6	LCL > ORG > LOW_CUTOFF
SPR7	BLANK SPIKE < LOW_CUTOFF
SPR8	INORGANIC SPIKE < LOW_CUTOFF
SPR9	ORGANIC SPIKE < LOW_CUTOFF
SU	Surrogate outlier
SU1	Surrogate
SU2	Surrogate diluted out
SURR1	ASSO. DETECTS OF LCL > REC > LOW_CUTOFF
SURR10	EarthSoft.DQM.SurrogateRecovery
SURR11	EarthSoft.DQM.SurrogateRecovery
SURR12	EarthSoft.DQM.SurrogateRecovery
SURR2	ASSO. DETECTS OF REC < LOW_CUTOFF
SURR3	ASSO. DETECTS OF REC > UCL
SURR4	ASSO. NDS OF LCL > REC > LOW_CUTOFF
SURR5	ASSO. NDS OF REC < LOW_CUTOFF
SURR6	ASSO. NDS OF REC > UCL
SURR7	LCL > REC > LOW_CUTOFF
SURR8	REC < LOW_CUTOFF
SURR9	REC > UCL
TBC1	BLANK CONTAMINATION
TBC2	RESULT < BLANK * MULTIPLIER
TBC3	RESULT > BLANK * MULTIPLIER
TR	Trace Detection
TR1	Trace detection
TRA1	Tracer is outside of UCL or LCL
TRA2	Associated result of a tracer less than the LCL
TRA3	Associated detect result of a tracer greater than the UCL
VC1	Canister vacuum
VC2	Canister contamination
VSU1	INVALID SAMPLE UNIT TYPE
VSU2	MISSING SAMPLE UNIT TYPE
VSU3	NON-DEFAULT RESULT UNIT

Geosyntec consultants

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Memorandum

Date: 10 January 2024

To: Whitney Law

From: Matthew Richardson

CC: Kristoffer Henderson

Subject: Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Services, LLC Project Numbers 92681881 and 92681882

SITE: Plant Hammond AP-3

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twelve aqueous samples, one field duplicate sample, one field blank, and one equipment blank, collected 8 and 10-11 August 2023, 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 ID	Client ID
92681881001	HAM-HGWA-1
92681881002	HAM-HGWA-2
92681881003	HAM-HGWA-3
92681881004	HAM-HGWA-43D
92681881005	HAM-HGWA-44D
92681882001	HAM-HGWA-45D
92681882002	HAM-HGWA-122
92681882003	HAM-HGWC-124

Laboratory ID	Client ID
92681882004	HAM-HGWC-126
92681882005	HAM-AP3-FD-03
92682395001	HAM-HGWC-120
92682395002	HAM-HGWC-121A
92682395003	HAM-HGWC-125
92682395004	HAM-AP3-EB-03
92682395005	HAM-AP3-FB-03

The samples were received within 0-6 degrees Celsius (ºC). 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%.

1.2 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). Four method blanks were reported for the radium-228 data (batches 610549, 611582, 611584 and 610551). Three method blanks were reported for the radium-226 data (batches 611645, 611647 and 610646). Radium-226 and radium-228 were not detected in the method blanks above the minimum detectable concentrations (MDCs), with the following exception.

92681881 and 92681882: Radium-228 was detected in the method blank in batch 610549 (0.453 pCi/L) at a concentration greater than the MDC. Since radium-228 was not detected in the associated samples at concentrations greater than the MDCs, no qualifications were applied to the data.

1.4 Matrix Spike/Matrix Spike Duplicate

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). Three LCS/LCS duplicate (LCSD) pairs were reported for radium-226. Four LCS/LCSD pairs were reported for radium-228. The recovery and replicate error ratio (RER) [1 sigma (1σ)] results were within the laboratory specified acceptance criteria, with the following exception.

92681882: The LCS recovery of radium-226 in the LCS/LCSD pair in batch 611647 was high and outside of the laboratory specified acceptance criteria. Therefore, the concentrations of radium-

226 and combined radium-226 and radium-228 in the associated samples were J qualified as estimated.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier*	Reason Code**
HAM-AP3-FD-03	Combined Radium 226 + 228	1.3	NA	1.3	J	5
HAM-AP3-FD-03	Radium-226	0.323	NA	0.323	J	5
HAM-HGWC-126	Combined Radium 226 + 228	1.34	NA	1.34	J	5
HAM-HGWC-126	Radium-226	0.573	NA	0.573	J	5

pCi/L-picocuries per liter
NA-not applicable
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.6 Laboratory Duplicate

One sample set specific laboratory duplicate was reported for radium-226 using sample HAM-HGWA-43D. The replicate percent difference (RPD) was outside of the laboratory specified acceptance criteria. Since the RER was within the laboratory specified acceptance criteria and based on professional and technical judgment, no qualifications were applied to the data.

One batch laboratory duplicate was reported for radium-226. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses and a tracer was reported for the radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

1.8 Equipment Blank

One equipment blank, HAM-AP3-EB-03, was collected with the sample set. Radium-226 and radium-228 were not detected in the equipment blank above the MDCs.

1.9 Field Blank

One field blank, HAM-AP3-FB-03, was collected with the sample set. Radium-226 and radium-228 were not detected in the field blank above the MDCs.

1.10 Field Duplicate

One field duplicate sample was collected with the sample set, HAM-AP-3-FD-03. Acceptable precision (RER (1σ) < 3) was demonstrated between the field duplicate and the original sample, HAM-HGWC-124.

However, radium-226, radium-228 and combined radium-226 and radium-228 were detected in field duplicate sample HAM-AP3-FD-03 at a concentration greater than the MDA and not detected in the parent sample HAM-HGWC-124, resulting in noncalculable RPDs. Since the RERs were less than three, no qualifications were applied to the data.

1.11 Sensitivity

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

1.12 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

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ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result."

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS or RPD recovery outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed or modified: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
RPD - Relative Percent Difference

February 2025

Geosyntec consultants

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Memorandum

Date:	8 July 2025
To:	Caroline Nelson
	Christine Hug
From:	Ashley Wilson
CC:	Kristoffer Henderson
Subject:	**Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Project Services, Project Numbers: 92779985, 92779989 and 92780677**

SITE: Plant Hammond AP-3

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twelve groundwater samples, two surface water samples, two field duplicates, two field blanks and two equipment blanks, collected 12-16 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:

- Metals 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 tests:

- 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
92779985001	HAM-HGWA-45D
92779985002	HAM-HGWA-122
92779985003	HAM-HGWC-120
92779985004	HAM-HGWC-121A
92779985005	HAM-HGWC-124
92779985006	HAM-HGWC-125
92779985007	HAM-HGWC-126
92779985008	HAM-AP3-EB-01
92779985009	HAM-AP3-FB-01
92779985010	HAM-AP3-FD-01

Laboratory IDs	Client IDs
92779989001	HAM-HGWA-1
92779989002	HAM-HGWA-3
92779989003	HAM-HGWA-43D
92779989004	HAM-HGWA-44D
92779989005	HAM-UGRD-EB-01
92779989006	HAM-UGRD-FB-01
92779989007	HAM-HGWA-2
92779989008	HAM-UGRD-FD-01
92780677001	HAM-SW-1
92780677002	HAM-SW-2

The chain of custody (COC) indicates the samples were received between 0-6 ºC. 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 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).

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-HGWA-45D, HAM-HGWC-125, HAM-UGRD-EB-01, and HAM-SW-2. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of boron, calcium and sodium in the MS/MSD pair using sample HAM-HGWC-125 were high or low and outside of laboratory specified acceptance criteria. Since the boron, calcium and sodium concentrations in sample HAM-HGWC-125 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-HGWC-125	Boron	1.5	M1	1.5	NA$^{\beta}$	MS3
HAM-HGWC-125	Calcium	169	M1	169	NA$^{\beta}$	MS3
HAM-HGWC-125	Sodium	10.4	M1	10.4	NA$^{\beta}$	MS3

mg/L- milligram per liter
M1-Laboratory flag indicating that the matrix spike recovery exceeded QC limits.
NA$^{\beta}$-Not applicable. The laboratory flag was removed and no qualifications were applied to the data based on this validation.
* 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

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-UGRD-EB-01 and HAM-AP3-EB-01. 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-UGRD-FB-01 and HAM-AP3-FB-01. 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-UGRD-FD-01 and HAM-AP3-FD-01. Acceptable precision (RPD < 30%) was demonstrated between the field duplicates and the original samples, HAM-HGWA-2 and HAM-HGWC-121A, respectively.

The field duplicates, HAM-UGRD-FD-01 and HAM-AP3-FD-01, 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 sodium, manganese and iron in sample HAM-HGWA-45D due to dilution 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-HGWA-1. 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-UGRD-EB-01 and HAM-AP3-EB-01. 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-UGRD-FB-01 and HAM-AP3-FB-01. 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-UGRD-FD-01 and HAM-AP3-FD-01. Acceptable precision (RPD < 30%) was demonstrated between the field duplicates and the original samples, HAM-HGWA-44D and HAM-HGWC-121A, 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-AP3-FB-01 and HAM-HGWA-2. One sample set specific MS/MSD pair was reported for sulfide using sample HAM-HGWA-43D. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The MS recoveries of chloride and fluoride in the MS/MSD pair using sample HAM-AP3-FB-01 as well as the fluoride RPD were high and outside of laboratory specified acceptance criteria. Since chloride and fluoride were not detected in sample HAM-AP3-FB-01, no qualifications were applied to the data.

The recoveries of sulfate in the MS/MSD pair using sample HAM-HGWA-2 were low and outside of laboratory specified acceptance criteria. Therefore, the concentration of sulfate in sample HAM-HGWA-2 was J- qualified as estimated with a low bias.

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-2	Sulfate	94.5	M1	94.5	J-	MS1

mg/L- milligram per liter
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

Three laboratory duplicates were reported for TDS using samples HAM-HGWC-125, HAM-HGWA-43D and HAM-UGRD-FB-01. 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-UGRD-EB-01 and HAM-AP3-EB-01. 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-UGRD-FB-01 and HAM-AP3-FB-01. 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-UGRD-FD-01 and HAM-AP3-FD-01. Acceptable precision (RPD $\leq$ 30%) was demonstrated between the field duplicates and the original samples, HAM-HGWA-44D and HAM-HGWC-121A, respectively.

The field duplicates, HAM-UGRD-FD-01 and HAM-AP3-FD-01, 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.

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ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS
AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected at or above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
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

Geosyntec consultants

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Memorandum

Date: 14 July 2025

To: Whitney Law

From: Ashley Wilson

CC: Kristoffer Henderson

Subject: Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Services, LLC Project Numbers 92779986, 92779992 and 92780680

SITE: Plant Hammond AP-3

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twelve groundwater samples, two surface water samples, two field duplicates, two field blanks and two equipment blanks, collected 12-16 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
92779986001	HAM-HGWA-45D
92779986002	HAM-HGWA-122
92779986003	HAM-HGWC-120
92779986004	HAM-HGWC-121A
92779986005	HAM-HGWC-124
92779986006	HAM-HGWC-125
92779986007	HAM-HGWC-126
92779986008	HAM-AP3-EB-01
92779986009	HAM-AP3-FB-01
92779986010	HAM-AP3-FD-01
92779992001	HAM-HGWA-1

Laboratory IDs	Client IDs
92779992002	HAM-HGWA-43D
92779992003	HAM-HGWA-44D
92779992004	HAM-UGRD-EB-01
92779992005	HAM-UGRD-FB-01
92779992006	HAM-HGWA-2
92779992007	HAM-HGWA-3
92779992008	HAM-UGRD-FD-01
92780680001	HAM-SW-1
92780680002	HAM-SW-2

The samples were received within 0-6 degrees Celsius (ºC). 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-AP3-FB-01 and HAM-HGWC-121A at concentrations greater than the minimum detectable concentration (MDC) and total radium was not detected. 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.

Radium-226 was detected in samples HAM-HGWA-45D, HAM-HGWC-126, HAM-SW-1 and HAM-SW-2 at concentrations greater than the MDC and total radium was not detected. 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.

Sample ID	Compound	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier*	DQM Reason Code**
HAM-AP3-FB-01	Combined Radium 226 + 228	0.953	U	0.953	NA	RO1
HAM-HGWA-45D	Combined Radium 226 + 228	0.871	U	0.871	NA	RO1
HAM-HGWC-121A	Combined Radium 226 + 228	0.874	U	0.874	NA	RO1
HAM-HGWC-126	Combined Radium 226 + 228	1.21	U	1.21	NA	RO1
HAM-SW-1	Combined Radium 226 + 228	1.24	U	1.24	NA	RO1
HAM-SW-2	Combined Radium 226 + 228	0.984	U	0.984	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-226 (0.652 pCi/L) was detected in the method blank in batch 728168 at a concentration greater than the MDC. Therefore, the radium-226 concentration with a mean difference less than 2 in samples HAM-HGWC-126 and HAM-UGRD-FD-01 were UJ qualified as not statistically distinguishable from the blank. In addition, the combined radium 226 + 228 concentration for sample HAM-HGWC-126 was UJ qualified as not statistically distinguishable from the blank.

Radium-228 (0.397 pCi/L) was detected in the method blank in batch 728160 at a concentration greater than the measured 2σ uncertainty. Therefore, the radium-228 concentration with a mean difference less than 2 in sample HAM-HGWC-121A were UJ qualified as not statistically distinguishable from the blank. In addition, the combined radium 226 + 228 concentrations for sample HAM-HGWC-121A were UJ qualified as not statistically distinguishable from the blank.

Radium-228 (0.679 pCi/L) was detected in the method blank in batch 728170 at a concentration greater than the measured 2σ uncertainty. Therefore, the radium-228 concentration with a mean difference less than 2 in sample HAM-UGRD-FD-01 was UJ qualified as not statistically distinguishable from the blank.

Since both radium-226 and radium-228 were UJ qualified as not statistically distinguishable from the blank for sample HAM-UGRD-FD-01, the combined radium 226 + 228 concentration for sample HAM-UGRD-FD-01 was also 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-HGWC-121A	Radium-226	0.766	NA	0.766	UJ	BL
HAM-HGWC-121A	Combined Radium 226 + 228	0.874	U	0.874	UJ	BL
HAM-HGWC-126	Radium-226	0.525	NA	0.525	UJ	BL
HAM-HGWC-126	Combined Radium 226 + 228	1.21	U	1.21	UJ	BL

Sample ID	Compound	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	DQM Reason Code
HAM-UGRD-FD-01	Radium-226	0.401	NA	0.401	UJ	BL
HAM-UGRD-FD-01	Radium-228	1.30	NA	1.30	UJ	BL
HAM-UGRD-FD-01	Combined Radium 226 + 228	1.70	NA	1.70	UJ	BL

pCi/L-picocuries per liter
U-not detected at or above the MDC
NA-not applicable

1.4 Matrix Spike/Matrix Spike Duplicate

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

Two sample set specific laboratory duplicates were reported for radium-226 using samples HAM-HGWC-124 and HAM-AP3-EB-01. The RPD results were within the laboratory specified acceptance criteria.

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.

1.7 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-AP3-FB-01 and HAM-UGRD-FB-01, 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 exceptions.

Radium-226 (0.241 pCi/L) was detected in HAM-AP3-FB-01 at a concentration greater than the measured 2σ uncertainty. Therefore, the radium-226 concentrations with a mean difference less than 2 in sample HAM-HGWA-45D was UJ qualified as not statistically distinguishable from the blank. In addition, the combined radium 226 + 228 concentration for sample HAM-HGWA-45D was UJ qualified as not statistically distinguishable from the blank.

Radium-228 (0.712 pCi/L) was detected in HAM-AP3-FB-01 at a concentration greater than the MDC. Since the radium-228 concentrations in the associated samples greater than the MDC were UJ qualified due to method blank contamination, no qualifications were applied to the data.

Radium-228 (0.998 pCi/L) was detected in HAM-UGRD-FB-01 at a concentration greater than the MDC. Since the radium-228 concentration in the associated sample greater than the MDC was UJ qualified due to method blank contamination, no qualifications were applied to the data.

Sample ID	Compound	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	DQM Reason Code
HAM-HGWA-45D	Radium-226	0.438	NA	0.4389	UJ	BFL
HAM-HGWA-45D	Combined Radium 226 + 228	0.871	U	0.871	UJ	BFL

pCi/L-picocuries per liter
U-not detected at or above the MDC
NA-not applicable

1.9 Equipment Blank

Two equipment blanks, HAM-AP3-EB-01 and HAM-UGRD-EB-01, 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 exceptions.

Radium-228 (0.781 pCi/L) was detected in HAM-AP3-EB-01 at a concentration greater than the measured 2σ uncertainty. Since the radium-228 concentrations in the associated samples greater than the MDC were UJ qualified due to method blank contamination, no qualifications were applied to the data.

Radium-228 (0.601 pCi/L) was detected in HAM-UGRD-EB-01 at a concentration greater than the measured 2σ uncertainty. Since the radium-228 concentrations in the associated samples greater than the MDC were UJ qualified due to method blank contamination, no qualifications were applied to the data.

1.10 Field Duplicate

Two field duplicate samples, HAM-UGRD-FD-01 and HAM-AP3-FD-01, were collected with the sample set. Acceptable precision [mean difference (MD) ≤ 3, RPD < 20% or difference < RL] was demonstrated between the field duplicates and the original samples, HAM-HGWA-2 and HAM-HGWC-121A.

1.11 Sensitivity

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

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ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result."

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

DQM Reason Code	Description
AB1	> Samples in batch
AB2	QC sample missing
AB3	Batch analysis time exceeded
BAH	Contamination detected in the Ambient Blank greater than or equal to the Quantitation Limit.
BAL	Contamination detected in the Ambient Blank less than the Quantitation Limit.
BC	Calibration blank contamination
BC1	assoc. result < RL
BC2	assoc. result > RL < mult.
BC3	assoc. result > RL > mult.
BEH	Contamination detected in the Equipment Blank greater than or equal to the Quantitation Limit.
BEL	Contamination detected in the Equipment Blank less than the Quantitation Limit.
BF	Field blank contamination
BF1	assoc. result < RL
BF2	assoc. result > RL < mult.
BF3	assoc. result > RL > mult.
BFH	Contamination detected in the Field Blank greater than or equal to the Quantitation Limit.
BFL	Contamination detected in the Field Blank less than the Quantitation Limit.
BL	Laboratory blank contamination
BL1	assoc. result < RL
BL2	assoc. result > RL < mult.
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

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: 8/5/2024 3:58:06 PM
Project: GP-Plant Hammond
Operator Name: C. Cain

Location Name: HGWA-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.49 ft** **Total Depth: 32.49 ft** **Initial Depth to Water: 20.86 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 27.49 ft** **Estimated Total Volume Pumped: 3 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.68 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

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	
8/5/2024 3:58 PM	00:00	8.01 pH	35.03 °C	0.15 µS/cm	6.62 mg/L	5.31 NTU	467.1 mV	21.15 ft	200.00 ml/min
8/5/2024 4:01 PM	03:50	7.20 pH	22.52 °C	589.94 µS/cm	2.88 mg/L	4.65 NTU	16.9 mV	21.15 ft	200.00 ml/min
8/5/2024 4:06 PM	08:50	7.22 pH	19.15 °C	620.89 µS/cm	0.63 mg/L	3.44 NTU	115.2 mV	21.57 ft	200.00 ml/min
8/5/2024 4:11 PM	13:50	7.23 pH	19.02 °C	607.63 µS/cm	0.24 mg/L	1.90 NTU	202.7 mV	21.63 ft	200.00 ml/min
8/5/2024 4:16 PM	18:50	7.24 pH	18.88 °C	621.19 µS/cm	0.31 mg/L	1.51 NTU	310.2 mV	21.71 ft	200.00 ml/min
8/5/2024 4:21 PM	23:50	7.25 pH	18.85 °C	609.77 µS/cm	0.21 mg/L	1.34 NTU	373.6 mV	21.78 ft	200.00 ml/min
8/5/2024 4:26 PM	28:50	7.27 pH	18.95 °C	626.76 µS/cm	0.19 mg/L	1.32 NTU	434.7 mV	21.81 ft	200.00 ml/min
8/5/2024 4:31 PM	33:50	7.29 pH	18.97 °C	624.60 µS/cm	0.16 mg/L	1.02 NTU	408.8 mV	21.83 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-1	Grab.

Low-Flow Test Report:

Test Date / Time: 8/5/2024 3:55:27 PM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWA-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.95 ft** **Total Depth: 27.95 ft** **Initial Depth to Water: 14.87 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 27.95 ft** **Estimated Total Volume Pumped: 5.25 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min Final Draw Down: 0.04 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

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	
8/5/2024 3:55 PM	00:00	4.92 pH	18.97 °C	298.88 µS/cm	0.17 mg/L	15.80 NTU	140.8 mV	14.67 ft	150.00 ml/min
8/5/2024 4:00 PM	05:00	4.93 pH	19.19 °C	300.77 µS/cm	0.12 mg/L	7.58 NTU	146.4 mV	14.72 ft	150.00 ml/min
8/5/2024 4:05 PM	10:00	4.92 pH	19.75 °C	301.53 µS/cm	0.12 mg/L	5.87 NTU	107.6 mV	14.72 ft	150.00 ml/min
8/5/2024 4:10 PM	15:00	4.92 pH	20.06 °C	299.78 µS/cm	0.12 mg/L	2.69 NTU	98.3 mV	14.72 ft	150.00 ml/min
8/5/2024 4:15 PM	20:00	4.91 pH	20.85 °C	300.42 µS/cm	0.12 mg/L	2.03 NTU	95.5 mV	14.72 ft	150.00 ml/min
8/5/2024 4:20 PM	25:00	4.91 pH	20.96 °C	299.53 µS/cm	0.12 mg/L	1.89 NTU	92.2 mV	14.72 ft	150.00 ml/min
8/5/2024 4:25 PM	30:00	4.91 pH	21.05 °C	298.80 µS/cm	0.12 mg/L	1.87 NTU	89.7 mV	14.72 ft	150.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-2	Grab.

Low-Flow Test Report:

Test Date / Time: 8/5/2024 3:49:27 PM
Project: GP-Plant Hammond
Operator Name: T. Kessler

Location Name: HGWA-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 34.51 ft** **Total Depth: 44.51 ft** **Initial Depth to Water: 14.3 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 39.51 ft** **Estimated Total Volume Pumped: 9 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: 884189**

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	
8/5/2024 3:49 PM	00:00	7.29 pH	20.92 °C	467.17 µS/cm	0.24 mg/L	61.20 NTU	-48.8 mV	14.35 ft	200.00 ml/min
8/5/2024 3:52 PM	03:21	7.27 pH	20.71 °C	468.77 µS/cm	0.19 mg/L	60.50 NTU	-69.8 mV	14.35 ft	200.00 ml/min
8/5/2024 3:57 PM	08:21	7.24 pH	20.52 °C	466.20 µS/cm	0.13 mg/L	14.35 NTU	-51.1 mV	14.35 ft	200.00 ml/min
8/5/2024 4:02 PM	13:21	7.24 pH	20.50 °C	466.63 µS/cm	0.10 mg/L	41.90 NTU	-72.4 mV	14.35 ft	200.00 ml/min
8/5/2024 4:07 PM	18:21	7.25 pH	20.42 °C	465.40 µS/cm	0.10 mg/L	14.90 NTU	-55.5 mV	14.35 ft	200.00 ml/min
8/5/2024 4:12 PM	23:21	7.25 pH	20.41 °C	464.44 µS/cm	0.09 mg/L	8.92 NTU	-57.9 mV	14.35 ft	200.00 ml/min
8/5/2024 4:17 PM	28:21	7.26 pH	20.32 °C	463.35 µS/cm	0.09 mg/L	9.16 NTU	-58.7 mV	14.35 ft	200.00 ml/min
8/5/2024 4:22 PM	33:21	7.27 pH	20.39 °C	462.13 µS/cm	0.09 mg/L	6.24 NTU	-60.1 mV	14.35 ft	200.00 ml/min
8/5/2024 4:27 PM	38:21	7.27 pH	20.35 °C	461.63 µS/cm	0.09 mg/L	4.71 NTU	-60.9 mV	14.35 ft	200.00 ml/min

Samples

Sample ID:	Description:

HAM-HGWA-3	Grab.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 8/6/2024 8:47:20 AM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWA-43D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 51.25 ft** **Total Depth: 61.25 ft** **Initial Depth to Water: 20.9 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 56.25 ft** **Estimated Total Volume Pumped: 12 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 1.42 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

Test Notes:
5 bottles; Full app. III and IV.

Weather Conditions:
Sunny, 75 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 8:47 AM	00:00	7.44 pH	19.26 °C	466.18 µS/cm	1.61 mg/L	2.55 NTU	-64.8 mV	20.90 ft	150.00 ml/min
8/6/2024 8:52 AM	05:00	7.43 pH	19.17 °C	464.02 µS/cm	1.22 mg/L	1.71 NTU	-56.3 mV	22.07 ft	150.00 ml/min
8/6/2024 8:57 AM	10:00	7.45 pH	19.23 °C	448.23 µS/cm	1.56 mg/L	1.91 NTU	-89.1 mV	22.13 ft	150.00 ml/min
8/6/2024 9:02 AM	15:00	7.46 pH	19.22 °C	464.78 µS/cm	1.00 mg/L	1.38 NTU	-61.4 mV	22.20 ft	150.00 ml/min
8/6/2024 9:07 AM	20:00	7.48 pH	19.19 °C	465.66 µS/cm	1.26 mg/L	1.11 NTU	-63.5 mV	22.29 ft	150.00 ml/min
8/6/2024 9:12 AM	25:00	7.49 pH	19.36 °C	452.13 µS/cm	0.94 mg/L	1.75 NTU	-63.9 mV	22.32 ft	150.00 ml/min
8/6/2024 9:17 AM	30:00	7.49 pH	19.49 °C	431.03 µS/cm	1.36 mg/L	1.79 NTU	-65.4 mV	22.32 ft	150.00 ml/min
8/6/2024 9:22 AM	35:00	7.50 pH	19.40 °C	456.51 µS/cm	0.78 mg/L	1.29 NTU	-63.7 mV	22.32 ft	150.00 ml/min
8/6/2024 9:27 AM	40:00	7.50 pH	19.43 °C	453.74 µS/cm	0.92 mg/L	0.86 NTU	-63.0 mV	22.32 ft	150.00 ml/min
8/6/2024 9:32 AM	45:00	7.50 pH	19.63 °C	413.85 µS/cm	1.08 mg/L	0.72 NTU	-62.9 mV	22.32 ft	150.00 ml/min
8/6/2024 9:37 AM	50:00	7.49 pH	19.69 °C	448.82 µS/cm	2.67 mg/L	0.68 NTU	-61.0 mV	22.32 ft	150.00 ml/min
8/6/2024 9:42 AM	55:00	7.49 pH	19.01 °C	441.63 µS/cm	4.92 mg/L	1.05 NTU	-59.9 mV	22.32 ft	150.00 ml/min
8/6/2024 9:47 AM	01:00:00	7.49 pH	18.88 °C	435.31 µS/cm	1.83 mg/L	1.21 NTU	-58.1 mV	22.32 ft	150.00 ml/min

8/6/2024 9:52 AM	01:05:00	7.46 pH	18.93 °C	450.19 µS/cm	0.36 mg/L	0.88 NTU	-57.4 mV	22.32 ft	150.00 ml/min
8/6/2024 9:57 AM	01:10:00	7.46 pH	19.00 °C	447.01 µS/cm	0.34 mg/L	0.69 NTU	-88.7 mV	22.32 ft	150.00 ml/min
8/6/2024 10:02 AM	01:15:00	7.46 pH	18.99 °C	445.19 µS/cm	0.36 mg/L	0.72 NTU	-88.1 mV	22.32 ft	150.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-43D	Grab.
HAM-UGRD-FD-01	Grab.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 8/6/2024 8:53:38 AM
Project: GP-Plant Hammond
Operator Name: T. Kessler

Location Name: HGWA-44D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 103.5 ft** **Total Depth: 113.5 ft** **Initial Depth to Water: 20.75 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 108.5 ft** **Estimated Total Volume Pumped: 7.5 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 5.25 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884189**

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	
8/6/2024 8:53 AM	00:00	7.94 pH	20.44 °C	550.82 µS/cm	1.67 mg/L	63.60 NTU	40.8 mV	20.85 ft	200.00 ml/min
8/6/2024 8:58 AM	05:00	8.02 pH	19.26 °C	558.24 µS/cm	0.41 mg/L	71.70 NTU	-40.5 mV	21.68 ft	200.00 ml/min
8/6/2024 9:03 AM	10:00	8.07 pH	19.03 °C	548.90 µS/cm	0.27 mg/L	26.80 NTU	-59.8 mV	22.88 ft	200.00 ml/min
8/6/2024 9:08 AM	15:00	8.09 pH	18.97 °C	540.26 µS/cm	0.21 mg/L	25.30 NTU	-96.5 mV	23.51 ft	200.00 ml/min
8/6/2024 9:13 AM	20:00	8.11 pH	19.15 °C	538.33 µS/cm	0.18 mg/L	11.50 NTU	-74.8 mV	23.60 ft	200.00 ml/min
8/6/2024 9:18 AM	25:00	8.12 pH	19.10 °C	535.48 µS/cm	0.14 mg/L	8.86 NTU	-122.3 mV	24.10 ft	200.00 ml/min
8/6/2024 9:23 AM	30:00	8.13 pH	19.13 °C	533.17 µS/cm	0.12 mg/L	6.32 NTU	-98.9 mV	24.40 ft	200.00 ml/min
8/6/2024 9:28 AM	35:00	8.28 pH	19.14 °C	536.64 µS/cm	0.12 mg/L	5.13 NTU	-144.1 mV	24.90 ft	200.00 ml/min
8/6/2024 9:33 AM	40:00	8.30 pH	19.24 °C	533.19 µS/cm	0.09 mg/L	4.09 NTU	-151.4 mV	25.20 ft	200.00 ml/min
8/6/2024 9:38 AM	45:00	8.31 pH	19.29 °C	540.94 µS/cm	0.08 mg/L	3.99 NTU	-157.9 mV	25.50 ft	200.00 ml/min
8/6/2024 9:43 AM	50:00	8.33 pH	19.24 °C	539.19 µS/cm	0.07 mg/L	4.27 NTU	-125.6 mV	25.80 ft	200.00 ml/min
8/6/2024 9:48 AM	55:00	8.34 pH	19.24 °C	535.59 µS/cm	0.06 mg/L	3.83 NTU	-166.2 mV	25.80 ft	200.00 ml/min
8/6/2024 9:53 AM	01:00:00	8.35 pH	19.30 °C	534.74 µS/cm	0.05 mg/L	4.01 NTU	-167.7 mV	25.95 ft	200.00 ml/min

8/6/2024 9:58 AM	01:05:00	8.36 pH	19.29 °C	533.45 µS/cm	0.05 mg/L	1.47 NTU	-173.4 mV	26.00 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-44D	Grab.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 8/6/2024 1:59:45 PM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWA-45D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 52.87 ft** **Total Depth: 62.87 ft** **Initial Depth to Water: 13.3 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 57.87 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.65 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

Test Notes:
5 bottles; Full app. III & 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	
8/6/2024 1:59 PM	00:00	7.46 pH	23.06 °C	486.00 µS/cm	1.02 mg/L	2.77 NTU	-77.1 mV	13.30 ft	200.00 ml/min
8/6/2024 2:04 PM	05:00	7.54 pH	22.17 °C	485.42 µS/cm	0.90 mg/L	1.56 NTU	-77.1 mV	13.87 ft	200.00 ml/min
8/6/2024 2:09 PM	10:00	7.51 pH	22.21 °C	471.46 µS/cm	1.00 mg/L	1.89 NTU	-102.6 mV	13.90 ft	200.00 ml/min
8/6/2024 2:14 PM	15:00	7.49 pH	21.98 °C	457.01 µS/cm	0.96 mg/L	1.34 NTU	-106.5 mV	13.92 ft	200.00 ml/min
8/6/2024 2:19 PM	20:00	7.49 pH	21.67 °C	448.83 µS/cm	0.97 mg/L	1.04 NTU	-110.6 mV	13.95 ft	200.00 ml/min
8/6/2024 2:24 PM	25:00	7.46 pH	21.97 °C	443.57 µS/cm	0.95 mg/L	1.01 NTU	-114.1 mV	13.95 ft	200.00 ml/min
8/6/2024 2:29 PM	30:00	7.46 pH	22.29 °C	442.86 µS/cm	0.93 mg/L	0.78 NTU	-80.6 mV	13.95 ft	200.00 ml/min
8/6/2024 2:34 PM	35:00	7.47 pH	22.21 °C	430.96 µS/cm	0.88 mg/L	0.67 NTU	-122.9 mV	13.95 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-45D	Grab.

Low-Flow Test Report:

Test Date / Time: 8/6/2024 11:46:25 AM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWA-122 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.76 ft** **Total Depth: 27.76 ft** **Initial Depth to Water: 14.39 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 22.76 ft** **Estimated Total Volume Pumped: 10 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.04 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

Test Notes:
5 Bottles; Full app. III & 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	
8/6/2024 11:46 AM	00:00	6.80 pH	20.52 °C	358.71 µS/cm	2.51 mg/L	4.80 NTU	95.8 mV	14.39 ft	150.00 ml/min
8/6/2024 11:51 AM	05:00	6.84 pH	20.37 °C	357.13 µS/cm	2.21 mg/L	2.95 NTU	96.3 mV	14.42 ft	150.00 ml/min
8/6/2024 11:56 AM	10:00	6.86 pH	20.35 °C	370.26 µS/cm	1.93 mg/L	1.33 NTU	91.4 mV	14.42 ft	150.00 ml/min
8/6/2024 12:01 PM	15:00	6.86 pH	20.38 °C	368.54 µS/cm	1.76 mg/L	1.24 NTU	71.1 mV	14.43 ft	150.00 ml/min
8/6/2024 12:06 PM	20:00	6.88 pH	20.29 °C	383.05 µS/cm	1.74 mg/L	1.79 NTU	86.7 mV	14.43 ft	150.00 ml/min
8/6/2024 12:11 PM	25:00	6.88 pH	22.44 °C	384.53 µS/cm	1.82 mg/L	1.18 NTU	67.5 mV	14.43 ft	150.00 ml/min
8/6/2024 12:16 PM	30:00	6.87 pH	26.41 °C	386.16 µS/cm	1.79 mg/L	--	67.0 mV	14.43 ft	150.00 ml/min
8/6/2024 12:21 PM	35:00	6.86 pH	29.66 °C	388.27 µS/cm	1.88 mg/L	--	66.9 mV	14.43 ft	150.00 ml/min
8/6/2024 12:26 PM	40:00	6.86 pH	32.63 °C	390.36 µS/cm	2.01 mg/L	--	66.6 mV	14.43 ft	150.00 ml/min
8/6/2024 12:31 PM	45:00	6.89 pH	33.08 °C	378.17 µS/cm	2.02 mg/L	--	68.8 mV	14.43 ft	150.00 ml/min
8/6/2024 12:36 PM	50:00	6.81 pH	20.95 °C	356.27 µS/cm	2.44 mg/L	1.62 NTU	95.3 mV	14.43 ft	150.00 ml/min
8/6/2024 12:41 PM	55:00	6.90 pH	20.20 °C	375.57 µS/cm	1.96 mg/L	0.83 NTU	69.3 mV	14.43 ft	150.00 ml/min
8/6/2024 12:46 PM	01:00:00	6.89 pH	22.22 °C	379.46 µS/cm	1.93 mg/L	0.77 NTU	67.9 mV	14.43 ft	150.00 ml/min

8/6/2024 12:51 PM	01:05:00	6.86 pH	22.83 °C	373.99 µS/cm	1.99 mg/L	0.72 NTU	87.8 mV	14.43 ft	150.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-122	Grab.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 8/7/2024 10:46:54 AM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWC-120 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.00 ft** **Total Depth: 67.00 ft** **Initial Depth to Water: 40.85 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene Pump** **Intake From TOC: 62.00 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

Test Notes:
5 Bottles; Full app. III & 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	
8/7/2024 10:46 AM	00:00	7.08 pH	22.19 °C	859.85 µS/cm	1.56 mg/L	5.75 NTU	-39.5 mV	40.85 ft	200.00 ml/min
8/7/2024 10:51 AM	05:00	7.05 pH	21.45 °C	863.98 µS/cm	0.82 mg/L	4.68 NTU	-29.1 mV	40.87 ft	200.00 ml/min
8/7/2024 10:56 AM	10:00	7.04 pH	21.37 °C	864.78 µS/cm	0.79 mg/L	2.87 NTU	-45.8 mV	40.87 ft	200.00 ml/min
8/7/2024 11:01 AM	15:00	7.03 pH	21.50 °C	865.94 µS/cm	0.74 mg/L	1.93 NTU	-43.9 mV	40.87 ft	200.00 ml/min
8/7/2024 11:06 AM	20:00	7.03 pH	21.47 °C	865.57 µS/cm	0.82 mg/L	1.31 NTU	-41.3 mV	40.87 ft	200.00 ml/min
8/7/2024 11:11 AM	25:00	7.02 pH	21.50 °C	861.79 µS/cm	0.77 mg/L	1.17 NTU	-39.5 mV	40.87 ft	200.00 ml/min
8/7/2024 11:16 AM	30:00	7.01 pH	21.68 °C	858.69 µS/cm	0.83 mg/L	1.22 NTU	-19.0 mV	40.87 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-120	Grab.

Low-Flow Test Report:

Test Date / Time: 8/6/2024 3:47:18 PM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWC-121A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 27.98 ft** **Total Depth: 37.98 ft** **Initial Depth to Water: 18.27 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 32.98 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.09 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

Test Notes:
5 Bottles; Full app. III & 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 3:47 PM	00:00	6.92 pH	20.66 °C	828.56 µS/cm	0.95 mg/L	1.86 NTU	20.8 mV	18.27 ft	200.00 ml/min
8/6/2024 3:52 PM	05:00	6.92 pH	20.41 °C	837.59 µS/cm	0.82 mg/L	1.67 NTU	19.8 mV	18.36 ft	200.00 ml/min
8/6/2024 3:57 PM	10:00	6.92 pH	20.47 °C	844.86 µS/cm	0.86 mg/L	1.49 NTU	21.9 mV	18.36 ft	200.00 ml/min
8/6/2024 4:02 PM	15:00	6.91 pH	20.31 °C	841.94 µS/cm	0.85 mg/L	1.17 NTU	25.7 mV	18.36 ft	200.00 ml/min
8/6/2024 4:07 PM	20:00	6.90 pH	20.11 °C	836.98 µS/cm	0.81 mg/L	1.03 NTU	24.3 mV	18.36 ft	200.00 ml/min
8/6/2024 4:12 PM	25:00	6.90 pH	19.85 °C	842.86 µS/cm	0.80 mg/L	1.11 NTU	24.1 mV	18.36 ft	200.00 ml/min
8/6/2024 4:17 PM	30:00	6.91 pH	19.87 °C	847.06 µS/cm	0.68 mg/L	0.94 NTU	22.7 mV	18.36 ft	200.00 ml/min

Samples

Sample ID:	Description:
HGWC-121A	Grab.

Low-Flow Test Report:

Test Date / Time: 8/7/2024 8:46:26 AM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWC-124 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 25.12 ft** **Total Depth: 35.12 ft** **Initial Depth to Water: 17.06 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 30.12 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.18 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

Test Notes:
5 Bottles; Full app. III & 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	
8/7/2024 8:46 AM	00:00	7.31 pH	19.05 °C	521.00 µS/cm	1.05 mg/L	1.48 NTU	-0.4 mV	17.06 ft	200.00 ml/min
8/7/2024 8:51 AM	05:00	7.31 pH	19.08 °C	507.74 µS/cm	1.20 mg/L	1.17 NTU	8.8 mV	17.24 ft	200.00 ml/min
8/7/2024 8:56 AM	10:00	7.30 pH	19.05 °C	510.34 µS/cm	1.11 mg/L	0.95 NTU	9.7 mV	17.24 ft	200.00 ml/min
8/7/2024 9:01 AM	15:00	7.28 pH	19.05 °C	508.89 µS/cm	0.99 mg/L	0.90 NTU	13.8 mV	17.24 ft	200.00 ml/min
8/7/2024 9:06 AM	20:00	7.27 pH	19.00 °C	507.66 µS/cm	1.13 mg/L	0.84 NTU	12.9 mV	17.24 ft	200.00 ml/min
8/7/2024 9:11 AM	25:00	7.25 pH	18.97 °C	507.01 µS/cm	1.08 mg/L	0.82 NTU	13.7 mV	17.24 ft	200.00 ml/min
8/7/2024 9:16 AM	30:00	7.24 pH	18.98 °C	505.67 µS/cm	1.00 mg/L	0.62 NTU	13.0 mV	17.24 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-124	Grab.
HAM-AP3-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 8/7/2024 12:21:39 PM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWC-125 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 53.19 ft** **Total Depth: 63.19 ft** **Initial Depth to Water: 44.22 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 58.19 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

Test Notes:
5 Bottles; Full app. III & 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	
8/7/2024 12:21 PM	00:00	6.26 pH	26.44 °C	879.77 µS/cm	2.96 mg/L	1.81 NTU	110.5 mV	44.22 ft	200.00 ml/min
8/7/2024 12:26 PM	05:00	6.17 pH	24.86 °C	886.57 µS/cm	1.73 mg/L	1.56 NTU	95.5 mV	44.25 ft	200.00 ml/min
8/7/2024 12:31 PM	10:00	6.17 pH	24.49 °C	885.31 µS/cm	1.53 mg/L	1.02 NTU	90.4 mV	44.25 ft	200.00 ml/min
8/7/2024 12:36 PM	15:00	6.17 pH	24.27 °C	887.69 µS/cm	1.41 mg/L	0.60 NTU	88.1 mV	44.25 ft	200.00 ml/min
8/7/2024 12:41 PM	20:00	6.16 pH	24.31 °C	880.10 µS/cm	1.22 mg/L	0.66 NTU	86.0 mV	44.25 ft	200.00 ml/min
8/7/2024 12:46 PM	25:00	6.14 pH	24.68 °C	867.85 µS/cm	1.05 mg/L	0.58 NTU	83.2 mV	44.25 ft	200.00 ml/min
8/7/2024 12:51 PM	30:00	6.13 pH	24.33 °C	871.85 µS/cm	0.96 mg/L	0.81 NTU	80.7 mV	44.25 ft	200.00 ml/min
8/7/2024 12:56 PM	35:00	6.15 pH	24.27 °C	871.08 µS/cm	0.93 mg/L	0.94 NTU	79.0 mV	44.25 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-125	Grab.

Low-Flow Test Report:

Test Date / Time: 8/7/2024 2:03:00 PM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWC-126 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 58.52 ft** **Total Depth: 68.52 ft** **Initial Depth to Water: 41.45 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 63.52 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 1.08 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 1080297**

Test Notes:
5 Bottles; Full app. III & 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	
8/7/2024 2:03 PM	00:00	8.14 pH	35.35 °C	449.30 µS/cm	7.51 mg/L	12.84 NTU	55.8 mV	41.45 ft	200.00 ml/min
8/7/2024 2:08 PM	05:00	7.03 pH	25.79 °C	820.10 µS/cm	2.50 mg/L	12.27 NTU	-24.0 mV	41.80 ft	200.00 ml/min
8/7/2024 2:13 PM	10:00	6.99 pH	23.85 °C	847.26 µS/cm	1.02 mg/L	10.16 NTU	-50.1 mV	42.08 ft	200.00 ml/min
8/7/2024 2:18 PM	15:00	6.99 pH	24.34 °C	852.69 µS/cm	0.79 mg/L	4.08 NTU	-52.3 mV	42.27 ft	200.00 ml/min
8/7/2024 2:23 PM	20:00	6.99 pH	23.87 °C	844.20 µS/cm	0.68 mg/L	3.49 NTU	-29.6 mV	42.34 ft	200.00 ml/min
8/7/2024 2:28 PM	25:00	6.99 pH	24.08 °C	839.30 µS/cm	0.60 mg/L	2.74 NTU	-29.1 mV	42.42 ft	200.00 ml/min
8/7/2024 2:33 PM	30:00	6.99 pH	24.18 °C	836.69 µS/cm	0.60 mg/L	2.26 NTU	-30.7 mV	42.53 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-126	Grab.

February 2025

Low-Flow Test Report:

Test Date / Time: 2/12/2025 12:53:42 PM
Project: GP-Plant Hammond
Operator Name: T. Kessler

Location Name: HGWA-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 22.49 ft** **Total Depth: 32.49 ft** **Initial Depth to Water: 16.98 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 27.39 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.67 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

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	
2/12/2025 12:53 PM	00:00	7.09 pH	15.83 °C	646.12 µS/cm	1.97 mg/L	1.09 NTU	79.4 mV	17.59 ft	200.00 ml/min
2/12/2025 12:58 PM	05:00	7.07 pH	16.14 °C	628.63 µS/cm	1.16 mg/L	1.09 NTU	54.3 mV	17.65 ft	200.00 ml/min
2/12/2025 1:03 PM	10:00	7.07 pH	16.14 °C	629.57 µS/cm	0.94 mg/L	0.41 NTU	45.1 mV	17.65 ft	200.00 ml/min
2/12/2025 1:08 PM	15:00	7.07 pH	16.28 °C	628.14 µS/cm	0.72 mg/L	0.49 NTU	39.7 mV	17.65 ft	200.00 ml/min
2/12/2025 1:13 PM	20:00	7.07 pH	16.19 °C	629.01 µS/cm	0.58 mg/L	0.44 NTU	35.9 mV	17.65 ft	200.00 ml/min
2/12/2025 1:18 PM	25:00	7.08 pH	16.07 °C	628.42 µS/cm	0.47 mg/L	0.29 NTU	32.8 mV	17.65 ft	200.00 ml/min
2/12/2025 1:23 PM	30:00	7.08 pH	16.01 °C	627.91 µS/cm	0.42 mg/L	0.95 NTU	30.5 mV	17.65 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-1	Grab.

Low-Flow Test Report:

Test Date / Time: 2/14/2025 8:45:01 AM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWA-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.95 ft** **Total Depth: 27.95 ft** **Initial Depth to Water: 12.67 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 22.95 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:
Clear, 40 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/14/2025 8:45 AM	00:00	6.38 pH	16.20 °C	414.61 µS/cm	4.04 mg/L	17.10 NTU	-119.5 mV	12.67 ft	200.00 ml/min
2/14/2025 8:50 AM	05:00	5.89 pH	16.57 °C	371.75 µS/cm	2.24 mg/L	8.02 NTU	226.6 mV	12.71 ft	200.00 ml/min
2/14/2025 8:55 AM	10:00	5.81 pH	15.46 °C	362.01 µS/cm	1.90 mg/L	5.86 NTU	287.1 mV	12.72 ft	200.00 ml/min
2/14/2025 9:00 AM	15:00	5.79 pH	15.44 °C	359.90 µS/cm	1.84 mg/L	3.45 NTU	320.0 mV	12.73 ft	200.00 ml/min
2/14/2025 9:05 AM	20:00	5.79 pH	15.44 °C	358.07 µS/cm	1.74 mg/L	2.21 NTU	279.2 mV	12.73 ft	200.00 ml/min
2/14/2025 9:10 AM	25:00	5.76 pH	15.45 °C	356.28 µS/cm	1.65 mg/L	1.27 NTU	291.6 mV	12.73 ft	200.00 ml/min
2/14/2025 9:15 AM	30:00	5.75 pH	15.57 °C	354.55 µS/cm	1.64 mg/L	1.13 NTU	371.8 mV	12.73 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-2	Grab.
HAM-UGRD-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 2/12/2025 1:55:33 PM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWA-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 34.51 ft** **Total Depth: 44.51 ft** **Initial Depth to Water: 13.25 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 39.51 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.03 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

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 1:55 PM	00:00	6.87 pH	15.36 °C	464.29 µS/cm	0.95 mg/L	42.60 NTU	-88.5 mV	13.25 ft	200.00 ml/min
2/12/2025 2:00 PM	05:00	7.13 pH	15.62 °C	461.05 µS/cm	0.57 mg/L	30.40 NTU	58.6 mV	13.28 ft	200.00 ml/min
2/12/2025 2:05 PM	10:00	7.23 pH	15.54 °C	464.54 µS/cm	0.28 mg/L	14.10 NTU	107.6 mV	13.28 ft	200.00 ml/min
2/12/2025 2:10 PM	15:00	7.29 pH	15.67 °C	464.64 µS/cm	0.21 mg/L	9.83 NTU	36.0 mV	13.28 ft	200.00 ml/min
2/12/2025 2:15 PM	20:00	7.32 pH	15.67 °C	463.65 µS/cm	0.19 mg/L	4.20 NTU	76.3 mV	13.28 ft	200.00 ml/min
2/12/2025 2:20 PM	25:00	7.35 pH	15.80 °C	463.95 µS/cm	0.18 mg/L	3.26 NTU	7.5 mV	13.28 ft	200.00 ml/min
2/12/2025 2:25 PM	30:00	7.37 pH	15.74 °C	461.15 µS/cm	0.18 mg/L	2.88 NTU	-5.1 mV	13.28 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-3	Grab.

Low-Flow Test Report:

Test Date / Time: 2/14/2025 10:31:58 AM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWA-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 34.51 ft** **Total Depth: 44.51 ft** **Initial Depth to Water: 12.02 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 39.51 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Two Bottles: RADs

Weather Conditions:
Clear, 40 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/14/2025 10:31 AM	00:00	7.14 pH	15.18 °C	452.21 µS/cm	1.61 mg/L	4.85 NTU	-289.2 mV	12.02 ft	200.00 ml/min
2/14/2025 10:36 AM	05:00	7.30 pH	15.17 °C	454.20 µS/cm	0.70 mg/L	3.78 NTU	-20.6 mV	12.03 ft	200.00 ml/min
2/14/2025 10:41 AM	10:00	7.36 pH	15.58 °C	453.24 µS/cm	0.49 mg/L	2.02 NTU	79.8 mV	12.04 ft	200.00 ml/min
2/14/2025 10:46 AM	15:00	7.40 pH	15.72 °C	451.95 µS/cm	0.39 mg/L	1.71 NTU	117.4 mV	12.04 ft	200.00 ml/min
2/14/2025 10:51 AM	20:00	7.42 pH	16.03 °C	451.50 µS/cm	0.32 mg/L	1.46 NTU	136.1 mV	12.04 ft	200.00 ml/min
2/14/2025 10:56 AM	25:00	7.43 pH	15.98 °C	449.86 µS/cm	0.28 mg/L	1.13 NTU	147.8 mV	12.04 ft	200.00 ml/min
2/14/2025 11:01 AM	30:00	7.45 pH	15.94 °C	449.67 µS/cm	0.30 mg/L	0.74 NTU	140.5 mV	12.04 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-3	Grab.

Low-Flow Test Report:

Test Date / Time: 2/12/2025 2:15:18 PM
Project: GP-Plant Hammond
Operator Name: T. Kessler

Location Name: HGWA-43D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 51.25 ft** **Total Depth: 61.25 ft** **Initial Depth to Water: 16.75 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 56.25 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 3.05 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:
Rainy, 41 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 2:15 PM	00:00	7.52 pH	15.50 °C	517.39 µS/cm	1.34 mg/L	0.46 NTU	-12.2 mV	18.15 ft	200.00 ml/min
2/12/2025 2:20 PM	05:00	7.53 pH	15.97 °C	514.97 µS/cm	1.00 mg/L	1.66 NTU	-40.3 mV	18.80 ft	200.00 ml/min
2/12/2025 2:25 PM	10:00	7.52 pH	16.04 °C	512.21 µS/cm	0.83 mg/L	0.70 NTU	-71.4 mV	19.20 ft	200.00 ml/min
2/12/2025 2:30 PM	15:00	7.51 pH	16.05 °C	508.21 µS/cm	0.92 mg/L	0.54 NTU	-78.6 mV	19.50 ft	200.00 ml/min
2/12/2025 2:35 PM	20:00	7.50 pH	15.97 °C	502.71 µS/cm	0.76 mg/L	1.04 NTU	-82.5 mV	19.65 ft	200.00 ml/min
2/12/2025 2:40 PM	25:00	7.50 pH	16.06 °C	498.37 µS/cm	0.68 mg/L	0.69 NTU	-85.8 mV	19.70 ft	200.00 ml/min
2/12/2025 2:45 PM	30:00	7.50 pH	16.11 °C	494.68 µS/cm	0.77 mg/L	0.59 NTU	-88.4 mV	19.80 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-43D	Grab.

Low-Flow Test Report:

Test Date / Time: 2/12/2025 1:38:08 PM
Project: GP- Plant Hammond
Operator Name: A. Tomlinson

Location Name: HGWA-44D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 103.5 ft** **Total Depth: 113.5 ft** **Initial Depth to Water: 18.09 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 108.5 ft** **Estimated Total Volume Pumped: 25 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 2.95 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850735**

Test Notes:
Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:
Cloudy, rain, 46 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 1:38 PM	00:00	8.36 pH	15.11 °C	618.96 µS/cm	1.18 mg/L	44.90 NTU	-120.6 mV	18.32 ft	200.00 ml/min
2/12/2025 1:43 PM	05:00	8.41 pH	15.29 °C	614.67 µS/cm	0.52 mg/L	17.80 NTU	-188.7 mV	18.74 ft	200.00 ml/min
2/12/2025 1:48 PM	10:00	8.42 pH	15.34 °C	609.29 µS/cm	0.38 mg/L	14.50 NTU	-170.8 mV	19.19 ft	200.00 ml/min
2/12/2025 1:53 PM	15:00	8.43 pH	15.38 °C	606.41 µS/cm	0.33 mg/L	12.00 NTU	-174.8 mV	19.53 ft	200.00 ml/min
2/12/2025 1:58 PM	20:00	8.45 pH	15.30 °C	602.57 µS/cm	0.30 mg/L	10.30 NTU	-180.4 mV	19.82 ft	200.00 ml/min
2/12/2025 2:03 PM	25:00	8.45 pH	15.25 °C	602.49 µS/cm	0.27 mg/L	14.70 NTU	-185.4 mV	20.04 ft	200.00 ml/min
2/12/2025 2:08 PM	30:00	8.46 pH	15.08 °C	603.77 µS/cm	0.25 mg/L	15.60 NTU	-189.2 mV	20.20 ft	200.00 ml/min
2/12/2025 2:13 PM	35:00	8.46 pH	15.12 °C	609.66 µS/cm	0.23 mg/L	17.20 NTU	-192.3 mV	20.35 ft	200.00 ml/min
2/12/2025 2:18 PM	40:00	8.47 pH	15.17 °C	607.40 µS/cm	0.22 mg/L	16.10 NTU	-195.4 mV	20.48 ft	200.00 ml/min
2/12/2025 2:23 PM	45:00	8.47 pH	15.16 °C	610.34 µS/cm	0.21 mg/L	13.60 NTU	-198.4 mV	20.60 ft	200.00 ml/min
2/12/2025 2:28 PM	50:00	8.47 pH	15.08 °C	614.50 µS/cm	0.19 mg/L	14.10 NTU	-199.9 mV	20.68 ft	200.00 ml/min
2/12/2025 2:33 PM	55:00	8.49 pH	15.07 °C	609.60 µS/cm	0.18 mg/L	13.00 NTU	-201.7 mV	20.74 ft	200.00 ml/min
2/12/2025 2:38 PM	01:00:00	8.48 pH	15.06 °C	608.21 µS/cm	0.18 mg/L	11.50 NTU	-202.4 mV	20.82 ft	200.00 ml/min

2/12/2025 2:43 PM	01:05:00	8.48 pH	15.12 °C	605.71 µS/cm	0.17 mg/L	13.10 NTU	-205.7 mV	20.94 ft	200.00 ml/min
2/12/2025 2:48 PM	01:10:00	8.48 pH	15.28 °C	611.77 µS/cm	0.15 mg/L	11.70 NTU	-207.6 mV	20.94 ft	200.00 ml/min
2/12/2025 2:53 PM	01:15:00	8.47 pH	15.17 °C	613.52 µS/cm	0.14 mg/L	14.60 NTU	-230.5 mV	20.94 ft	200.00 ml/min
2/12/2025 2:58 PM	01:20:00	8.46 pH	15.21 °C	613.83 µS/cm	0.13 mg/L	23.90 NTU	-209.7 mV	20.94 ft	200.00 ml/min
2/12/2025 3:03 PM	01:25:00	8.47 pH	15.16 °C	610.38 µS/cm	0.12 mg/L	10.50 NTU	-210.3 mV	20.98 ft	200.00 ml/min
2/12/2025 3:08 PM	01:30:00	8.47 pH	15.03 °C	609.37 µS/cm	0.12 mg/L	11.00 NTU	-212.1 mV	20.98 ft	200.00 ml/min
2/12/2025 3:13 PM	01:35:00	8.47 pH	14.96 °C	612.20 µS/cm	0.12 mg/L	9.80 NTU	-211.7 mV	21.04 ft	200.00 ml/min
2/12/2025 3:18 PM	01:40:00	8.48 pH	15.12 °C	612.90 µS/cm	0.11 mg/L	9.07 NTU	-214.9 mV	21.04 ft	200.00 ml/min
2/12/2025 3:23 PM	01:45:00	8.48 pH	15.14 °C	611.10 µS/cm	0.10 mg/L	7.94 NTU	-213.9 mV	21.04 ft	200.00 ml/min
2/12/2025 3:28 PM	01:50:00	8.48 pH	15.12 °C	612.07 µS/cm	0.10 mg/L	8.16 NTU	-214.6 mV	21.04 ft	200.00 ml/min
2/12/2025 3:33 PM	01:55:00	8.48 pH	15.21 °C	610.21 µS/cm	0.10 mg/L	6.88 NTU	-215.8 mV	21.04 ft	200.00 ml/min
2/12/2025 3:38 PM	02:00:00	8.49 pH	15.08 °C	608.44 µS/cm	0.09 mg/L	4.61 NTU	-216.3 mV	21.04 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-44D	Grab.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/13/2025 12:06:28 PM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWA-45D **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 52.87 ft** **Total Depth: 62.87 ft** **Initial Depth to Water: 4.44 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 57.87 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.75 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

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	
2/13/2025 12:06 PM	00:00	7.06 pH	14.96 °C	492.74 µS/cm	1.56 mg/L	6.44 NTU	-97.7 mV	4.44 ft	200.00 ml/min
2/13/2025 12:11 PM	05:00	7.38 pH	15.46 °C	479.78 µS/cm	1.28 mg/L	2.17 NTU	-78.2 mV	4.91 ft	200.00 ml/min
2/13/2025 12:16 PM	10:00	7.52 pH	15.44 °C	476.68 µS/cm	1.23 mg/L	1.68 NTU	-69.7 mV	5.06 ft	200.00 ml/min
2/13/2025 12:21 PM	15:00	7.57 pH	15.59 °C	471.55 µS/cm	1.12 mg/L	0.54 NTU	-83.7 mV	5.10 ft	200.00 ml/min
2/13/2025 12:26 PM	20:00	7.60 pH	15.72 °C	466.82 µS/cm	1.19 mg/L	0.39 NTU	-96.3 mV	5.14 ft	200.00 ml/min
2/13/2025 12:31 PM	25:00	7.62 pH	15.67 °C	465.06 µS/cm	1.14 mg/L	0.27 NTU	-98.7 mV	5.17 ft	200.00 ml/min
2/13/2025 12:36 PM	30:00	7.63 pH	15.79 °C	462.06 µS/cm	1.14 mg/L	0.19 NTU	-98.2 mV	5.19 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-45D	Grab.

Low-Flow Test Report:

Test Date / Time: 2/13/2025 2:01:56 PM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWA-122 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 17.76 ft** **Total Depth: 27.76 ft** **Initial Depth to Water: 5.41 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 22.76 ft** **Estimated Total Volume Pumped: 12 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:
Clear, 50 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/13/2025 2:01 PM	00:00	6.91 pH	16.44 °C	281.09 µS/cm	4.39 mg/L	5.70 NTU	94.3 mV	5.41 ft	200.00 ml/min
2/13/2025 2:06 PM	05:00	6.90 pH	16.56 °C	300.88 µS/cm	3.93 mg/L	3.93 NTU	228.1 mV	5.41 ft	200.00 ml/min
2/13/2025 2:11 PM	10:00	6.93 pH	16.52 °C	307.43 µS/cm	3.66 mg/L	1.57 NTU	326.5 mV	5.41 ft	200.00 ml/min
2/13/2025 2:16 PM	15:00	6.92 pH	16.68 °C	314.49 µS/cm	3.46 mg/L	1.41 NTU	351.9 mV	5.41 ft	200.00 ml/min
2/13/2025 2:21 PM	20:00	6.93 pH	16.74 °C	320.35 µS/cm	3.30 mg/L	1.65 NTU	377.1 mV	5.41 ft	200.00 ml/min
2/13/2025 2:26 PM	25:00	6.94 pH	16.81 °C	325.22 µS/cm	3.14 mg/L	2.13 NTU	398.0 mV	5.41 ft	200.00 ml/min
2/13/2025 2:31 PM	30:00	6.98 pH	16.74 °C	332.36 µS/cm	3.55 mg/L	1.98 NTU	335.9 mV	5.41 ft	200.00 ml/min
2/13/2025 2:36 PM	35:00	6.96 pH	17.10 °C	335.38 µS/cm	2.86 mg/L	1.55 NTU	412.5 mV	5.41 ft	200.00 ml/min
2/13/2025 2:41 PM	40:00	6.96 pH	17.23 °C	336.66 µS/cm	2.78 mg/L	0.83 NTU	418.5 mV	5.41 ft	200.00 ml/min
2/13/2025 2:46 PM	45:00	6.96 pH	17.20 °C	339.10 µS/cm	2.69 mg/L	0.85 NTU	357.0 mV	5.41 ft	200.00 ml/min
2/13/2025 2:51 PM	50:00	6.98 pH	17.27 °C	339.67 µS/cm	2.65 mg/L	0.97 NTU	446.5 mV	5.41 ft	200.00 ml/min
2/13/2025 2:56 PM	55:00	6.99 pH	17.21 °C	342.14 µS/cm	2.60 mg/L	0.62 NTU	387.1 mV	5.41 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWA-122	Grab.

Created using VuSitu from In-Situ, Inc.

Low-Flow Test Report:

Test Date / Time: 2/15/2025 3:06:29 PM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWC-120 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57 ft** **Total Depth: 67 ft** **Initial Depth to Water: 33.38 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 62 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**

Test Notes:
Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:
Overcast, 42 degrees F.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/15/2025 3:06 PM	00:00	7.50 pH	14.95 °C	587.62 µS/cm	9.41 mg/L	0.42 NTU	-255.7 mV	33.38 ft	200.00 ml/min
2/15/2025 3:11 PM	05:00	7.43 pH	15.17 °C	795.80 µS/cm	3.58 mg/L	0.73 NTU	-122.3 mV	33.38 ft	200.00 ml/min
2/15/2025 3:16 PM	10:00	7.09 pH	16.93 °C	803.92 µS/cm	0.61 mg/L	1.31 NTU	131.2 mV	33.38 ft	200.00 ml/min
2/15/2025 3:21 PM	15:00	7.05 pH	16.93 °C	798.34 µS/cm	0.39 mg/L	1.76 NTU	267.7 mV	33.43 ft	200.00 ml/min
2/15/2025 3:26 PM	20:00	7.06 pH	16.99 °C	798.97 µS/cm	0.42 mg/L	1.27 NTU	322.8 mV	33.43 ft	200.00 ml/min
2/15/2025 3:31 PM	25:00	7.06 pH	17.05 °C	798.49 µS/cm	0.41 mg/L	1.16 NTU	353.9 mV	33.43 ft	200.00 ml/min
2/15/2025 3:36 PM	30:00	7.06 pH	16.97 °C	798.44 µS/cm	0.53 mg/L	1.04 NTU	373.3 mV	33.43 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-120	Grab.

Low-Flow Test Report:

Test Date / Time: 2/15/2025 8:44:52 AM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWC-121A **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 27.98 ft** **Total Depth: 37.98 ft** **Initial Depth to Water: 12.09 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 32.98 ft** **Estimated Total Volume Pumped: 7 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.11 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

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	
2/15/2025 8:44 AM	00:00	6.25 pH	16.31 °C	642.01 µS/cm	0.47 mg/L	12.80 NTU	-221.8 mV	12.09 ft	200.00 ml/min
2/15/2025 8:49 AM	05:00	7.11 pH	16.30 °C	669.75 µS/cm	0.28 mg/L	10.15 NTU	183.7 mV	12.20 ft	200.00 ml/min
2/15/2025 8:54 AM	10:00	7.13 pH	16.36 °C	680.46 µS/cm	0.30 mg/L	6.68 NTU	247.7 mV	12.20 ft	200.00 ml/min
2/15/2025 8:59 AM	15:00	7.13 pH	16.50 °C	686.25 µS/cm	0.29 mg/L	4.16 NTU	267.9 mV	12.20 ft	200.00 ml/min
2/15/2025 9:04 AM	20:00	7.13 pH	16.41 °C	682.94 µS/cm	0.28 mg/L	3.88 NTU	357.2 mV	12.20 ft	200.00 ml/min
2/15/2025 9:09 AM	25:00	7.12 pH	16.30 °C	685.18 µS/cm	0.25 mg/L	2.93 NTU	366.3 mV	12.20 ft	200.00 ml/min
2/15/2025 9:14 AM	30:00	7.12 pH	16.51 °C	687.31 µS/cm	0.25 mg/L	2.52 NTU	371.6 mV	12.20 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-121A	Grab.
HAM-AP3-FD-01	Grab.

Low-Flow Test Report:

Test Date / Time: 2/14/2025 3:53:31 PM
Project: GP-Plant Hammond
Operator Name: T. Kessler

Location Name: HGWC-124 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 25.12 ft** **Total Depth: 35.12 ft** **Initial Depth to Water: 8.55 ft**	**Pump Type: Bladder** **Tubing Type: Poly** **Pump Intake From TOC: 30.12 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.45 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 989630**

Test Notes:
Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:
Sunny, 50 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/14/2025 3:53 PM	00:00	7.44 pH	16.86 °C	514.91 µS/cm	0.63 mg/L	3.58 NTU	-17.3 mV	9.00 ft	200.00 ml/min
2/14/2025 3:58 PM	05:00	7.38 pH	16.86 °C	515.40 µS/cm	0.42 mg/L	4.00 NTU	15.8 mV	9.00 ft	200.00 ml/min
2/14/2025 4:03 PM	10:00	7.37 pH	16.92 °C	517.52 µS/cm	0.35 mg/L	7.11 NTU	23.5 mV	9.00 ft	200.00 ml/min
2/14/2025 4:08 PM	15:00	7.36 pH	16.95 °C	516.05 µS/cm	0.36 mg/L	8.20 NTU	28.3 mV	9.00 ft	200.00 ml/min
2/14/2025 4:13 PM	20:00	7.34 pH	16.95 °C	511.91 µS/cm	0.42 mg/L	6.89 NTU	32.1 mV	9.00 ft	200.00 ml/min
2/14/2025 4:18 PM	25:00	7.34 pH	17.00 °C	509.44 µS/cm	0.48 mg/L	5.64 NTU	33.8 mV	9.00 ft	200.00 ml/min
2/14/2025 4:23 PM	30:00	7.33 pH	16.82 °C	506.47 µS/cm	0.54 mg/L	5.71 NTU	35.5 mV	9.00 ft	200.00 ml/min
2/14/2025 4:28 PM	35:00	7.31 pH	16.78 °C	504.09 µS/cm	0.64 mg/L	4.45 NTU	37.1 mV	9.00 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-124	Grab.

Low-Flow Test Report:

Test Date / Time: 2/15/2025 1:21:05 PM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWC-125 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 53.19 ft** **Total Depth: 63.19 ft** **Initial Depth to Water: 36.04 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 58.19 ft** **Estimated Total Volume Pumped: 8 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.02 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:
Overcast, 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 1:21 PM	00:00	6.62 pH	16.61 °C	777.55 µS/cm	2.95 mg/L	1.29 NTU	-225.8 mV	36.04 ft	200.00 ml/min
2/15/2025 1:26 PM	05:00	6.87 pH	16.66 °C	820.58 µS/cm	2.27 mg/L	0.93 NTU	154.6 mV	36.05 ft	200.00 ml/min
2/15/2025 1:31 PM	10:00	6.87 pH	16.78 °C	819.12 µS/cm	1.84 mg/L	0.47 NTU	230.2 mV	36.05 ft	200.00 ml/min
2/15/2025 1:36 PM	15:00	6.88 pH	17.13 °C	818.91 µS/cm	1.69 mg/L	0.42 NTU	288.8 mV	36.05 ft	200.00 ml/min
2/15/2025 1:41 PM	20:00	6.89 pH	17.14 °C	812.80 µS/cm	1.61 mg/L	0.35 NTU	335.7 mV	36.05 ft	200.00 ml/min
2/15/2025 1:46 PM	25:00	6.89 pH	17.21 °C	815.88 µS/cm	1.51 mg/L	0.38 NTU	367.1 mV	36.06 ft	200.00 ml/min
2/15/2025 1:51 PM	30:00	6.89 pH	17.19 °C	815.31 µS/cm	1.52 mg/L	0.24 NTU	385.4 mV	36.06 ft	200.00 ml/min
2/15/2025 1:56 PM	35:00	6.88 pH	17.24 °C	815.46 µS/cm	1.41 mg/L	0.21 NTU	399.5 mV	36.06 ft	200.00 ml/min

Samples

Sample ID:	Description:
HAM-HGWC-125	Grab.

Low-Flow Test Report:

Test Date / Time: 2/15/2025 11:17:07 AM
Project: GP-Plant Hammond
Operator Name: Z. Webb

Location Name: HGWC-126 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 58.52 ft** **Total Depth: 68.52 ft** **Initial Depth to Water: 39.67 ft**	**Pump Type: Bladder** **Tubing Type: Polyethylene** **Pump Intake From TOC: 63.52 ft** **Estimated Total Volume Pumped: 9 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 1.62 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883530**

Test Notes:
Eight bottles: Full App. III & IV and Major Ions.

Weather Conditions:
Overcast, 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 11:17 AM	00:00	7.21 pH	15.90 °C	865.39 µS/cm	2.33 mg/L	4.61 NTU	-342.5 mV	39.67 ft	200.00 ml/min
2/15/2025 11:22 AM	05:00	7.17 pH	16.22 °C	864.44 µS/cm	1.60 mg/L	3.34 NTU	-198.7 mV	40.03 ft	200.00 ml/min
2/15/2025 11:27 AM	10:00	7.15 pH	15.95 °C	877.22 µS/cm	1.28 mg/L	2.69 NTU	-122.1 mV	40.55 ft	200.00 ml/min
2/15/2025 11:32 AM	15:00	7.13 pH	16.42 °C	874.23 µS/cm	0.84 mg/L	2.62 NTU	-125.6 mV	40.76 ft	200.00 ml/min
2/15/2025 11:37 AM	20:00	7.13 pH	16.91 °C	868.84 µS/cm	0.62 mg/L	2.16 NTU	-102.2 mV	40.91 ft	200.00 ml/min
2/15/2025 11:42 AM	25:00	7.13 pH	16.87 °C	858.81 µS/cm	0.57 mg/L	1.89 NTU	-28.5 mV	41.03 ft	200.00 ml/min
2/15/2025 11:47 AM	30:00	7.13 pH	16.83 °C	860.49 µS/cm	0.55 mg/L	1.33 NTU	6.1 mV	41.15 ft	200.00 ml/min
2/15/2025 11:52 AM	35:00	7.12 pH	16.97 °C	867.34 µS/cm	0.56 mg/L	0.95 NTU	31.6 mV	41.23 ft	200.00 ml/min
2/15/2025 11:57 AM	40:00	7.13 pH	17.01 °C	861.90 µS/cm	0.55 mg/L	0.87 NTU	60.4 mV	41.29 ft	200.00 ml/min

Samples

Sample ID:	Description:

HAM-HGWC-126	Grab.

Created using VuSitu from In-Situ, Inc.

CALIBRATION REPORTS

August 2024

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 5/5/24

Calibrated By: C. CAIN

Field Conditions: Sunny

Instrument	Manufactuer/ Model	Serial Number
~~Water Quality Meter~~ Turbidity	LaMotte 2020wi	L123-2623
~~Turbidity Meter~~ Water quality	Aquatrall	883530

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005893	11/2024	In-situ
pH (SU)	4.00	24065593	12/2024	↓
pH (SU)	7.00	24084517	12/2024	↓
pH (SU)	10.00	24100283	12/2024	↓
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006903	12/2024	In-Situ

Calibration					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	32.0	± 10% of standard	EPA 2023
pH (SU)	4.00	4.0	32.23	± 0.1	GWMP
pH (SU)	7.00	7.0	31.20	± 0.1	GWMP
pH (SU)	10.00	10.0	30.40	± 0.1	GWMP
D.O. (%)	N/A	—	—	± 10%	NA
ORP (mV)	228.0	228.0	29.99	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0.05	± 10% of standard	EPA 2023
	1	0.97		
	10	10.15		

~~Calibration Check~~					
~~Time Start~~		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Site Name: Bland Hammond

Field Instrumentation Calibration Form

Date: 8-5-24

Calibrated By: Zaria W. on behalf of FJK.

Field Conditions: Clear 95°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	884189
Turbidity Meter	La Motte 2020we	~~FS11-4111~~ ZW 3123

Calibration Standard Information				
Parameter	Standard	ZW Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	~~449024005593~~	12/2024	AIR
pH (SU)	4.00	24005593	12/2024	AIR
pH (SU)	7.00	24004517	12/2024	AIR
pH (SU)	10.00	24000085	12/2024	AIR
D.O. (%)	N/A	—	—	AIR
ORP (mV)	228.0	24006903	12/2024	AIR

Calibration					
Time Start 1510		Time Finish 1531			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	29.53	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.50	± 0.1	GWMP
pH (SU)	7.00	7.00	26.79	± 0.1	GWMP
pH (SU)	10.00	10.00	26.18	± 0.1	GWMP
D.O. (%)	N/A	100.2	24.32	± 10%	NA
ORP (mV)	228.0	228.0	25.79	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1.02		
	10	10.2		
	—	—		

Calibration Check					
Time Start		Time Finish			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490			± 10% of standard	EPA 2023
pH (SU)	4.00			± 0.1	GWMP
pH (SU)	7.00			± 0.1	GWMP
pH (SU)	10.00			± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)			± 10% of standard	EPA 2023

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 8-5-24

Calibrated By: Zach Wells

Field Conditions: Clear · 95°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	1088297
Turbidity Meter	La Motte, 2020we	1511-4111

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	12/2024	AIR
pH (SU)	4.00	24005573	12/2024	AIR
pH (SU)	7.00	24004517	12/2024	AIR
pH (SU)	10.00	24000085	12/2024	AIR
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24006903	12/2024	AIR

Calibration					
Time Start 1433		Time Finish 1453			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	26.91	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	26.88	± 0.1	GWMP
pH (SU)	7.00	7.00	26.36	± 0.1	GWMP
pH (SU)	10.00	10.00	26.03	± 0.1	GWMP
D.O. (%)	N/A	100.7	24.81	± 10%	NA
ORP (mV)	228.0	228.0	228.0	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	—	—		

Calibration Check					
Time Start —		Time Finish —			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	—	—	± 10% of standard	EPA 2023
pH (SU)	4.00	—	—	± 0.1	GWMP
pH (SU)	7.00	—	—	± 0.1	GWMP
pH (SU)	10.00	—	—	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	—	—	± 10% of standard	EPA 2023
	—	—		
	—	—		
	—	—		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 8-6-24

Calibrated By: Zain W.

Field Conditions: Sunny, 75°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	1080297
Turbidity Meter	LaMotte 2020we	1511-4111

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	12/2024	AIR
pH (SU)	4.00	24005593	12/2024	AIR
pH (SU)	7.00	24004597	12/2024	AIR
pH (SU)	10.00	24000085	12/2024	AIR
D.O. (%)	N/A	—	—	AIR
ORP (mV)	228.0	24006903	12/2024	AIR

Calibration					
Time Start 0715		Time Finish 0737			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	27.05	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	27.23	± 0.1	GWMP
pH (SU)	7.00	7.00	27.37	± 0.1	GWMP
pH (SU)	10.00	10.00	27.30	± 0.1	GWMP
D.O. (%)	N/A	100%	24.13	± 10%	NA
ORP (mV)	228.0	228.0	27.03	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	—	—		

Calibration Check					
Time Start 1324		Time Finish 1343			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	29.58	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	29.58	± 0.1	GWMP
pH (SU)	7.00	7.00	27.59	± 0.1	GWMP
pH (SU)	10.00	10.00	26.42	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	—			

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 8-7-24

Calibrated By: Zain W.

Field Conditions: Sunny, 75°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	1A102997
Turbidity Meter	LaMotte 2020we	1511-4111

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24005593	12/2024	AIR
pH (SU)	4.00	24005593	12/2024	AIR
pH (SU)	7.00	24004517	12/2024	AIR
pH (SU)	10.00	24000065	12/2024	AIR
D.O. (%)	N/A	—	~~12~~ 2.	AIR
ORP (mV)	228.0	24006903	12/2024	AIR

Calibration					
Time Start 0750		Time Finish 0812			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	26.31	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	26.29	± 0.1	GWMP
pH (SU)	7.00	7.00	26.18	± 0.1	GWMP
pH (SU)	10.00	10.00	26.09	± 0.1	GWMP
D.O. (%)	N/A	100%	23.68	± 10%	NA
ORP (mV)	228.0	228.0	25.80	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	—	—		

Calibration Check					
Time Start 1345		Time Finish 1356			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	34.24	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	34.12	± 0.1	GWMP
pH (SU)	7.00	7.00	31.35	± 0.1	GWMP
pH (SU)	10.00	10.00	30.23	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	—	—		

Notes:

February 2025

Site Name: GP-Plant Hammond **Field Instrumentation Calibration Form** Date: 2/12/2025

Calibrated By: A. Tomlinson Field Conditions: 48° F, rain

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aqua TROLL	850735
Turbidity Meter	LaMotte 2020e	1571-309

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	240 10943	5/2025	YSI
pH (SU)	4.00	240 10943	5/2025	
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	240 11792	6/2025	

Calibration					
Time Start 0800		Time Finish 0820			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4,490.0	10.36	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	10.46	± 0.1	GWMP
pH (SU)	7.00	7.00	10.69	± 0.1	GWMP
pH (SU)	10.00	10.00	10.59	± 0.1	GWMP
D.O. (%)	N/A	100.1%	11.20	± 10%	NA
ORP (mV)	228.0	228.0	10.57	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1.00		
	10	10.0		

Calibration Check					
Time Start 1250		Time Finish 1300			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4,490.0	14.10	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	14.20	± 0.1	GWMP
pH (SU)	7.00	7.00	13.86	± 0.1	GWMP
pH (SU)	10.00	10.00	13.49	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0.00	± 10% of standard	EPA 2023
	1	1.00		
	10	10.00		

Notes:

21/12/2025

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2/12/2025

Calibrated By: T. Kesisle

Field Conditions: Rainy, 39°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	ins.tru	989630
Turbidity Meter	Lamotte	T1351-2402

Calibration Standard Information

Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24010943	05/2025	ins.tru
pH (SU)	4.00	24010943	05/2025	ins.tru
pH (SU)	7.00	24005387	06/2025	ins.tru
pH (SU)	10.00	24010486	06/2025	ins.tru
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24011782	06/2025	ins.tru

Calibration

Time Start 0753 Time Finish 0816

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	10.01	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	10.03	± 0.1	GWMP
pH (SU)	7.00	7.00	10.03	± 0.1	GWMP
pH (SU)	10.00	10.00	10.65	± 0.1	GWMP
D.O. (%)	N/A	100	11.74	± 10%	NA
ORP (mV)	228.0	228	10.82	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1.03		
	10	9.84		
	—	—		

Calibration Check

Time Start 1200 Time Finish 1215

Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4575.2	15.85	± 10% of standard	EPA 2023
pH (SU)	4.00	4.04	15.85	± 0.1	GWMP
pH (SU)	7.00	7.04	15.16	± 0.1	GWMP
pH (SU)	10.00	9.95	15.35	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1.05		
	10	9.95		
	—	—		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2-12-25

Calibrated By: Zain W.

Field Conditions: Rain, 45°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 600	883530
Turbidity Meter	LaMotte, 2020e	4121-2623

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24010943	05/2025	AIR
pH (SU)	4.00	24010943	05/2025	AIR
pH (SU)	7.00	24008587	06/2025	AIR
pH (SU)	10.00	24004996	06/2025	AIR
D.O. (%)	N/A	–	–	AIR
ORP (mV)	228.0	24011792	06/2025	AIR

Calibration					
Time Start 0750		**Time Finish** 0815			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	10.83	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	10.85	± 0.1	GWMP
pH (SU)	7.00	7.00	11.74	± 0.1	GWMP
pH (SU)	10.00	10.00	12.07	± 0.1	GWMP
D.O. (%)	N/A	100.2	12.75	± 10%	NA
ORP (mV)	228.0	228.0	12.25	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	–	–		

Calibration Check					
Time Start 1500		**Time Finish** 1527			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	15.98	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	16.43	± 0.1	GWMP
pH (SU)	7.00	7.00	16.52	± 0.1	GWMP
pH (SU)	10.00	10.00	16.56	± 0.1	GWMP

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	–	–		

Notes: Re calibrated ORP during midday

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2-13-25

Calibrated By: Zain W

Field Conditions: Cloudy, 45°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	883530
Turbidity Meter	LaMotte 2020t	4121-2623

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24010943	05/2025	AIR
pH (SU)	4.00	24010943	05/2025	AIR
pH (SU)	7.00	24008587	06/2025	AIR
pH (SU)	10.00	24004996	06/2025	AIR
D.O. (%)	N/A	—	—	AIR
ORP (mV)	228.0	24011792	06/2025	AIR

Calibration					
Time Start 0709		**Time Finish** 0738			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	12.35	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	13.23	± 0.1	GWMP
pH (SU)	7.00	7.00	14.50	± 0.1	GWMP
pH (SU)	10.00	10.00	15.19	± 0.1	GWMP
D.O. (%)	N/A	100%	16.51	± 10%	NA
ORP (mV)	228.0	228.0	15.40	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	—	—		

Calibration Check					
Time Start 1308		**Time Finish** 1325			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	14.67	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	15.18	± 0.1	GWMP
pH (SU)	7.00	7.00	15.49	± 0.1	GWMP
pH (SU)	10.00	10.00	15.54	± 0.1	GWMP

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	—	—		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 7/14/2025

Calibrated By: T. Kressler

Field Conditions: clear, 78°

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Insitu	989630
Turbidity Meter	Lamotte	4139-2673

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24010943	5/2025	Insitu
pH (SU)	4.00	24010943	5/2025	Insitu
pH (SU)	7.00	24005585	6/2025	Insitu
pH (SU)	10.00	24006436	6/2025	Insitu
D.O. (%)	N/A	—	—	—
ORP (mV)	228.0	24011792	06/2025	Insitu

Calibration					
Time Start 0730		Time Finish 0820			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	3.56	± 10% of standard	EPA 2023
pH (SU)	4.00	4.0	3.67	± 0.1	GWMP
pH (SU)	7.00	7.0	3.71	± 0.1	GWMP
pH (SU)	10.00	10.0	5.36	± 0.1	GWMP
D.O. (%)	N/A	100	5.96	± 10%	NA
ORP (mV)	228.0	228	5.77	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1.01		
	10	10.00		
	—	—		

Calibration Check					
Time Start 1537		Time Finish 1535			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4700	20.05	± 10% of standard	EPA 2023
pH (SU)	4.00	4.07	20.05	± 0.1	GWMP
pH (SU)	7.00	6.97	16.79	± 0.1	GWMP
pH (SU)	10.00	9.97	17.23	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1.02		
	10	9.93		

Notes:

Scanned with CamScanner

Field Instrumentation Calibration Form

Site Name: Plant Hammond

Date: 2-14-25

Calibrated By: Zain W.

Field Conditions: Clear, 45°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	883530
Turbidity Meter	LaMotte 2020e	4121-2023

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	24010945	05/2025	AIR
pH (SU)	4.00	24010945	05/2025	AIR
pH (SU)	7.00	24009587	06/2025	AIR
pH (SU)	10.00	24004996	06/2025	AIR
D.O. (%)	N/A	—	—	AIR
ORP (mV)	228.0	24011722	06/2025	AIR

Calibration					
Time Start 0709		Time Finish 0759			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	7.23	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	7.52	± 0.1	GWMP
pH (SU)	7.00	7.00	7.58	± 0.1	GWMP
pH (SU)	10.00	10.00	10.52	± 0.1	GWMP
D.O. (%)	N/A	100.7	12.52	± 10%	NA
ORP (mV)	228.0	228.0	12.22	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	—	—		

Calibration Check					
Time Start 1310		Time Finish 1330			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	4490	18.08	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	18.10	± 0.1	GWMP
pH (SU)	7.00	7.00	19.46	± 0.1	GWMP
pH (SU)	10.00	10.05	17.37	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	—	—		

Notes:

ORP probe taking a long time to stabilize; reset factory settings on ORP probe; issue persisted

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 2-15-25

Calibrated By: Zain W.

Field Conditions: Rain, 45°F

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	AquaTroll 400	883530
Turbidity Meter	LaMotte 2020e	4121-2623

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	4,490	24010943	05/2025	AIR
pH (SU)	4.00	24010943	05/2025	AIR
pH (SU)	7.00	24008589	06/2025	AIR
pH (SU)	10.00	24004996	06/2025	AIR
D.O. (%)	N/A	–	–	AIR
ORP (mV)	228.0	24011922	06/2025	AIR

Calibration					
Time Start 0715		**Time Finish** 0759			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	14.85	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	15.04	± 0.1	GWMP
pH (SU)	7.00	7.00	15.87	± 0.1	GWMP
pH (SU)	10.00	10.00	16.61	± 0.1	GWMP
D.O. (%)	N/A	100.2	17.49	± 10%	NA
ORP (mV)	228.0	228.0	17.52	± 10	EPA 2023

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	–	–		

Calibration Check					
Time Start 1249		**Time Finish** 1306			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	4,490	4490	17.47	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	18.17	± 0.1	GWMP
pH (SU)	7.00	7.00	18.66	± 0.1	GWMP
pH (SU)	10.00	10.00	19.01	± 0.1	GWMP

	Standard	**Calibration Value**	**Acceptance Criteria**	**Reference**
Turbidity (NTU)	0	0	± 10% of standard	EPA 2023
	1	1		
	10	10		
	–	–		

Notes:

ZW 2-15-25

APPENDIX C

Statistical Analysis 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 3 (AP-3)
August 2024 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 analysis of groundwater data for Georgia Power Company's Plant Hammond AP-3. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the Coal Combustion Residuals (CCR) program in 2016, and at least 8 background samples have been collected at each of the groundwater monitoring wells, except for those discussed below. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** HGWA-1, HGWA-2, HGWA-3, HGWA-43D, HGWA-44D, HGWA-45D, and HGWA-122
- **Downgradient wells:** HGWC-120, HGWC-121A, HGWC-124, HGWC-125, and HGWC-126

Upgradient wells HGWA-43D, HGWA-44D, and HGWA-45D were first sampled in September 2020 and all available data are included in construction of interwell prediction limits. As requested by Southern Company Services, upgradient wells with 2 or more

samples are incorporated into the statistical analyses. Sampling began at downgradient wells HGWC-125 and HGWC-126 in May 2020 and also have at least 8 rounds of background sampling; therefore, these wells are statistically analyzed in this report with prediction limits and confidence intervals.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting.

The 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

When no detections are present in downgradient wells for a given constituent, statistical analyses are not required. A summary of downgradient Appendix IV well/constituent pairs containing 100% non-detects follows this letter. These well/constituent pairs were included in the time series and box plots, but no formal statistics were required.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. In the case of lithium, historical reporting limits vary among the wells. Therefore, the reporting limit of 0.030 mg/L was substituted across all wells, which is the most recent reporting limit provided by the laboratory. Note that due to elevated historic reporting limits, the current reporting limit for arsenic of 0.005 mg/L was substituted across all wells in order to maintain statistical limits that are conservative from a regulatory perspective.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. 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 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 (for data sets containing <15% non-detects as described above) are 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 March 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. Those findings were submitted with the screening report.

While this was not the case during the background screening, when the most recent value is identified as an outlier, values are not flagged in the database 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 existed in the data sets and appeared on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values were observed trace values (i.e., measurements reported between the Method Detection Limit and the Practical Quantitation Limit) by the laboratory and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, only one outlier was flagged for TDS in upgradient well HGWA-112. All other values are similar to remaining measurements within a given well or neighboring wells or were reported non-detects. The outlier summary follows this report (Figure C).

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.

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 Test Evaluation

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 showed one statistically significant decreasing trend for the Appendix III parameters. However, the trend noted was relatively low in magnitude when compared to average concentrations, and the background time 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 for each Appendix III parameter using all historical upgradient well data through August 2024 (Figure D). Interwell prediction limits use all available 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 the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary. If no resample is collected, the initial exceedance is automatically confirmed. For Appendix III parameters, several prediction limit exceedances were identified. A summary table of the interwell prediction limits follows this letter. Exceedances were identified for the following well/constituent pairs:

- Boron: HGWC-120, HGWC-121A, and HGWC-125
- Calcium: HGWC-120, HGWC-121A, and HGWC-125
- Sulfate: HGWC-120, HGWC-121A, and HGWC-125
- TDS: HGWC-120, HGWC-121A, and HGWC-125

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 well data are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. When trends are present in upgradient wells it is an indication of variability in groundwater quality unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

Increasing trends:

- Boron: HGWA-2 and HGWA-44D (both upgradient)
- Calcium: HGWA-2 and HGWA-3 (both upgradient)
- Sulfate: HGWA-2 (upgradient)

Decreasing trends:

- Boron: HGWA-43D, HGWA-122 (both upgradient), HGWC-120, and HGWC-121A
- Calcium: HGWA-44D (upgradient) and HGWC-121A
- Sulfate: HGWA-43D, HGWA-122 (both upgradient), HGWC-120, HGWC-121A, and HGWC-125
- TDS: HGWC-120 and HGWC-121A

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 analyses.

Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis. More recent concentrations have increased for lithium at upgradient well HGWA-44D; therefore, previously flagged measurements were confirmed and the most recent value for lithium at upgradient well HGWA-44D was flagged during this analysis in order to maintain conservative limits from a regulatory perspective. If further studies indicate the flagged measurements represent variation in groundwater quality, the values will be re-evaluated for construction of interwell upper tolerance limits. A summary of 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 used. As mentioned above, a reporting limit of 0.005 mg/L was substituted for arsenic and a reporting limit of 0.030 mg/L was substituted for lithium. Parametric tolerance limits are used when data follow a normal or transformed-normal distribution.

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 of downgradient well data to GWPS, confidence intervals were constructed for the Appendix IV constituents in each downgradient well with detections (Figure H). Note that a GWPS is established for each Appendix IV constituent. However, since there are 100% non-detects for beryllium, cadmium, and

thallium in downgradient wells, no confidence intervals were required for these constituents.

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 and 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-3. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,





Tristan Clark
Groundwater Analyst

Andrew T. Collins
Project Manager

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Summary Tables

100% Non-Detects: Appendix IV Downgradient & Assessment

Analysis Run 10/16/2024 4:01 PM View: Appendix IV
Plant Hammond Client: Southern Company Data: Hammond AP-3

Beryllium (mg/L)
HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126

Cadmium (mg/L)
HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126

Cobalt (mg/L)
HGWC-124, HGWC-126

Mercury (mg/L)
HGWC-121A, HGWC-125, HGWC-126

Molybdenum (mg/L)
HGWC-121A, HGWC-126

Selenium (mg/L)
HGWC-125, HGWC-126

Thallium (mg/L)
HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126

Appendix III - Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/16/2024, 3:52 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**HGWC-120**	**0.55**	**n/a**	**8/7/2024**	**1.1**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-121A**	**0.55**	**n/a**	**8/6/2024**	**1.4**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-125**	**0.55**	**n/a**	**8/7/2024**	**1.5**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-120**	**138**	**n/a**	**8/7/2024**	**154**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-121A**	**138**	**n/a**	**8/6/2024**	**152**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-125**	**138**	**n/a**	**8/7/2024**	**159**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-120**	**93.9**	**n/a**	**8/7/2024**	**191**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-121A**	**93.9**	**n/a**	**8/6/2024**	**127**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-125**	**93.9**	**n/a**	**8/7/2024**	**289**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-120**	**632**	**n/a**	**8/7/2024**	**647**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-121A**	**632**	**n/a**	**8/6/2024**	**661**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-125**	**632**	**n/a**	**8/7/2024**	**695**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**

Appendix III - Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/16/2024, 3:52 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**HGWC-120**	**0.55**	**n/a**	**8/7/2024**	**1.1**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-121A**	**0.55**	**n/a**	**8/6/2024**	**1.4**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	HGWC-124	0.55	n/a	8/7/2024	0.34	No	128	5.469	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Boron (mg/L)	**HGWC-125**	**0.55**	**n/a**	**8/7/2024**	**1.5**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	HGWC-126	0.55	n/a	8/7/2024	0.021J	No	128	5.469	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-120**	**138**	**n/a**	**8/7/2024**	**154**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-121A**	**138**	**n/a**	**8/6/2024**	**152**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-124	138	n/a	8/7/2024	97.7	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-125**	**138**	**n/a**	**8/7/2024**	**159**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-126	138	n/a	8/7/2024	136	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-120	44.8	n/a	8/7/2024	2.6	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-121A	44.8	n/a	8/6/2024	11.6	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-124	44.8	n/a	8/7/2024	2.2	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-125	44.8	n/a	8/7/2024	9.7	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-126	44.8	n/a	8/7/2024	8.7	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-120	1.5	n/a	8/7/2024	0.34	No	142	20.42	n/a	n/a	0.00009736	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-121A	1.5	n/a	8/6/2024	0.2	No	142	20.42	n/a	n/a	0.00009736	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-124	1.5	n/a	8/7/2024	0.1ND	No	142	20.42	n/a	n/a	0.00009736	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-125	1.5	n/a	8/7/2024	0.12	No	142	20.42	n/a	n/a	0.00009736	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-126	1.5	n/a	8/7/2024	0.5	No	142	20.42	n/a	n/a	0.00009736	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-120	8.36	4.57	8/7/2024	7.01	No	141	0	n/a	n/a	0.000197	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-121A	8.36	4.57	8/6/2024	6.91	No	141	0	n/a	n/a	0.000197	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-124	8.36	4.57	8/7/2024	7.24	No	141	0	n/a	n/a	0.000197	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-125	8.36	4.57	8/7/2024	6.15	No	141	0	n/a	n/a	0.000197	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-126	8.36	4.57	8/7/2024	6.99	No	141	0	n/a	n/a	0.000197	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-120**	**93.9**	**n/a**	**8/7/2024**	**191**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-121A**	**93.9**	**n/a**	**8/6/2024**	**127**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	HGWC-124	93.9	n/a	8/7/2024	69.7	No	128	0.7813	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-125**	**93.9**	**n/a**	**8/7/2024**	**289**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	HGWC-126	93.9	n/a	8/7/2024	72.8	No	128	0.7813	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-120**	**632**	**n/a**	**8/7/2024**	**647**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-121A**	**632**	**n/a**	**8/6/2024**	**661**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-124	632	n/a	8/7/2024	337	No	127	0	n/a	n/a	0.0001227	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-125**	**632**	**n/a**	**8/7/2024**	**695**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-126	632	n/a	8/7/2024	518	No	127	0	n/a	n/a	0.0001227	NP Inter (normality) 1 of 2

Appendix III Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/23/2024, 12:32 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**HGWA-122 (bg)**	**-0.02066**	**-142**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-2 (bg)**	**0.002641**	**177**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-43D (bg)**	**-0.005612**	**-42**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-44D (bg)**	**0.07224**	**46**	**38**	**Yes**	**12**	**8.333**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-120**	**-0.03508**	**-104**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-121A**	**-0.2362**	**-160**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-2 (bg)**	**1.536**	**119**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**1.859**	**131**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-44D (bg)**	**-7.17**	**-50**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWC-121A**	**-5.681**	**-124**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-122 (bg)**	**-1.765**	**-134**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-2 (bg)**	**4.063**	**177**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-43D (bg)**	**-3.566**	**-54**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-120**	**-14.01**	**-159**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-121A**	**-23.75**	**-160**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-125**	**-16.24**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**HGWC-120**	**-11.22**	**-91**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**HGWC-121A**	**-43.81**	**-128**	**-87**	**Yes**	**21**	**4.762**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/23/2024, 12:32 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.0000669	-13	-105	No	24	0	n/a	0.01	NP
Boron (mg/L)	**HGWA-122 (bg)**	**-0.02066**	**-142**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-2 (bg)**	**0.002641**	**177**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-3 (bg)	0.0005613	68	105	No	24	25	n/a	0.01	NP
Boron (mg/L)	**HGWA-43D (bg)**	**-0.005612**	**-42**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-44D (bg)**	**0.07224**	**46**	**38**	**Yes**	**12**	**8.333**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-45D (bg)	-0.003634	-18	-38	No	12	0	n/a	0.01	NP
Boron (mg/L)	**HGWC-120**	**-0.03508**	**-104**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-121A**	**-0.2362**	**-160**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-125	0	8	53	No	15	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	1.902	84	105	No	24	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-122 (bg)	-1.705	-64	-87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**HGWA-2 (bg)**	**1.536**	**119**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**1.859**	**131**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWA-43D (bg)	-2.184	-32	-38	No	12	0	n/a	0.01	NP
Calcium (mg/L)	**HGWA-44D (bg)**	**-7.17**	**-50**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWA-45D (bg)	-1.791	-36	-38	No	12	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-120	0.3985	16	92	No	22	0	n/a	0.01	NP
Calcium (mg/L)	**HGWC-121A**	**-5.681**	**-124**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWC-125	0.9777	4	53	No	15	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-1 (bg)	0.5993	35	105	No	24	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-122 (bg)**	**-1.765**	**-134**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-2 (bg)**	**4.063**	**177**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-3 (bg)	-0.4499	-30	-105	No	24	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-43D (bg)**	**-3.566**	**-54**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-44D (bg)	-1.833	-14	-38	No	12	8.333	n/a	0.01	NP
Sulfate (mg/L)	HGWA-45D (bg)	-1.936	-30	-38	No	12	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWC-120**	**-14.01**	**-159**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-121A**	**-23.75**	**-160**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-125**	**-16.24**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	5.368	56	105	No	24	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-122 (bg)	-5.553	-56	-81	No	20	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	6.288	78	98	No	23	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	2.16	44	105	No	24	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	0.03609	0	38	No	12	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	28.25	38	38	No	12	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-45D (bg)	-3.941	-16	-38	No	12	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**HGWC-120**	**-11.22**	**-91**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**HGWC-121A**	**-43.81**	**-128**	**-87**	**Yes**	**21**	**4.762**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	HGWC-125	-12.46	-20	-53	No	15	0	n/a	0.01	NP

Upper Tolerance Limit Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/22/2024, 11:47 AM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	n/a	n/a	n/a	127	88.19	n/a	n/a	0.001482	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	n/a	n/a	125	74.4	n/a	n/a	0.001642	NP Inter(NDs)
Barium (mg/L)	0.64	n/a	n/a	n/a	n/a	135	0.7407	n/a	n/a	0.0009833	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	n/a	n/a	127	83.46	n/a	n/a	0.001482	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	n/a	125	88	n/a	n/a	0.001642	NP Inter(NDs)
Chromium (mg/L)	0.0079	n/a	n/a	n/a	n/a	129	82.95	n/a	n/a	0.001338	NP Inter(NDs)
Cobalt (mg/L)	0.038	n/a	n/a	n/a	n/a	135	77.78	n/a	n/a	0.0009833	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.687	n/a	n/a	n/a	n/a	128	0	None	sqrt(x)	0.05	Inter
Fluoride (mg/L)	1.5	n/a	n/a	n/a	n/a	142	20.42	n/a	n/a	0.0006867	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	129	73.64	n/a	n/a	0.001338	NP Inter(NDs)
Lithium (mg/L)	0.064	n/a	n/a	n/a	n/a	132	31.82	n/a	n/a	0.001147	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	107	95.33	n/a	n/a	0.004135	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	n/a	n/a	137	64.96	n/a	n/a	0.0008874	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	125	94.4	n/a	n/a	0.001642	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	125	99.2	n/a	n/a	0.001642	NP Inter(NDs)

PLANT HAMMOND AP-3 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		0.64	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.0079	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		1.69	5
Fluoride, Total (mg/L)	4		1.5	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.040	0.064	0.064
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Grey cell indidcates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Statard*

Appendix IV - Confidence Intervals - All Results (No Significant)

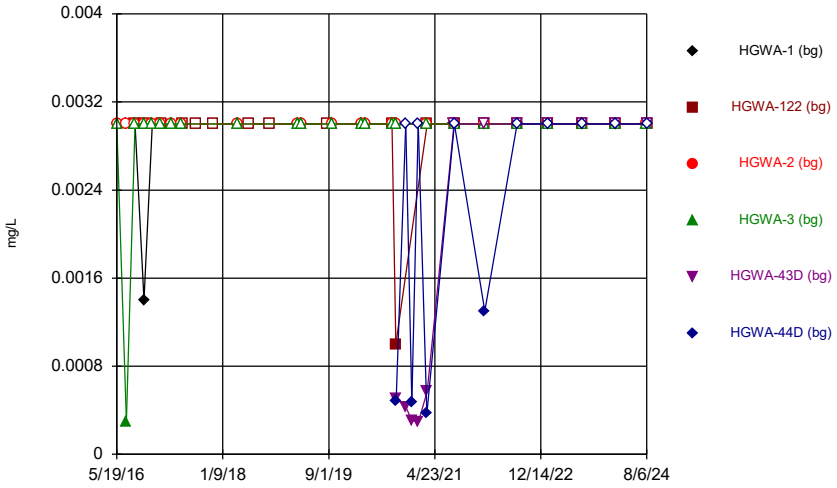
Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/22/2024, 11:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-120	0.003	0.0018	0.006	No	19	0.002937	0.0002753	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-121A	0.003	0.0018	0.006	No	19	0.002863	0.0004112	89.47	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-124	0.003	0.002	0.006	No	19	0.002884	0.0003484	89.47	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-125	0.003	0.00061	0.006	No	15	0.002672	0.000866	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-126	0.003	0.00043	0.006	No	15	0.002655	0.0009096	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-120	0.005	0.001	0.01	No	17	0.003639	0.001909	64.71	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-121A	0.005	0.0014	0.01	No	17	0.004341	0.001469	82.35	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-124	0.005	0.0006	0.01	No	17	0.004741	0.001067	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-125	0.005	0.0014	0.01	No	14	0.004022	0.001691	71.43	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-126	0.005	0.0026	0.01	No	14	0.00423	0.001583	78.57	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-120	0.05111	0.04679	2	No	21	0.04895	0.00392	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-121A	0.07618	0.05996	2	No	21	0.06807	0.0147	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-124	0.07161	0.06538	2	No	21	0.06849	0.005646	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-125	0.04478	0.03935	2	No	15	0.04207	0.004008	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-126	0.2495	0.2278	2	No	15	0.2387	0.01598	0	None	No	0.01	Param.
Chromium (mg/L)	HGWC-120	0.005	0.0015	0.1	No	21	0.004422	0.001457	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-121A	0.005	0.0005	0.1	No	21	0.004786	0.000982	95.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-124	0.005	0.00051	0.1	No	21	0.00457	0.001358	90.48	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-125	0.005	0.00081	0.1	No	15	0.004127	0.001808	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-126	0.005	0.0014	0.1	No	15	0.004491	0.001347	86.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-120	0.004816	0.003336	0.038	No	21	0.004076	0.001342	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-121A	0.005	0.0005	0.038	No	21	0.004338	0.001662	85.71	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-125	0.01206	0.007876	0.038	No	15	0.009967	0.003086	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-120	1.02	0.6588	5	No	20	0.8396	0.3184	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-121A	1.086	0.5125	5	No	20	0.7994	0.5051	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-124	0.8213	0.5294	5	No	20	0.6754	0.2571	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-125	1.249	0.6323	5	No	14	0.9408	0.4356	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-126	1.602	1.008	5	No	14	1.305	0.4191	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-120	0.65	0.36	4	No	24	0.5875	0.3473	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-121A	0.19	0.15	4	No	22	0.2334	0.2364	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-124	0.11	0.078	4	No	22	0.1123	0.06373	45.45	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-125	0.1686	0.1247	4	No	15	0.1467	0.03244	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-126	0.5053	0.4521	4	No	15	0.4787	0.03925	0	None	No	0.01	Param.
Lead (mg/L)	HGWC-120	0.001	0.0002	0.015	No	21	0.0008748	0.000315	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-121A	0.001	0.00036	0.015	No	21	0.0008848	0.0002931	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-124	0.001	0.000094	0.015	No	21	0.0007784	0.0004062	76.19	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-125	0.001	0.000092	0.015	No	15	0.0006969	0.0004444	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-126	0.001	0.000046	0.015	No	15	0.0008089	0.0003957	80	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-120	0.03055	0.02454	0.064	No	21	0.02755	0.005449	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-121A	0.00863	0.007266	0.064	No	21	0.007948	0.001236	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-124	0.03	0.0011	0.064	No	21	0.01073	0.01396	33.33	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-125	0.005627	0.003956	0.064	No	15	0.00488	0.00141	0	None	ln(x)	0.01	Param.
Lithium (mg/L)	HGWC-126	0.004184	0.003469	0.064	No	15	0.003827	0.0005271	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-120	0.0002	0.00007	0.002	No	17	0.0001829	0.00004845	88.24	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-124	0.0002	0.000051	0.002	No	17	0.0001912	0.00003614	94.12	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-120	0.03664	0.02792	0.1	No	21	0.03228	0.007905	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-124	0.01	0.00091	0.1	No	21	0.00446	0.004456	38.1	None	No	0.01	NP (normality)
Molybdenum (mg/L)	HGWC-125	0.009185	0.001729	0.1	No	15	0.007759	0.007619	20	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	HGWC-120	0.005	0.002	0.05	No	17	0.004824	0.0007276	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-121A	0.005	0.0011	0.05	No	17	0.004771	0.0009459	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-124	0.005	0.0014	0.05	No	17	0.004788	0.0008731	94.12	None	No	0.01	NP (NDs)

FIGURE A.

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG
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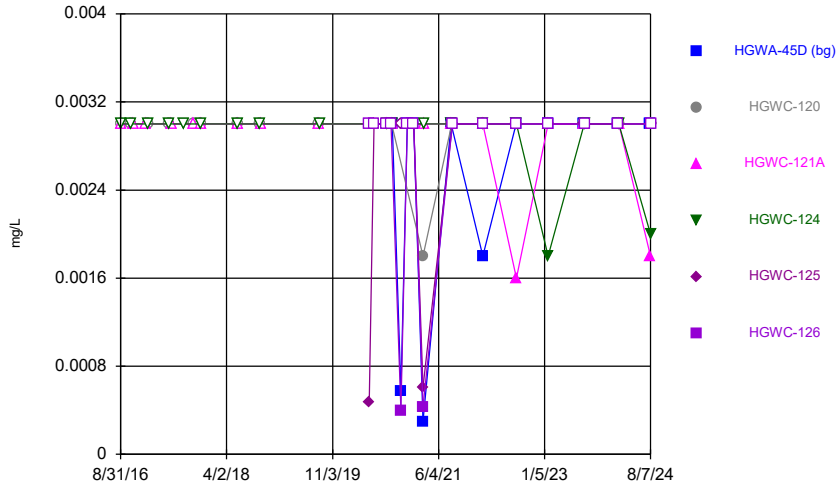
Time Series



Constituent: Antimony Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG
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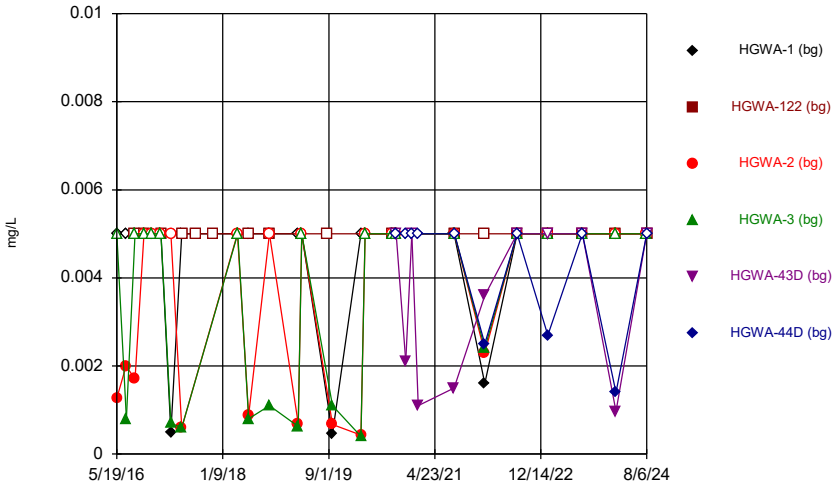
Time Series



Constituent: Antimony Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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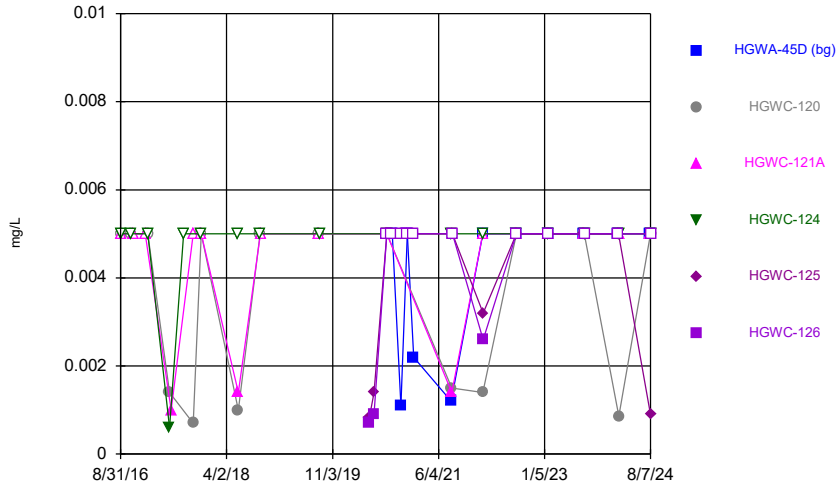
Time Series



Constituent: Arsenic Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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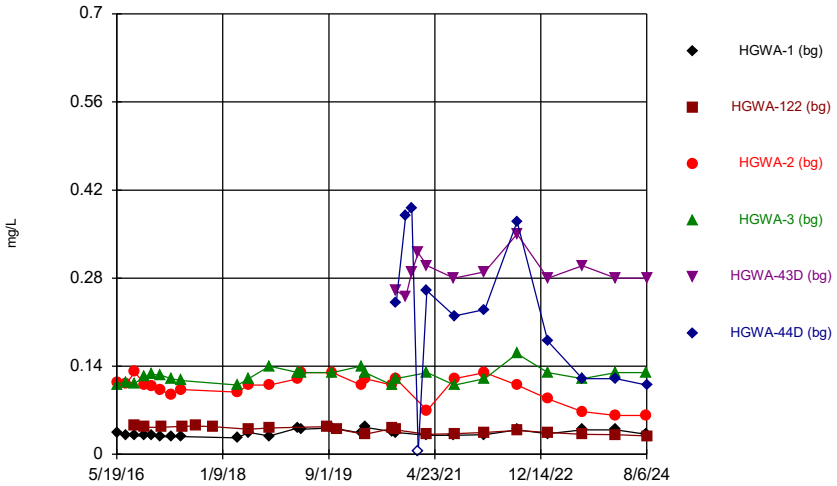
Time Series



Constituent: Arsenic Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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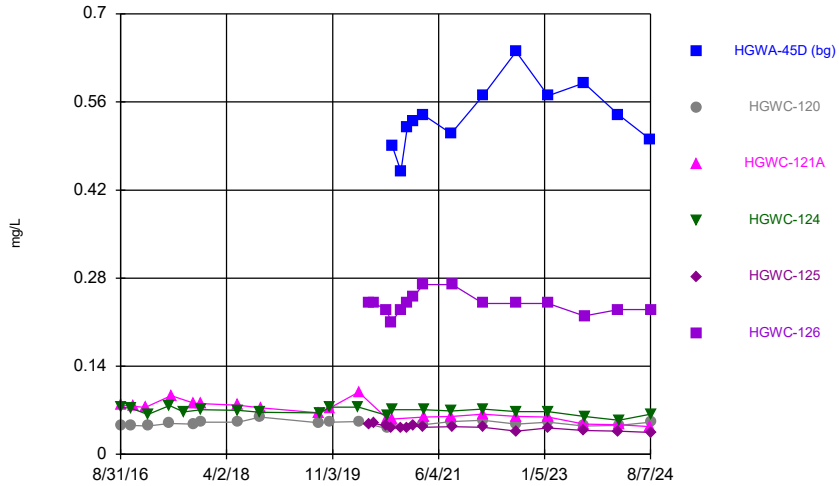
Time Series



Constituent: Barium Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

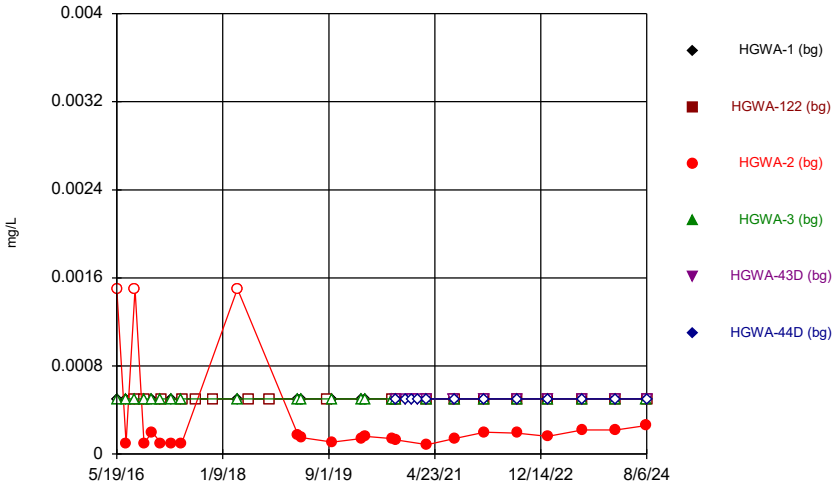
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Constituent: Barium Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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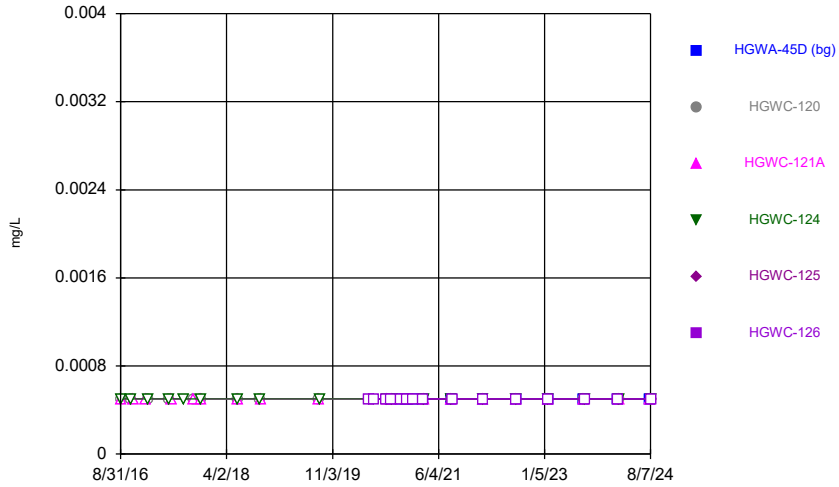
Time Series



Constituent: Beryllium Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG
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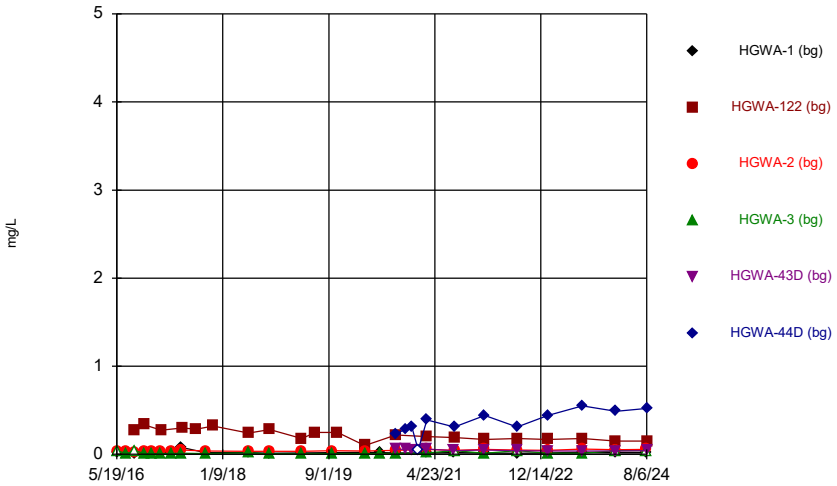
Time Series



Constituent: Beryllium Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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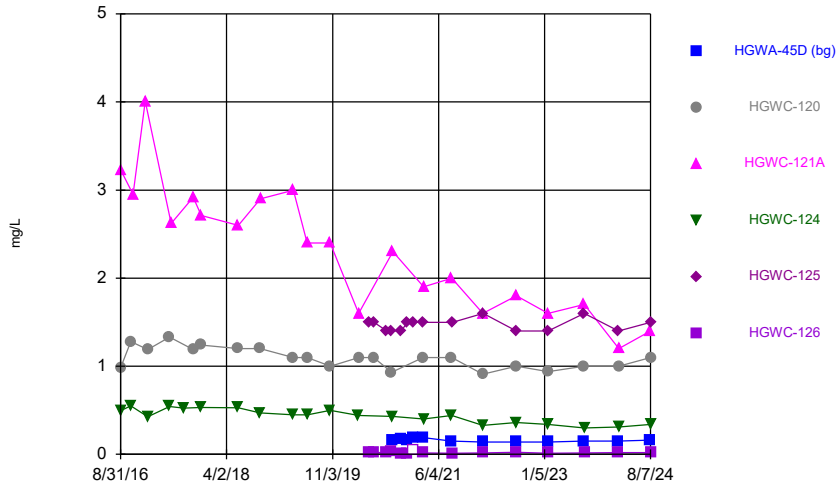
Time Series



Constituent: Boron Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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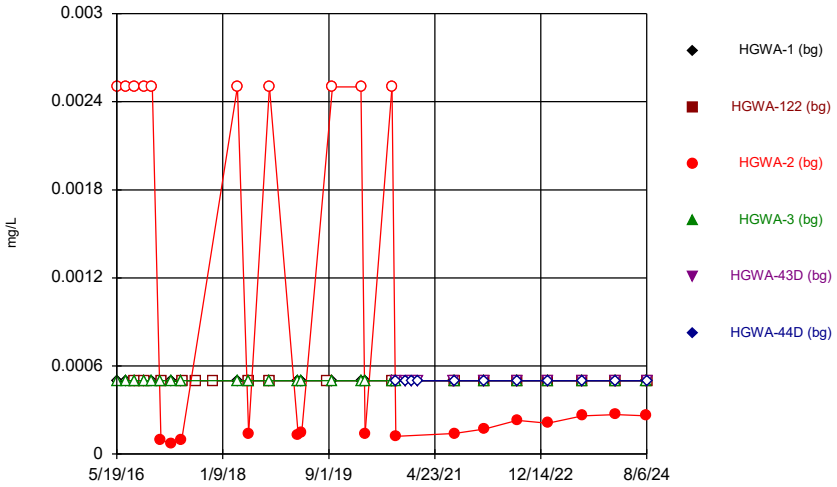
Time Series



Constituent: Boron Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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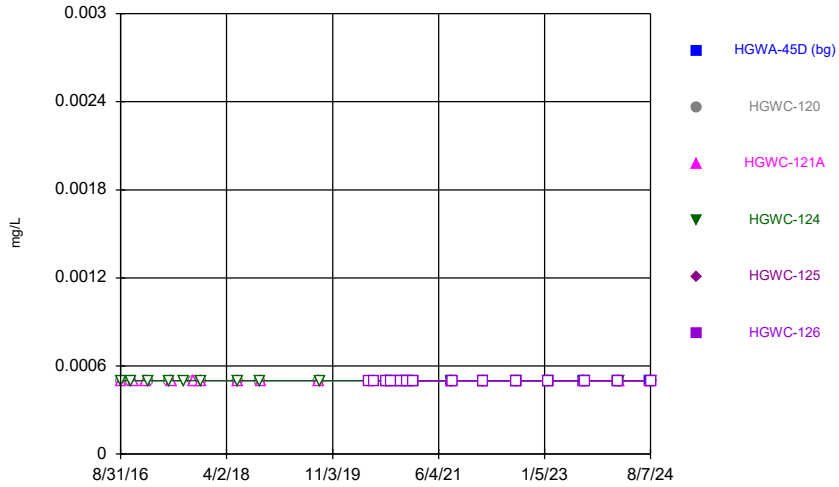
Time Series



Constituent: Cadmium Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

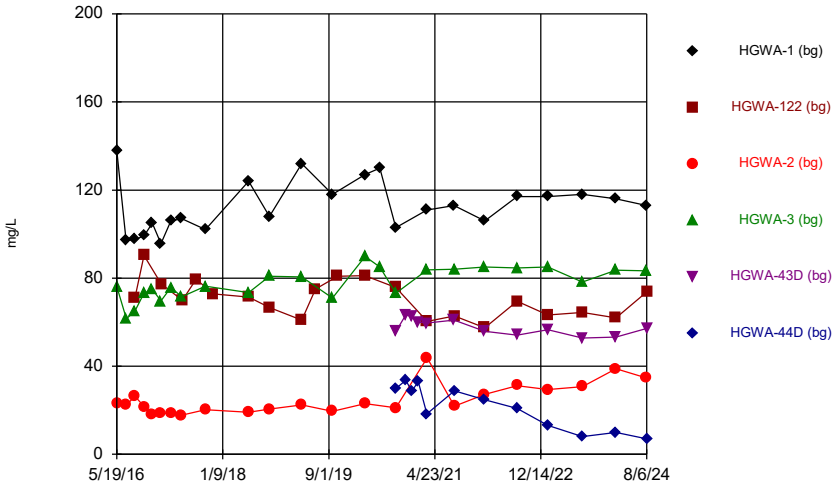
Time Series



Constituent: Cadmium Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series

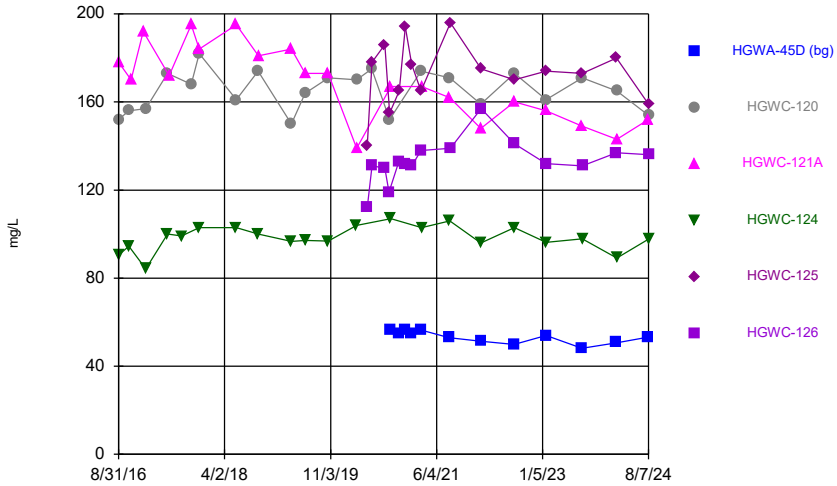


Constituent: Calcium Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series

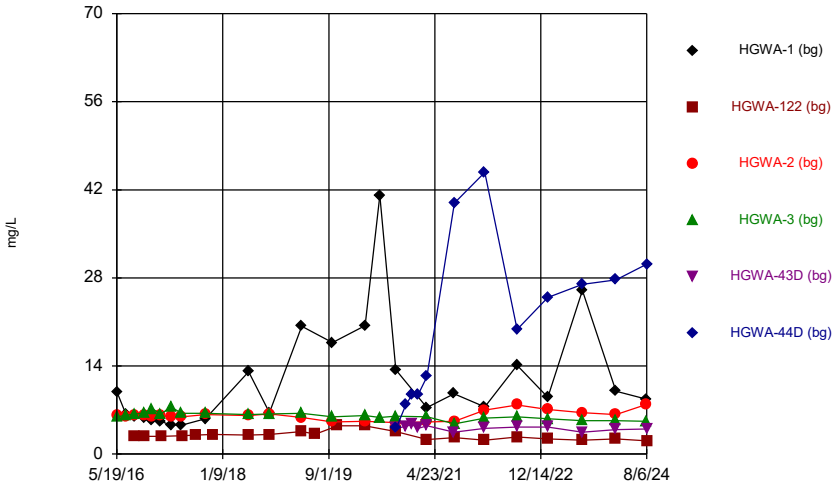


Constituent: Calcium Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Time Series

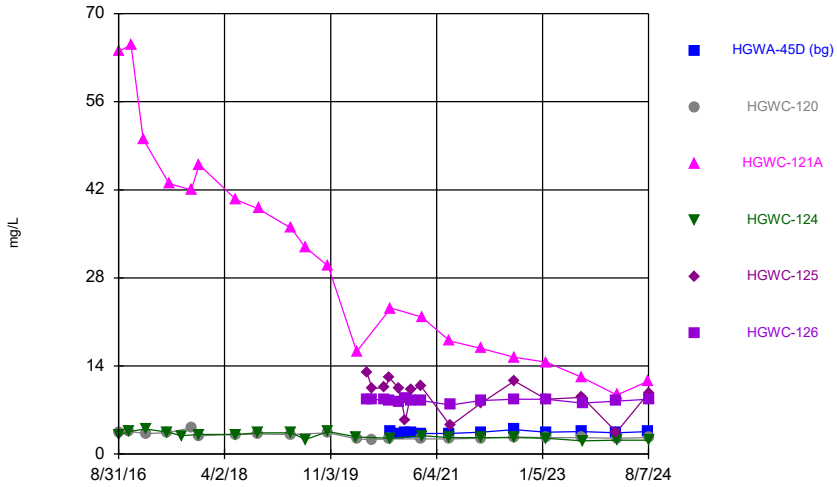


Constituent: Chloride Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series

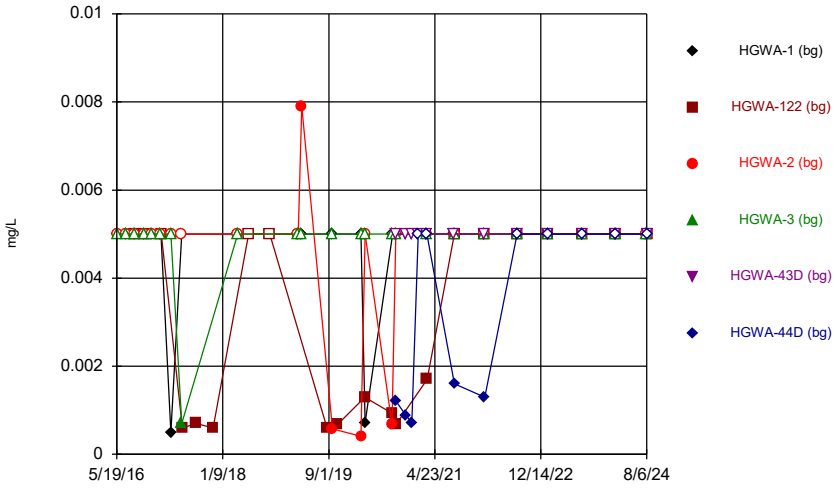


Constituent: Chloride Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

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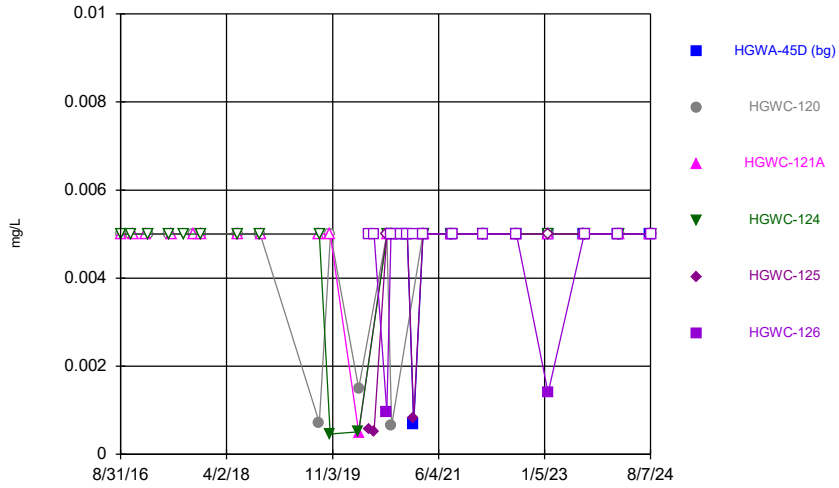
Time Series



Constituent: Chromium Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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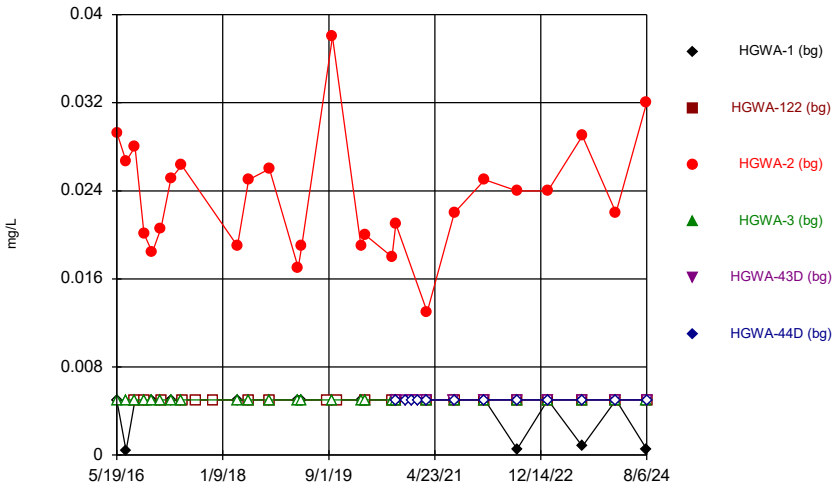
Time Series



Constituent: Chromium Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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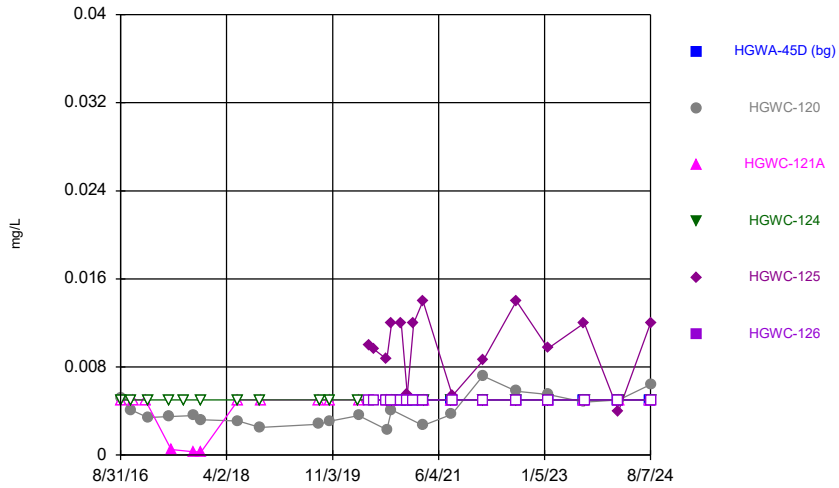
Time Series



Constituent: Cobalt Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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Hollow symbols indicate censored values.

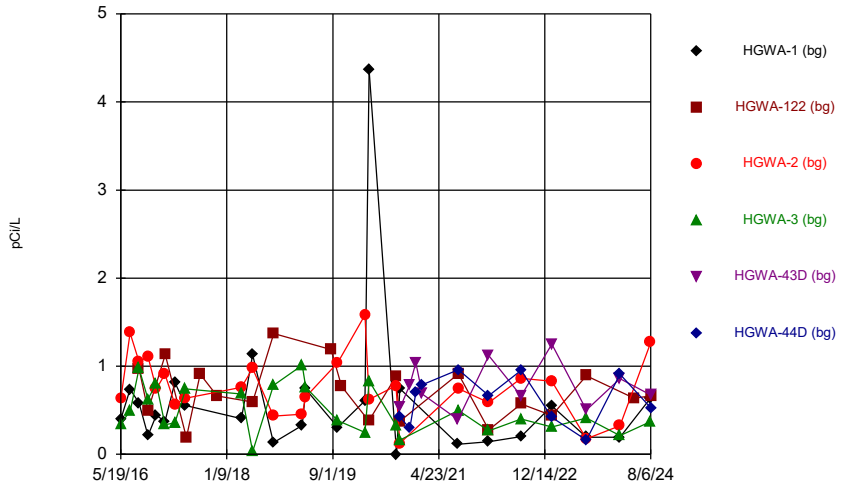
Time Series



Constituent: Cobalt Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series

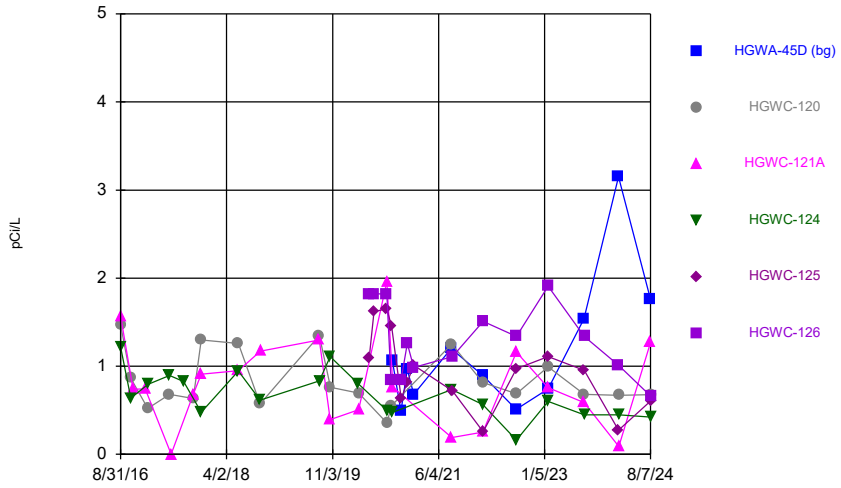


Constituent: Combined Radium 226 + 228 Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series



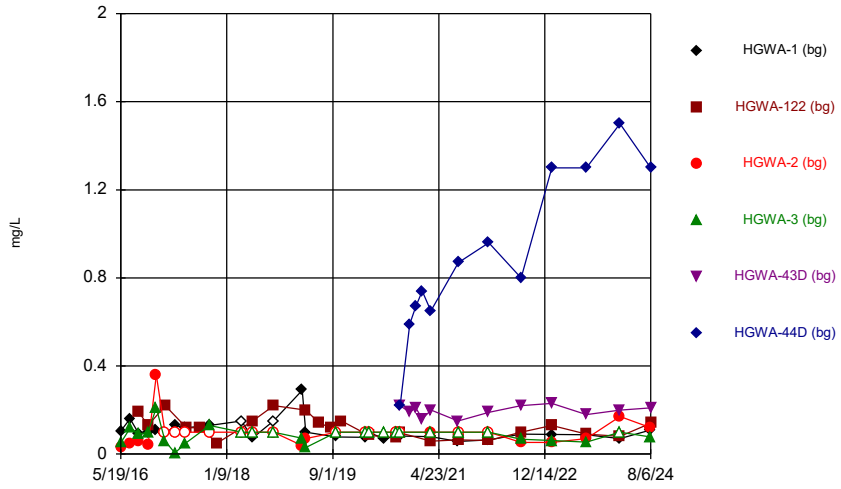
Constituent: Combined Radium 226 + 228 Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Time Series



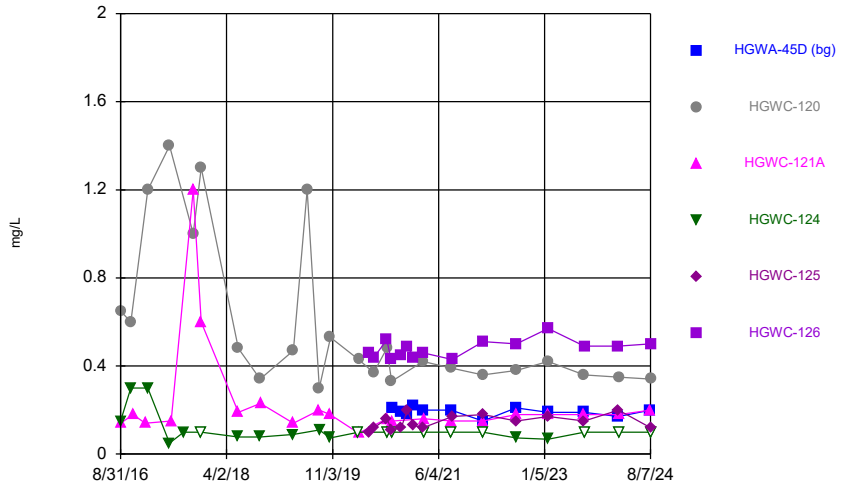
Constituent: Fluoride Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

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Time Series

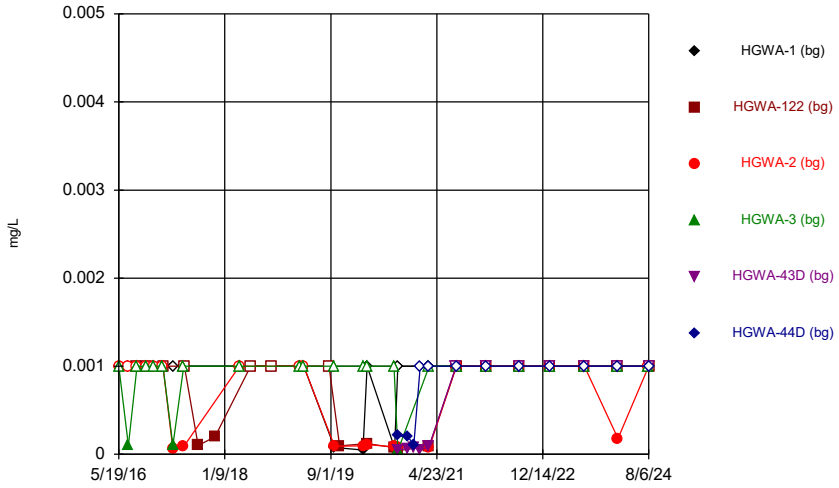


Constituent: Fluoride Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

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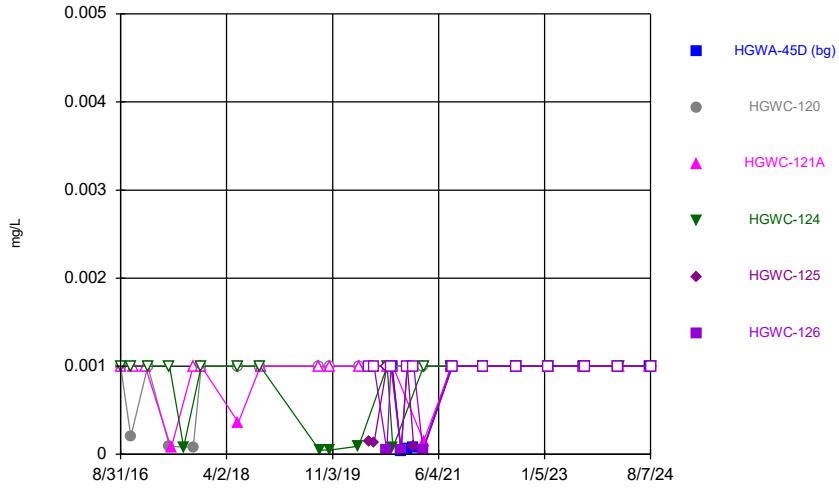
Time Series



Constituent: Lead Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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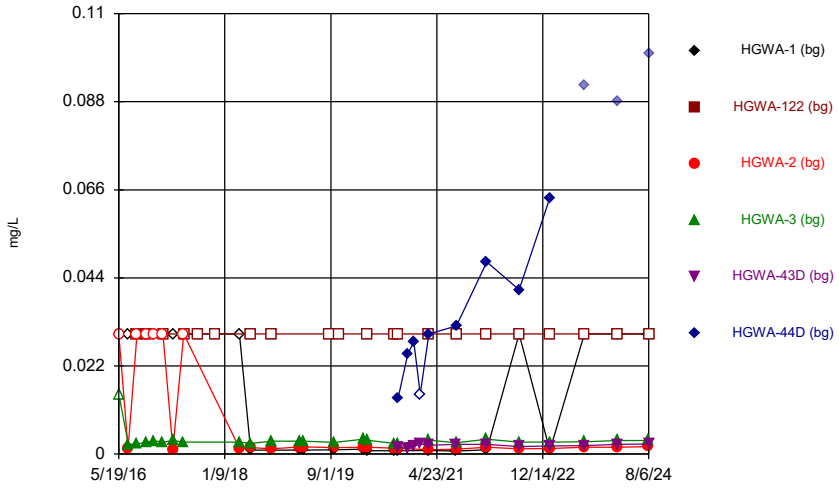
Time Series



Constituent: Lead Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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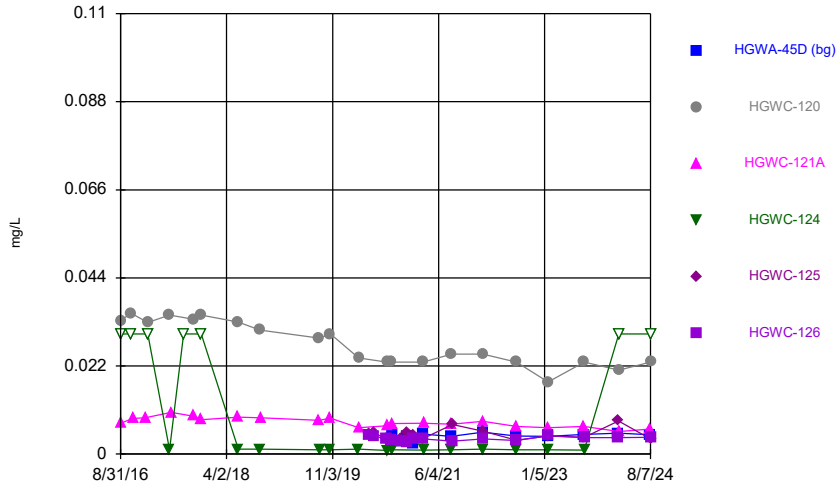
Time Series



Constituent: Lithium Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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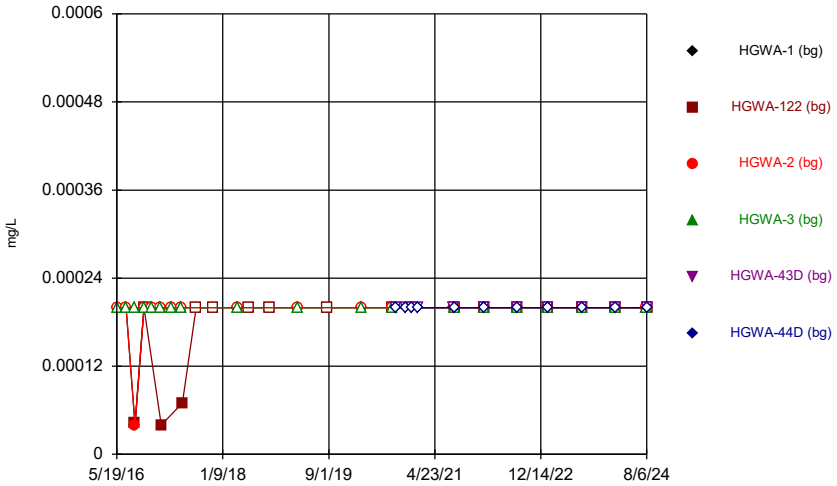
Time Series



Constituent: Lithium Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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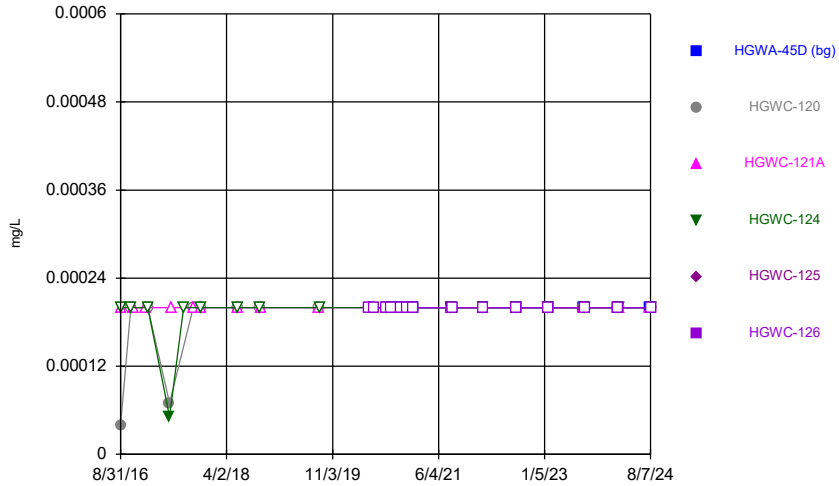
Time Series



Constituent: Mercury Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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Hollow symbols indicate censored values.

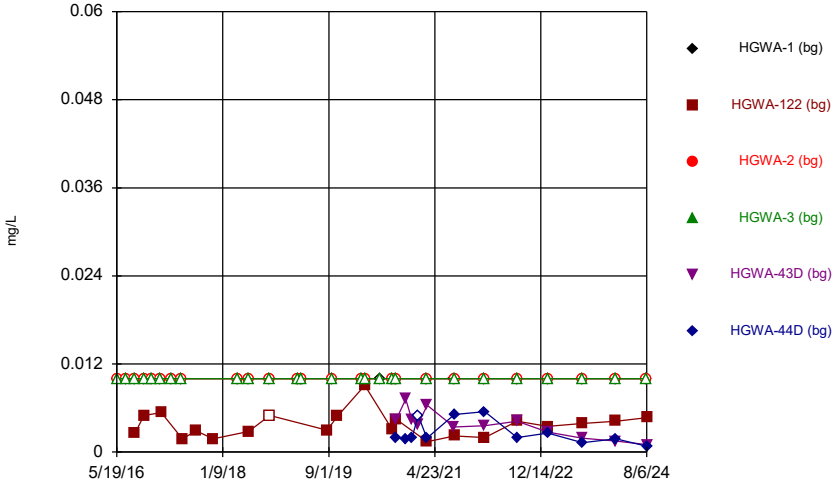
Time Series



Constituent: Mercury Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

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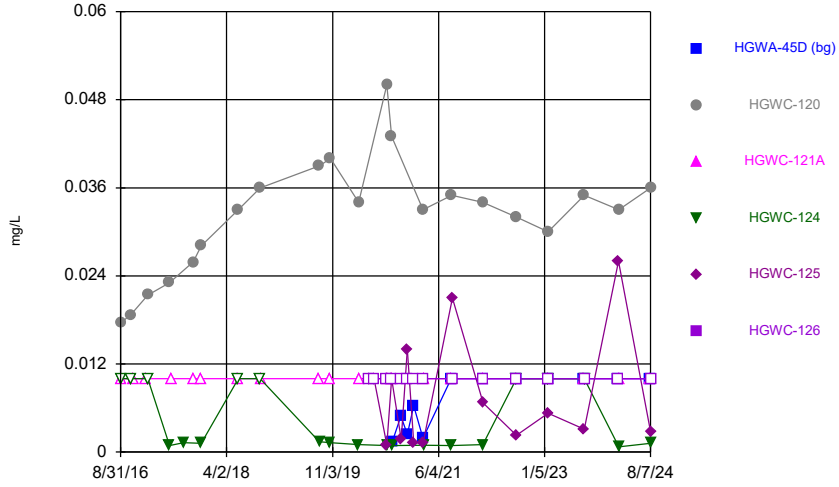
Time Series



Constituent: Molybdenum Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

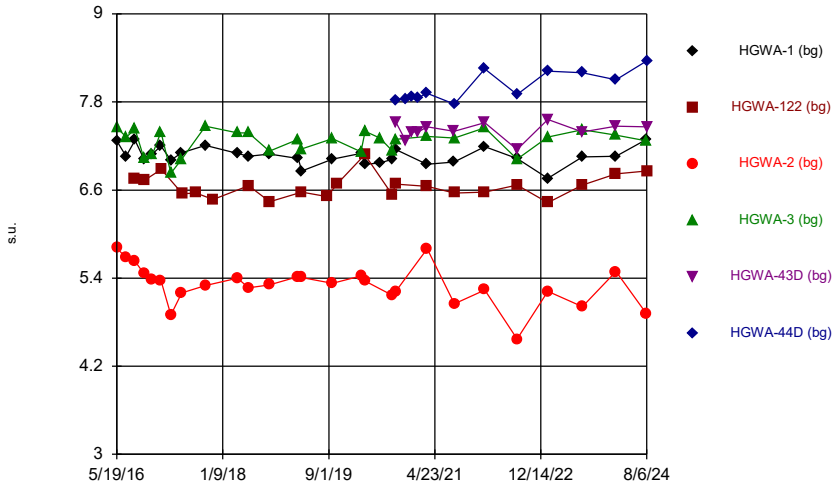
Time Series



Constituent: Molybdenum Analysis Run 10/22/2024 11:42 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series

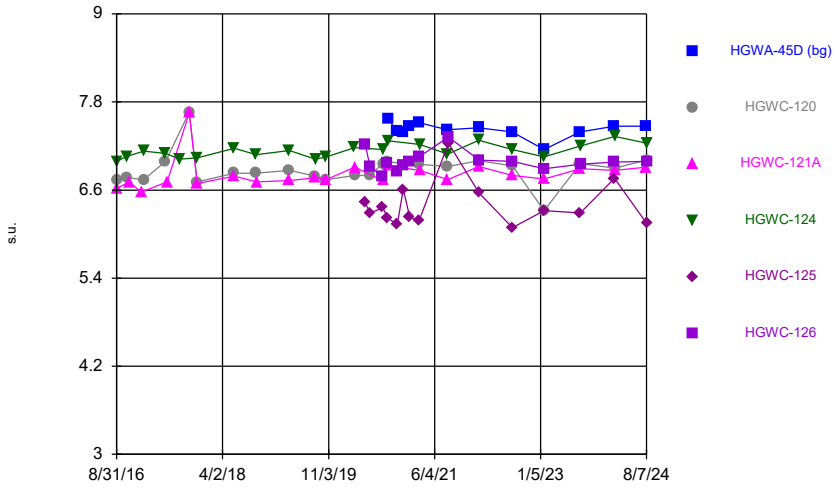


Constituent: pH Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Time Series

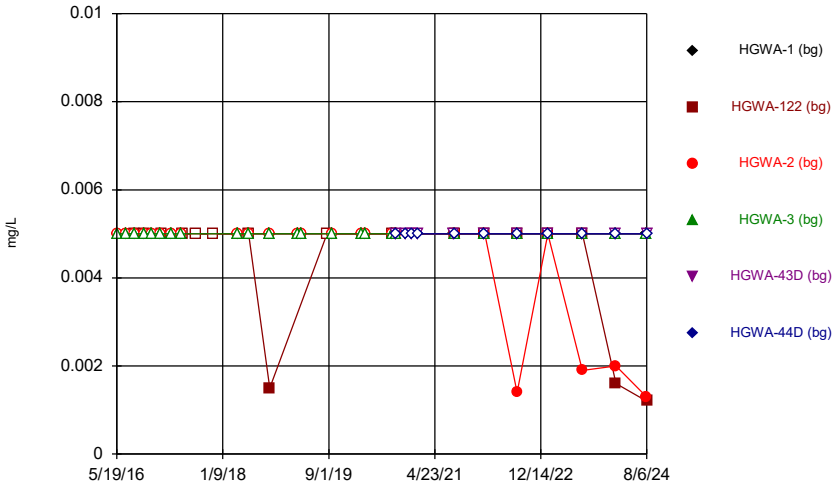


Constituent: pH Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

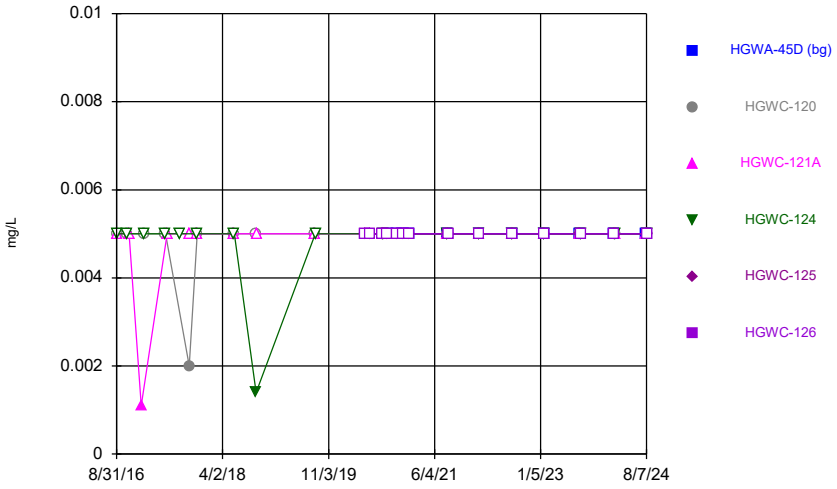


Constituent: Selenium Analysis Run 10/22/2024 11:42 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

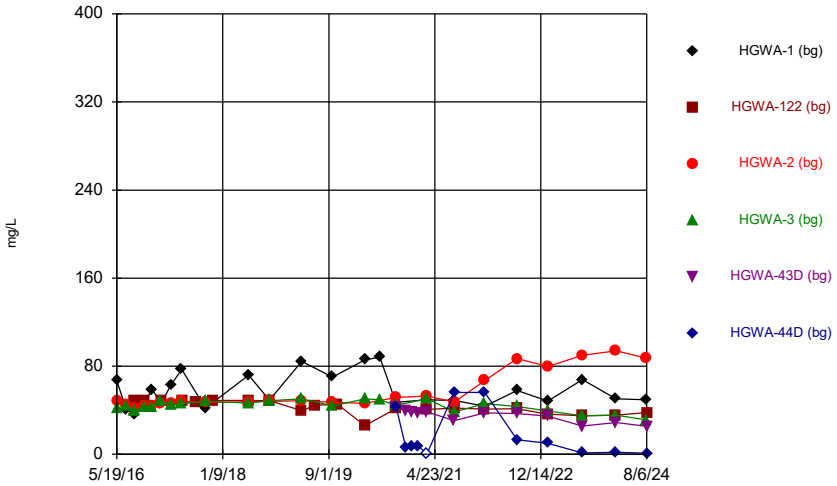


Constituent: Selenium Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

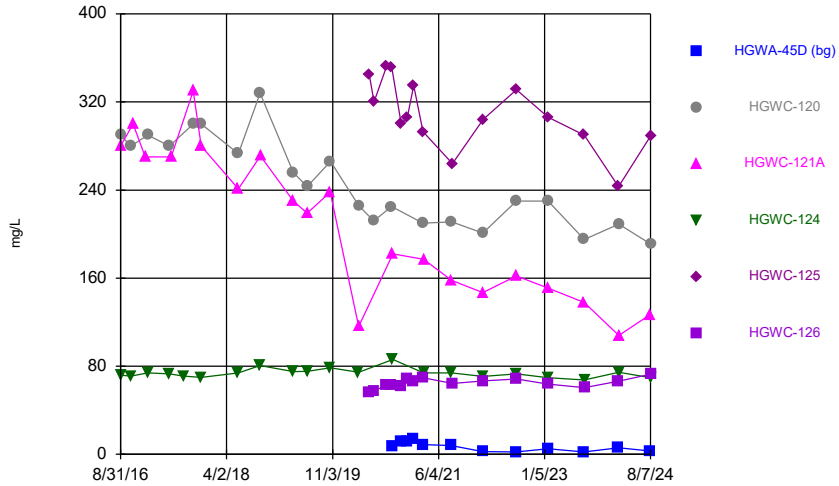
Time Series



Constituent: Sulfate Analysis Run 10/22/2024 11:43 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

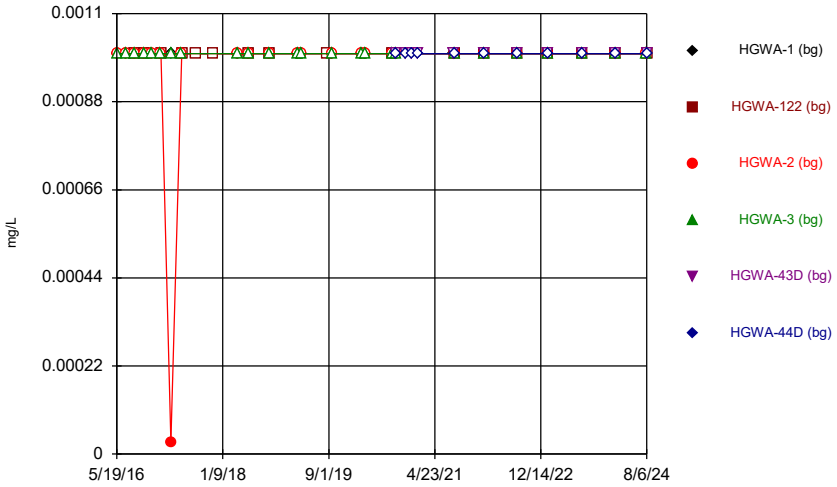
Time Series



Constituent: Sulfate Analysis Run 10/22/2024 11:43 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

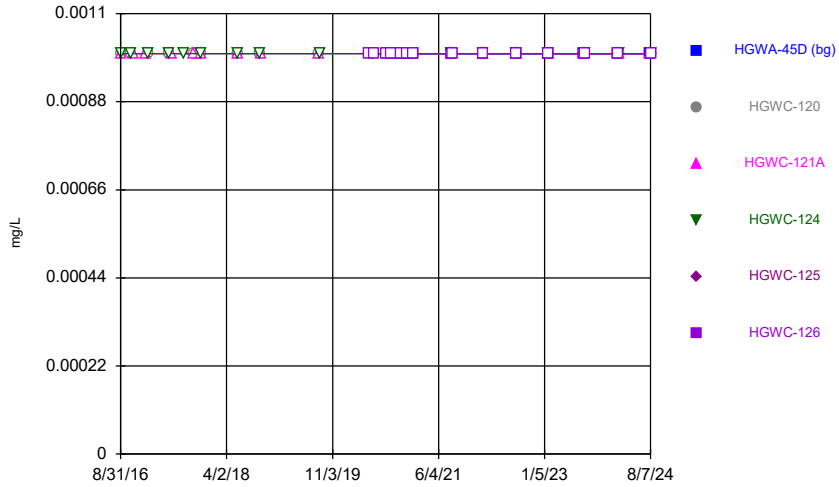
Time Series



Constituent: Thallium Analysis Run 10/22/2024 11:43 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

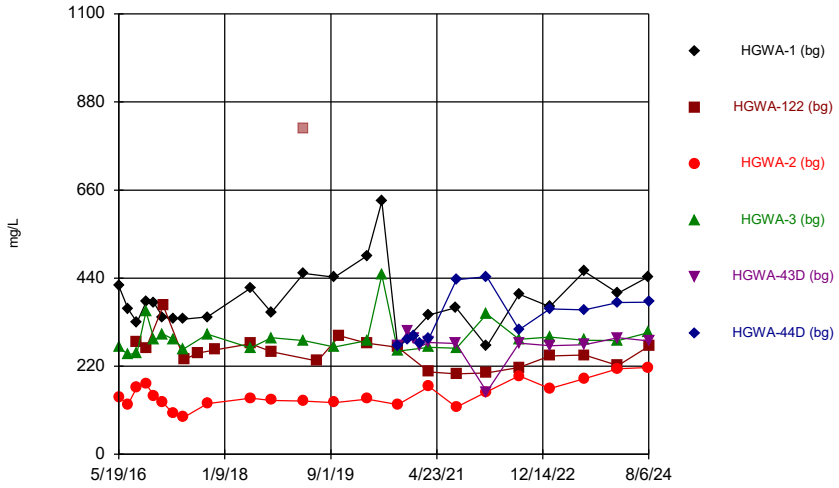
Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 10/22/2024 11:43 AM
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



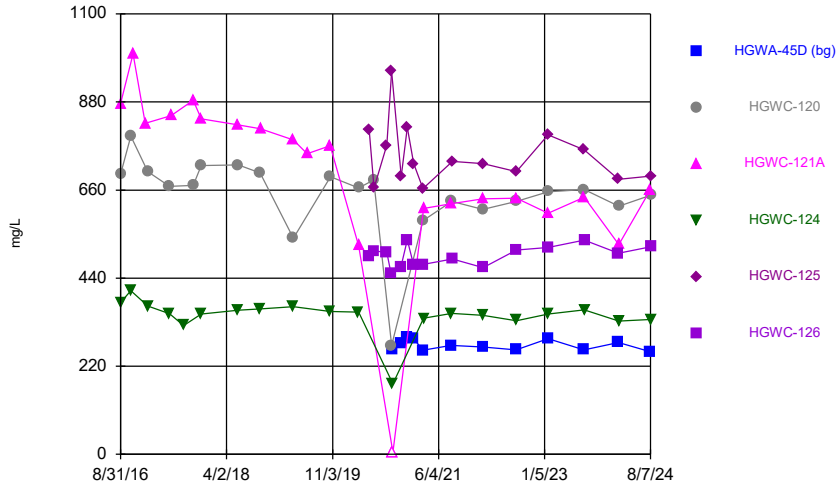
Constituent: Total Dissolved Solids Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



Constituent: Total Dissolved Solids Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.003		<0.003	<0.003		
7/11/2016	<0.003		<0.003			
7/12/2016				0.0003 (J)		
8/30/2016	<0.003	<0.003	<0.003	<0.003		
10/19/2016	0.0014 (J)		<0.003	<0.003		
10/20/2016		<0.003				
12/6/2016	<0.003		<0.003	<0.003		
1/24/2017	<0.003		<0.003	<0.003		
1/25/2017		<0.003				
3/21/2017	<0.003		<0.003	<0.003		
5/22/2017	<0.003		<0.003	<0.003		
5/25/2017		<0.003				
8/11/2017		<0.003				
11/15/2017		<0.003				
4/2/2018	<0.003		<0.003			
4/3/2018				<0.003		
6/5/2018		<0.003				
10/2/2018		<0.003				
3/12/2019	<0.003		<0.003	<0.003		
4/1/2019				<0.003		
4/2/2019	<0.003		<0.003			
8/22/2019		<0.003				
9/23/2019	<0.003		<0.003	<0.003		
3/2/2020	<0.003		<0.003	<0.003		
3/25/2020	<0.003		<0.003	<0.003		
8/24/2020		<0.003				
8/25/2020			<0.003	<0.003		
8/28/2020	<0.003					
9/15/2020	<0.003	0.001 (J)	<0.003	<0.003		
9/16/2020					0.00051 (J)	0.00049 (J)
11/10/2020					0.00043 (J)	<0.003
12/15/2020					0.00031 (J)	0.00047 (J)
1/19/2021					0.00029 (J)	<0.003
3/10/2021	<0.003					0.00037 (J)
3/11/2021		<0.003	<0.003	<0.003	0.00057 (J)	
8/11/2021	<0.003				<0.003	
8/12/2021			<0.003	<0.003		
8/13/2021		<0.003				<0.003
2/1/2022	<0.003	<0.003	<0.003	<0.003	<0.003	0.0013 (J)
8/2/2022	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1/23/2023				<0.003		
1/24/2023	<0.003	<0.003	<0.003		<0.003	<0.003
8/8/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
2/13/2024	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/5/2024	<0.003		<0.003	<0.003		
8/6/2024		<0.003			<0.003	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		<0.003	<0.003	<0.003		
10/26/2016		<0.003		<0.003		
11/7/2016			<0.003			
1/13/2017			<0.003			
1/27/2017		<0.003		<0.003		
5/25/2017		<0.003		<0.003		
6/3/2017			<0.003			
8/11/2017				<0.003		
10/2/2017		<0.003	<0.003			
11/15/2017		<0.003	<0.003	<0.003		
6/5/2018		<0.003	<0.003	<0.003		
10/2/2018		<0.003		<0.003		
10/5/2018			<0.003			
8/22/2019		<0.003	<0.003			
8/23/2019				<0.003		
5/22/2020					0.00047 (J)	<0.003
6/16/2020					<0.003	<0.003
8/25/2020					<0.003	<0.003
8/26/2020		<0.003	<0.003			
8/27/2020				<0.003		
9/18/2020						<0.003
9/21/2020		<0.003			<0.003	
9/25/2020	<0.003					
9/28/2020			<0.003	<0.003		
11/11/2020	0.00057 (J)					0.0004 (J)
11/12/2020					<0.003	
12/16/2020	<0.003				<0.003	<0.003
1/20/2021	<0.003				<0.003	<0.003
3/12/2021	0.0003 (J)	0.0018 (J)			0.00061 (J)	0.00043 (J)
3/15/2021			<0.003	<0.003		
8/13/2021	<0.003					
8/16/2021		<0.003	<0.003	<0.003		
8/19/2021					<0.003	<0.003
2/1/2022	0.0018 (J)					
2/2/2022		<0.003	<0.003	<0.003		
2/3/2022					<0.003	<0.003
8/2/2022	<0.003					
8/4/2022		<0.003	0.0016 (J)	<0.003	<0.003	<0.003
1/24/2023	<0.003		<0.003	0.0018 (J)		
1/25/2023		<0.003			<0.003	<0.003
8/8/2023	<0.003					
8/10/2023		<0.003	<0.003		<0.003	
8/11/2023				<0.003		<0.003
2/13/2024	<0.003					
2/14/2024					<0.003	<0.003
2/15/2024		<0.003	<0.003			
2/16/2024				<0.003		
8/6/2024	<0.003		0.0018 (J)			
8/7/2024		<0.003		0.002 (J)	<0.003	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.005		0.00127 (J)	<0.005		
7/11/2016	<0.005		0.002 (J)			
7/12/2016				0.0008 (J)		
8/30/2016	<0.005	<0.005	0.0017 (J)	<0.005		
10/19/2016	<0.005		<0.005	<0.005		
10/20/2016		<0.005				
12/6/2016	<0.005		<0.005	<0.005		
1/24/2017	<0.005		<0.005	<0.005		
1/25/2017		<0.005				
3/21/2017	0.0005 (J)		<0.005	0.0007 (J)		
5/22/2017	<0.005		0.0006 (J)	0.0006 (J)		
5/25/2017		<0.005				
8/11/2017		<0.005				
11/15/2017		<0.005				
4/2/2018	<0.005		<0.005			
4/3/2018				<0.005		
6/4/2018	<0.005		0.00088 (J)	0.0008 (J)		
6/5/2018		<0.005				
10/1/2018	<0.005		<0.005	0.0011 (J)		
10/2/2018		<0.005				
3/12/2019	<0.005		0.00069 (J)	0.00063 (J)		
4/1/2019				<0.005		
4/2/2019	<0.005		<0.005			
8/22/2019		<0.005				
9/23/2019	0.00046 (J)		0.00067 (J)	0.0011 (J)		
3/2/2020	<0.005		0.00043 (J)	0.0004 (J)		
3/25/2020	<0.005		<0.005	<0.005		
8/24/2020		<0.005				
8/25/2020			<0.005	<0.005		
8/28/2020	<0.005					
9/15/2020	<0.005		<0.005	<0.005		
9/16/2020					<0.005	<0.005
11/10/2020					0.0021 (J)	<0.005
12/15/2020					<0.005	<0.005
1/19/2021					0.0011 (J)	<0.005
8/11/2021	<0.005				0.0015 (J)	
8/12/2021			<0.005	<0.005		
8/13/2021		<0.005				<0.005
2/1/2022	0.0016 (J)	<0.005	0.0023 (J)	0.0024 (J)	0.0036 (J)	0.0025 (J)
8/2/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/23/2023				<0.005		
1/24/2023	<0.005	<0.005	<0.005		<0.005	0.0027 (J)
8/8/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/13/2024	<0.005	<0.005	<0.005	<0.005	0.00097 (J)	0.0014 (J)
8/5/2024	<0.005		<0.005	<0.005		
8/6/2024		<0.005			<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		<0.005	<0.005	<0.005		
10/26/2016		<0.005		<0.005		
11/7/2016			<0.005			
1/13/2017			<0.005			
1/27/2017		<0.005		<0.005		
5/25/2017		0.0014 (J)		0.0006 (J)		
6/3/2017			0.001 (J)			
8/11/2017				<0.005		
10/2/2017		0.0007 (J)	<0.005			
11/15/2017		<0.005	<0.005	<0.005		
6/5/2018		0.001 (J)	0.0014 (J)	<0.005		
10/2/2018		<0.005		<0.005		
10/5/2018			<0.005			
8/22/2019		<0.005	<0.005			
8/23/2019				<0.005		
5/22/2020					0.00081 (J)	0.00071 (J)
6/16/2020					0.0014 (J)	0.00091 (J)
8/25/2020					<0.005	<0.005
8/26/2020		<0.005	<0.005			
8/27/2020				<0.005		
9/18/2020						<0.005
9/21/2020					<0.005	
9/25/2020	<0.005					
11/11/2020	0.0011 (J)					<0.005
11/12/2020					<0.005	
12/16/2020	<0.005				<0.005	<0.005
1/20/2021	0.0022 (J)				<0.005	<0.005
8/13/2021	0.0012 (J)					
8/16/2021		0.0015 (J)	0.0014 (J)	<0.005		
8/19/2021					<0.005	<0.005
2/1/2022	<0.005					
2/2/2022		0.0014 (J)	<0.005	<0.005		
2/3/2022					0.0032 (J)	0.0026 (J)
8/2/2022	<0.005					
8/4/2022		<0.005	<0.005	<0.005	<0.005	<0.005
1/24/2023	<0.005		<0.005	<0.005		
1/25/2023		<0.005			<0.005	<0.005
8/8/2023	<0.005					
8/10/2023		<0.005	<0.005		<0.005	
8/11/2023				<0.005		<0.005
2/13/2024	<0.005					
2/14/2024					<0.005	<0.005
2/15/2024		0.00086 (J)	<0.005			
2/16/2024				<0.005		
8/6/2024	<0.005		<0.005			
8/7/2024		<0.005		<0.005	0.0009 (J)	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	0.0346		0.114	0.111		
7/11/2016	0.0311		0.112			
7/12/2016				0.115		
8/30/2016	0.0293	0.0463	0.131	0.113		
10/19/2016	0.0293		0.111	0.123		
10/20/2016		0.0431				
12/6/2016	0.0304		0.108	0.127		
1/24/2017	0.028		0.102	0.126		
1/25/2017		0.0429				
3/21/2017	0.0275		0.095	0.12		
5/22/2017	0.0281		0.103	0.117		
5/25/2017		0.0447				
8/11/2017		0.0451				
11/15/2017		0.0439				
4/2/2018	0.026		0.099			
4/3/2018				0.11		
6/4/2018	0.035		0.11	0.12		
6/5/2018		0.04				
10/1/2018	0.029		0.11	0.14		
10/2/2018		0.042				
3/12/2019	0.042		0.12	0.13		
4/1/2019				0.13		
4/2/2019	0.04		0.13			
8/22/2019		0.044				
9/23/2019	0.042		0.13	0.13		
10/21/2019		0.04				
3/2/2020	0.034		0.11	0.14		
3/24/2020		0.032				
3/25/2020	0.043		0.12	0.13		
8/24/2020		0.041				
8/25/2020			0.11	0.11		
8/28/2020	0.036					
9/15/2020	0.035	0.039	0.12	0.12		
9/16/2020					0.26	0.24
11/10/2020					0.25	0.38
12/15/2020					0.29	0.39
1/19/2021					0.32	<0.01
3/10/2021	0.03					0.26
3/11/2021		0.032	0.07	0.13	0.3	
8/11/2021	0.03				0.28	
8/12/2021			0.12	0.11		
8/13/2021		0.033				0.22
2/1/2022	0.031	0.035	0.13	0.12	0.29	0.23
8/2/2022	0.039	0.038	0.11	0.16	0.35	0.37
1/23/2023				0.13		
1/24/2023	0.033	0.035	0.088		0.28	0.18
8/8/2023	0.039	0.032	0.068	0.12	0.3	0.12
2/13/2024	0.039	0.031	0.062	0.13	0.28	0.12
8/5/2024	0.032		0.062	0.13		
8/6/2024		0.029			0.28	0.11

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		0.045	0.0782	0.0744		
10/26/2016		0.0462		0.0735		
11/7/2016			0.0764			
1/13/2017			0.0744			
1/27/2017		0.0451		0.0632		
5/25/2017		0.0488		0.0773		
6/3/2017			0.0933			
8/11/2017				0.0672		
10/2/2017		0.0479	0.0815			
11/15/2017		0.051	0.0807	0.0707		
6/5/2018		0.051	0.078	0.07		
10/2/2018		0.059		0.067		
10/5/2018			0.074			
8/22/2019		0.05	0.066			
8/23/2019				0.066		
10/21/2019			0.074	0.075		
10/22/2019		0.051				
3/24/2020				0.075		
3/25/2020		0.052	0.099			
5/22/2020					0.048	0.24
6/16/2020					0.049	0.24
8/25/2020					0.045	0.23
8/26/2020		0.041	0.057			
8/27/2020				0.062		
9/18/2020						0.21
9/21/2020		0.046			0.042	
9/25/2020	0.49					
9/28/2020			0.056	0.071		
11/11/2020	0.45					0.23
11/12/2020					0.042	
12/16/2020	0.52				0.041	0.24
1/20/2021	0.53				0.045	0.25
3/12/2021	0.54	0.047			0.043	0.27
3/15/2021			0.059	0.071		
8/13/2021	0.51					
8/16/2021		0.052	0.06	0.069		
8/19/2021					0.044	0.27
2/1/2022	0.57					
2/2/2022		0.054	0.064	0.072		
2/3/2022					0.043	0.24
8/2/2022	0.64					
8/4/2022		0.048	0.06	0.068	0.037	0.24
1/24/2023	0.57		0.059	0.068		
1/25/2023		0.051			0.042	0.24
8/8/2023	0.59					
8/10/2023		0.045	0.048		0.038	
8/11/2023				0.06		0.22
2/13/2024	0.54					
2/14/2024					0.037	0.23
2/15/2024		0.046	0.047			
2/16/2024				0.054		
8/6/2024	0.5		0.044			

Time Series

Constituent: Barium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/7/2024		0.051		0.064	0.035	0.23

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.0005		<0.003	<0.0005		
7/11/2016	<0.0005		0.0001 (J)			
7/12/2016				<0.0005		
8/30/2016	<0.0005	<0.0005	<0.003	<0.0005		
10/19/2016	<0.0005		0.0001 (J)	<0.0005		
10/20/2016		<0.0005				
12/6/2016	<0.0005		0.0002 (J)	<0.0005		
1/24/2017	<0.0005		0.0001 (J)	<0.0005		
1/25/2017		<0.0005				
3/21/2017	<0.0005		0.0001 (J)	<0.0005		
5/22/2017	<0.0005		0.0001 (J)	<0.0005		
5/25/2017		<0.0005				
8/11/2017		<0.0005				
11/15/2017		<0.0005				
4/2/2018	<0.0005		<0.003			
4/3/2018				<0.0005		
6/5/2018		<0.0005				
10/2/2018		<0.0005				
3/12/2019	<0.0005		0.00017 (J)	<0.0005		
4/1/2019				<0.0005		
4/2/2019	<0.0005		0.00015 (J)			
8/22/2019		<0.0005				
9/23/2019	<0.0005		0.00011 (J)	<0.0005		
3/2/2020	<0.0005		0.00014 (J)	<0.0005		
3/25/2020	<0.0005		0.00016 (J)	<0.0005		
8/24/2020		<0.0005				
8/25/2020			0.00014 (J)	<0.0005		
8/28/2020	<0.0005					
9/15/2020	<0.0005	<0.0005	0.00013 (J)	<0.0005		
9/16/2020					<0.0005	<0.0005
11/10/2020					<0.0005	<0.0005
12/15/2020					<0.0005	<0.0005
1/19/2021					<0.0005	<0.0005
3/10/2021	<0.0005					<0.0005
3/11/2021		<0.0005	8.6E-05 (J)	<0.0005	<0.0005	
8/11/2021	<0.0005				<0.0005	
8/12/2021			0.00014 (J)	<0.0005		
8/13/2021		<0.0005				<0.0005
2/1/2022	<0.0005	<0.0005	0.0002 (J)	<0.0005	<0.0005	<0.0005
8/2/2022	<0.0005	<0.0005	0.00019 (J)	<0.0005	<0.0005	<0.0005
1/23/2023				<0.0005		
1/24/2023	<0.0005	<0.0005	0.00016 (J)		<0.0005	<0.0005
8/8/2023	<0.0005	<0.0005	0.00022 (J)	<0.0005	<0.0005	<0.0005
2/13/2024	<0.0005	<0.0005	0.00022 (J)	<0.0005	<0.0005	<0.0005
8/5/2024	<0.0005		0.00026 (J)	<0.0005		
8/6/2024		<0.0005			<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		<0.0005	<0.0005	<0.0005		
10/26/2016		<0.0005		<0.0005		
11/7/2016			<0.0005			
1/13/2017			<0.0005			
1/27/2017		<0.0005		<0.0005		
5/25/2017		<0.0005		<0.0005		
6/3/2017			<0.0005			
8/11/2017				<0.0005		
10/2/2017		<0.0005	<0.0005			
11/15/2017		<0.0005	<0.0005	<0.0005		
6/5/2018		<0.0005	<0.0005	<0.0005		
10/2/2018		<0.0005		<0.0005		
10/5/2018			<0.0005			
8/22/2019		<0.0005	<0.0005			
8/23/2019				<0.0005		
5/22/2020					<0.0005	<0.0005
6/16/2020					<0.0005	<0.0005
8/25/2020					<0.0005	<0.0005
8/26/2020		<0.0005	<0.0005			
8/27/2020				<0.0005		
9/18/2020						<0.0005
9/21/2020		<0.0005			<0.0005	
9/25/2020	<0.0005					
9/28/2020			<0.0005	<0.0005		
11/11/2020	<0.0005					<0.0005
11/12/2020					<0.0005	
12/16/2020	<0.0005				<0.0005	<0.0005
1/20/2021	<0.0005				<0.0005	<0.0005
3/12/2021	<0.0005	<0.0005			<0.0005	<0.0005
3/15/2021			<0.0005	<0.0005		
8/13/2021	<0.0005					
8/16/2021		<0.0005	<0.0005	<0.0005		
8/19/2021					<0.0005	<0.0005
2/1/2022	<0.0005					
2/2/2022		<0.0005	<0.0005	<0.0005		
2/3/2022					<0.0005	<0.0005
8/2/2022	<0.0005					
8/4/2022		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/24/2023	<0.0005		<0.0005	<0.0005		
1/25/2023		<0.0005			<0.0005	<0.0005
8/8/2023	<0.0005					
8/10/2023		<0.0005	<0.0005		<0.0005	
8/11/2023				<0.0005		<0.0005
2/13/2024	<0.0005					
2/14/2024					<0.0005	<0.0005
2/15/2024		<0.0005	<0.0005			
2/16/2024				<0.0005		
8/6/2024	<0.0005		<0.0005			
8/7/2024		<0.0005		<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	0.0214 (J)		0.0321 (J)	<0.04		
7/11/2016	0.0142 (J)		0.0337 (J)			
7/12/2016				0.0074 (J)		
8/30/2016	0.0074 (J)	0.277	0.0173 (J)	<0.04		
10/19/2016	0.0224 (J)		0.0341 (J)	0.0085 (J)		
10/20/2016		0.336				
12/6/2016	0.0211 (J)		0.0326 (J)	0.0085 (J)		
1/24/2017	0.0165 (J)		0.0365 (J)	0.01 (J)		
1/25/2017		0.274				
3/21/2017	0.0187 (J)		0.0349 (J)	0.0079 (J)		
5/22/2017	0.0782		0.0475	0.0131 (J)		
5/25/2017		0.298				
8/11/2017		0.285				
10/3/2017	0.0198 (J)		0.0386 (J)	0.0097 (J)		
11/15/2017		0.322				
6/4/2018	0.02 (J)		0.036 (J)	0.017 (J)		
6/5/2018		0.24				
10/1/2018	0.013 (J)		0.035 (J)	0.0061 (J)		
10/2/2018		0.28				
4/1/2019				0.0066 (J)		
4/2/2019	0.016 (J)	0.18	0.034 (J)			
6/18/2019		0.25				
9/23/2019	0.021 (J)		0.04 (J)	0.0081 (J)		
10/21/2019		0.25				
3/24/2020		0.1				
3/25/2020	0.025 (J)		0.039 (J)	0.0096 (J)		
6/16/2020	0.021 (J)			0.01 (J)		
9/15/2020	0.017 (J)	0.22	0.044 (J)	0.0071 (J)		
9/16/2020					0.061 (J)	0.23
11/10/2020					0.057 (J)	0.29
12/15/2020					0.052 (J)	0.31
1/19/2021					0.049 (J)	<0.1
3/10/2021	0.015 (J)					0.39
3/11/2021		0.2	0.056	0.015 (J)	0.06	
8/11/2021	0.02 (J)				0.042	
8/12/2021			0.044	<0.04		
8/13/2021		0.19				0.31
2/1/2022	0.016 (J)	0.17	0.056	0.011 (J)	0.05	0.44
8/2/2022	0.012 (J)	0.18	0.047	<0.04	0.043	0.31
1/23/2023				0.012 (J)		
1/24/2023	0.015 (J)	0.17	0.046		0.037 (J)	0.44
8/8/2023	0.023 (J)	0.18	0.06	0.011 (J)	0.038 (J)	0.55
2/13/2024	0.02 (J)	0.15	0.051	<0.04	0.037 (J)	0.49
8/5/2024	0.02 (J)		0.057	<0.04		
8/6/2024		0.15			0.043	0.52

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		0.981	3.23	0.494		
10/26/2016		1.28		0.55		
11/7/2016			2.95			
1/13/2017			4.01			
1/27/2017		1.19		0.428		
5/25/2017		1.33		0.544		
6/3/2017			2.62			
8/11/2017				0.524		
10/2/2017		1.19	2.92			
11/15/2017		1.24	2.71	0.531		
6/5/2018		1.2	2.6	0.53		
10/2/2018		1.2		0.47		
10/5/2018			2.9			
4/2/2019		1.1				
4/3/2019			3	0.45		
6/17/2019		1.1	2.4			
6/18/2019				0.45		
10/21/2019			2.4	0.5		
10/22/2019		1				
3/24/2020				0.44		
3/25/2020		1.1	1.6			
5/22/2020					1.5	0.026 (J)
6/15/2020		1.1				
6/16/2020					1.5	0.023 (J)
8/25/2020					1.4	0.016 (J)
9/18/2020						0.041 (J)
9/21/2020		0.93			1.4	
9/25/2020	0.16					
9/28/2020			2.3	0.43		
11/11/2020	0.17					0.009 (J)
11/12/2020					1.4	
12/16/2020	0.16				1.5	0.011 (J)
1/20/2021	0.19				1.5	<0.1
3/12/2021	0.19	1.1			1.5	0.016 (J)
3/15/2021			1.9	0.4		
8/13/2021	0.15					
8/16/2021		1.1	2	0.44		
8/19/2021					1.5	0.011 (J)
2/1/2022	0.14					
2/2/2022		0.91	1.6	0.33		
2/3/2022					1.6	0.016 (J)
8/2/2022	0.14					
8/4/2022		1	1.8	0.36	1.4	0.023 (J)
1/24/2023	0.14		1.6	0.34		
1/25/2023		0.94			1.4	0.014 (J)
8/8/2023	0.15					
8/10/2023		1	1.7		1.6	
8/11/2023				0.3		0.016 (J)
2/13/2024	0.15					
2/14/2024					1.4	0.019 (J)
2/15/2024		1	1.2			
2/16/2024				0.31		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/6/2024	0.16		1.4			
8/7/2024		1.1		0.34	1.5	0.021 (J)

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.0005		<0.0025	<0.0005		
7/11/2016	<0.0005		<0.0025			
7/12/2016				<0.0005		
8/30/2016	<0.0005	<0.0005	<0.0025	<0.0005		
10/19/2016	<0.0005		<0.0025	<0.0005		
10/20/2016		<0.0005				
12/6/2016	<0.0005		<0.0025	<0.0005		
1/24/2017	<0.0005		0.0001 (J)	<0.0005		
1/25/2017		<0.0005				
3/21/2017	<0.0005		7E-05 (J)	<0.0005		
5/22/2017	<0.0005		0.0001 (J)	<0.0005		
5/25/2017		<0.0005				
8/11/2017		<0.0005				
11/15/2017		<0.0005				
4/2/2018	<0.0005		<0.0025			
4/3/2018				<0.0005		
6/4/2018	<0.0005		0.00014 (J)	<0.0005		
6/5/2018		<0.0005				
10/1/2018	<0.0005		<0.0025	<0.0005		
10/2/2018		<0.0005				
3/12/2019	<0.0005		0.00013 (J)	<0.0005		
4/1/2019				<0.0005		
4/2/2019	<0.0005		0.00015 (J)			
8/22/2019		<0.0005				
9/23/2019	<0.0005		<0.0025	<0.0005		
3/2/2020	<0.0005		<0.0025	<0.0005		
3/25/2020	<0.0005		0.00014 (J)	<0.0005		
8/24/2020		<0.0005				
8/25/2020			<0.0025	<0.0005		
8/28/2020	<0.0005					
9/15/2020	<0.0005		0.00012 (J)	<0.0005		
9/16/2020					<0.0005	<0.0005
11/10/2020					<0.0005	<0.0005
12/15/2020					<0.0005	<0.0005
1/19/2021					<0.0005	<0.0005
8/11/2021	<0.0005				<0.0005	
8/12/2021			0.00014 (J)	<0.0005		
8/13/2021		<0.0005				<0.0005
2/1/2022	<0.0005	<0.0005	0.00017 (J)	<0.0005	<0.0005	<0.0005
8/2/2022	<0.0005	<0.0005	0.00023 (J)	<0.0005	<0.0005	<0.0005
1/23/2023				<0.0005		
1/24/2023	<0.0005	<0.0005	0.00021 (J)		<0.0005	<0.0005
8/8/2023	<0.0005	<0.0005	0.00026 (J)	<0.0005	<0.0005	<0.0005
2/13/2024	<0.0005	<0.0005	0.00027 (J)	<0.0005	<0.0005	<0.0005
8/5/2024	<0.0005		0.00026 (J)	<0.0005		
8/6/2024		<0.0005			<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		<0.0005	<0.0005	<0.0005		
10/26/2016		<0.0005		<0.0005		
11/7/2016			<0.0005			
1/13/2017			<0.0005			
1/27/2017		<0.0005		<0.0005		
5/25/2017		<0.0005		<0.0005		
6/3/2017			<0.0005			
8/11/2017				<0.0005		
10/2/2017		<0.0005	<0.0005			
11/15/2017		<0.0005	<0.0005	<0.0005		
6/5/2018		<0.0005	<0.0005	<0.0005		
10/2/2018		<0.0005		<0.0005		
10/5/2018			<0.0005			
8/22/2019		<0.0005	<0.0005			
8/23/2019				<0.0005		
5/22/2020					<0.0005	<0.0005
6/16/2020					<0.0005	<0.0005
8/25/2020					<0.0005	<0.0005
8/26/2020		<0.0005	<0.0005			
8/27/2020				<0.0005		
9/18/2020						<0.0005
9/21/2020					<0.0005	
9/25/2020	<0.0005					
11/11/2020	<0.0005					<0.0005
11/12/2020					<0.0005	
12/16/2020	<0.0005				<0.0005	<0.0005
1/20/2021	<0.0005				<0.0005	<0.0005
8/13/2021	<0.0005					
8/16/2021		<0.0005	<0.0005	<0.0005		
8/19/2021					<0.0005	<0.0005
2/1/2022	<0.0005					
2/2/2022		<0.0005	<0.0005	<0.0005		
2/3/2022					<0.0005	<0.0005
8/2/2022	<0.0005					
8/4/2022		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/24/2023	<0.0005		<0.0005	<0.0005		
1/25/2023		<0.0005			<0.0005	<0.0005
8/8/2023	<0.0005					
8/10/2023		<0.0005	<0.0005		<0.0005	
8/11/2023				<0.0005		<0.0005
2/13/2024	<0.0005					
2/14/2024					<0.0005	<0.0005
2/15/2024		<0.0005	<0.0005			
2/16/2024				<0.0005		
8/6/2024	<0.0005		<0.0005			
8/7/2024		<0.0005		<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	138		22.9	76.2		
7/11/2016	97.2		22.3			
7/12/2016				61.5		
8/30/2016	97.5	71.3	26.4	65.1		
10/19/2016	99.2		21.7	73.2		
10/20/2016		90.3				
12/6/2016	105		18.2	74.9		
1/24/2017	95.7		18.5	69.6		
1/25/2017		77.3				
3/21/2017	106		18.6	75.7		
5/22/2017	107		17.8	71.5		
5/25/2017		69.9				
8/11/2017		79.5				
10/3/2017	102		20.2	76.3		
11/15/2017		72.8				
6/4/2018	124		19.1	73.4		
6/5/2018		71.4				
10/1/2018	108		20.5 (J)	80.9		
10/2/2018		66.6				
4/1/2019				80.5		
4/2/2019	132	60.9	22.5 (J)			
6/18/2019		75				
9/23/2019	118		19.5	71		
10/21/2019		80.8				
3/24/2020		81.2				
3/25/2020	127		23	89.8		
6/16/2020	130			85.1		
9/15/2020	103	75.8	21.1	73.1		
9/16/2020					56	30
11/10/2020					63.3	33.6
12/15/2020					62.6	28.7
1/19/2021					60.1	33
3/10/2021	111					18.3
3/11/2021		60.4 (M1)	43.8	83.8	59.6	
8/11/2021	113				61	
8/12/2021			21.9	84		
8/13/2021		62.9				28.9
2/1/2022	106	57.5	27.2	85.1	55.9	24.8
8/2/2022	117	69.5	31.2	84.6	54.1	20.9
1/23/2023				85		
1/24/2023	117	63.3	29.4		56.6	13.2
8/8/2023	118	64.4	30.7	78.3	52.8	8.1
2/13/2024	116	61.9	38.8	83.6	53.3	9.9
8/5/2024	113		34.7	83.3		
8/6/2024		73.7			57.2	7.1

Time Series

Constituent: Calcium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		152	178	90.4		
10/26/2016		156		94.5		
11/7/2016			170			
1/13/2017			192			
1/27/2017		157		84.2		
5/25/2017		173		100		
6/3/2017			172			
8/11/2017				99.1		
10/2/2017		168	195			
11/15/2017		182	184	103		
6/5/2018		161	195	103		
10/2/2018		174		100		
10/5/2018			181			
4/2/2019		150				
4/3/2019			184	96.7		
6/17/2019		164	173			
6/18/2019				97.1		
10/21/2019			173	96.9		
10/22/2019		171				
3/24/2020				104		
3/25/2020		170	139			
5/22/2020					140	112
6/15/2020		175				
6/16/2020					178	131
8/25/2020					186	130
9/18/2020						119
9/21/2020		152			155	
9/25/2020	56.8					
9/28/2020			167	107		
11/11/2020	54.9					133
11/12/2020					165	
12/16/2020	56.4				194	132
1/20/2021	55				177 (M1)	131
3/12/2021	56.5	174			165	138
3/15/2021			167	103		
8/13/2021	53					
8/16/2021		171	162	106		
8/19/2021					196	139
2/1/2022	51.3					
2/2/2022		159	148	95.9		
2/3/2022					175	157
8/2/2022	49.9					
8/4/2022		173	160	103	170	141
1/24/2023	53.9		156	96.2		
1/25/2023		161			174	132
8/8/2023	48.1					
8/10/2023		171	149		173	
8/11/2023				97.8		131
2/13/2024	50.7					
2/14/2024					180	137
2/15/2024		165	143			
2/16/2024				89.2		

Time Series

Constituent: Calcium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/6/2024	53.3		152			
8/7/2024		154		97.7	159	136

Time Series

Constituent: Chloride (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	9.94		6.14	5.93		
7/11/2016	6.3		5.9			
7/12/2016				6.2		
8/30/2016	6	2.8	6.2	6.4		
10/19/2016	5.8		6.1	6.5		
10/20/2016		2.8				
12/6/2016	5.4		6	7.2		
1/24/2017	5.2		6.1	6.4		
1/25/2017		2.8				
3/21/2017	4.6		5.9	7.5		
5/22/2017	4.6		5.9	6.5		
5/25/2017		2.9				
8/11/2017		3				
10/3/2017	5.6		6.3	6.5		
11/15/2017		3.1				
6/4/2018	13.1		6.1	6.3		
6/5/2018		3				
10/1/2018	6.6		6.4	6.4		
10/2/2018		3.1				
4/1/2019				6.5		
4/2/2019	20.3	3.6	5.8			
6/18/2019		3.2				
9/23/2019	17.7		5.1	5.9		
10/21/2019		4.5				
3/24/2020		4.5				
3/25/2020	20.4		5.2	6.1		
6/16/2020	41.1			5.8		
9/15/2020	13.4	3.6	5	6		
9/16/2020					4.1	4.1
11/10/2020					4.4	7.8
12/15/2020					4.7	9.4
1/19/2021					4.1	9.5
3/10/2021	7.4					12.3
3/11/2021		2.3	5.1	5.9	4.5	
8/11/2021	9.6				3.5	
8/12/2021			5.2	4.8		
8/13/2021		2.6				39.9
2/1/2022	7.5	2.2	7	5.7	4.1	44.8
8/2/2022	14.1	2.7	7.8	5.9	4.3	19.8
1/23/2023				5.6		
1/24/2023	9	2.4	7.1		4.3	24.9
8/8/2023	26	2.2	6.6	5.3	3.5	27
2/13/2024	10	2.4	6.3	5.3	3.9	27.7
8/5/2024	8.7		7.9	5.2		
8/6/2024		2.1			4	30.2

Time Series

Constituent: Chloride (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		3.5	64	3		
10/26/2016		3.6		3.6		
11/7/2016			65			
1/13/2017			50			
1/27/2017		3.3		4		
5/25/2017		3.4		3.5		
6/3/2017			43			
8/11/2017				2.9		
10/2/2017		4.2	42			
11/15/2017		2.9	46	3.1		
6/5/2018		3.1	40.4	3.1		
10/2/2018		3.2		3.4		
10/5/2018			39			
4/2/2019		3.1				
4/3/2019			35.9	3.4		
6/17/2019			32.9			
6/18/2019				2.3 (J)		
10/21/2019			29.9	3.6		
10/22/2019		3.4				
3/24/2020				2.7		
3/25/2020		2.4	16.3			
5/22/2020					12.9	8.6
6/15/2020		2.3				
6/16/2020					10.4	8.6
8/25/2020					10.6	8.7
9/18/2020						8.4
9/21/2020		2.4			12.1	
9/25/2020	3.6					
9/28/2020			23.2	2.5		
11/11/2020	3.3					8.3
11/12/2020					10.4	
12/16/2020	3.4				5.3	8.9
1/20/2021	3.5				10.2	8.5
3/12/2021	3.3	2.4			10.8	8.5
3/15/2021			21.8	2.9		
8/13/2021	3.3					
8/16/2021		2.4	18	2.6		
8/19/2021					4.5	7.8
2/1/2022	3.5					
2/2/2022		2.5	16.8	2.6		
2/3/2022					8.1	8.5
8/2/2022	3.9					
8/4/2022		2.7	15.4	2.6	11.6	8.7
1/24/2023	3.5		14.6	2.5		
1/25/2023		2.6			8.7	8.7
8/8/2023	3.6					
8/10/2023		2.6	12.2		9	
8/11/2023				2.1		8.1
2/13/2024	3.4					
2/14/2024					3.5	8.4
2/15/2024		2.5	9.4			
2/16/2024				2.2		

Time Series

Constituent: Chloride (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/6/2024	3.6		11.6			
8/7/2024		2.6		2.2	9.7	8.7

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.005		<0.005	<0.005		
7/11/2016	<0.005		<0.005			
7/12/2016				<0.005		
8/30/2016	<0.005	<0.005	<0.005	<0.005		
10/19/2016	<0.005		<0.005	<0.005		
10/20/2016		<0.005				
12/6/2016	<0.005		<0.005	<0.005		
1/24/2017	<0.005		<0.005	<0.005		
1/25/2017		<0.005				
3/21/2017	0.0005 (J)		<0.005	<0.005		
5/22/2017	<0.005		<0.005	0.0007 (J)		
5/25/2017		0.0006 (J)				
8/11/2017		0.0007 (J)				
11/15/2017		0.0006 (J)				
4/2/2018	<0.005		<0.005			
4/3/2018				<0.005		
6/5/2018		<0.005				
10/2/2018		<0.005				
3/12/2019	<0.005		<0.005	<0.005		
4/1/2019				<0.005		
4/2/2019	<0.005		0.0079 (J)			
8/22/2019		0.0006 (J)				
9/23/2019	<0.005		0.00058 (J)	<0.005		
10/21/2019		0.00068 (J)				
3/2/2020	<0.005		0.00041 (J)	<0.005		
3/24/2020		0.0013 (J)				
3/25/2020	0.00072 (J)		<0.005	<0.005		
8/24/2020		0.00093 (J)				
8/25/2020			0.00067 (J)	<0.005		
8/28/2020	<0.005					
9/15/2020	<0.005	0.00067 (J)	<0.005	<0.005		
9/16/2020					<0.005	0.0012 (J)
11/10/2020					<0.005	0.00089 (J)
12/15/2020					<0.005	0.00072 (J)
1/19/2021					<0.005	<0.005
3/10/2021	<0.005					<0.005
3/11/2021		0.0017 (J)	<0.005	<0.005	<0.005	
8/11/2021	<0.005				<0.005	
8/12/2021			<0.005	<0.005		
8/13/2021		<0.005				0.0016 (J)
2/1/2022	<0.005	<0.005	<0.005	<0.005	<0.005	0.0013 (J)
8/2/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/23/2023				<0.005		
1/24/2023	<0.005	<0.005	<0.005		<0.005	<0.005
8/8/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/13/2024	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/5/2024	<0.005		<0.005	<0.005		
8/6/2024		<0.005			<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		<0.005	<0.005	<0.005		
10/26/2016		<0.005		<0.005		
11/7/2016			<0.005			
1/13/2017			<0.005			
1/27/2017		<0.005		<0.005		
5/25/2017		<0.005		<0.005		
6/3/2017			<0.005			
8/11/2017				<0.005		
10/2/2017		<0.005	<0.005			
11/15/2017		<0.005	<0.005	<0.005		
6/5/2018		<0.005	<0.005	<0.005		
10/2/2018		<0.005		<0.005		
10/5/2018			<0.005			
8/22/2019		0.00072 (J)	<0.005			
8/23/2019				<0.005		
10/21/2019			<0.005	0.00046 (J)		
10/22/2019		<0.005				
3/24/2020				0.00051 (J)		
3/25/2020		0.0015 (J)	0.0005 (J)			
5/22/2020					0.00058 (J)	<0.005
6/16/2020					0.00052 (J)	<0.005
8/25/2020					<0.005	0.00096 (J)
8/26/2020		<0.005	<0.005			
8/27/2020				<0.005		
9/18/2020						<0.005
9/21/2020		0.00065 (J)			<0.005	
9/25/2020	<0.005					
9/28/2020			<0.005	<0.005		
11/11/2020	<0.005					<0.005
11/12/2020					<0.005	
12/16/2020	<0.005				<0.005	<0.005
1/20/2021	0.00067 (J)				0.00081 (J)	<0.005
3/12/2021	<0.005	<0.005			<0.005	<0.005
3/15/2021			<0.005	<0.005		
8/13/2021	<0.005					
8/16/2021		<0.005	<0.005	<0.005		
8/19/2021					<0.005	<0.005
2/1/2022	<0.005					
2/2/2022		<0.005	<0.005	<0.005		
2/3/2022					<0.005	<0.005
8/2/2022	<0.005					
8/4/2022		<0.005	<0.005	<0.005	<0.005	<0.005
1/24/2023	<0.005		<0.005	<0.005		
1/25/2023		<0.005			<0.005	0.0014 (J)
8/8/2023	<0.005					
8/10/2023		<0.005	<0.005		<0.005	
8/11/2023				<0.005		<0.005
2/13/2024	<0.005					
2/14/2024					<0.005	<0.005
2/15/2024		<0.005	<0.005			
2/16/2024				<0.005		
8/6/2024	<0.005		<0.005			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/7/2024		<0.005		<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.005		0.0293	<0.005		
7/11/2016	0.0004 (J)		0.0267			
7/12/2016				<0.005		
8/30/2016	<0.005	<0.005	0.028	<0.005		
10/19/2016	<0.005		0.0201	<0.005		
10/20/2016		<0.005				
12/6/2016	<0.005		0.0184	<0.005		
1/24/2017	<0.005		0.0206	<0.005		
1/25/2017		<0.005				
3/21/2017	<0.005		0.0251	<0.005		
5/22/2017	<0.005		0.0263	<0.005		
5/25/2017		<0.005				
8/11/2017		<0.005				
11/15/2017		<0.005				
4/2/2018	<0.005		0.019			
4/3/2018				<0.005		
6/4/2018	<0.005		0.025	<0.005		
6/5/2018		<0.005				
10/1/2018	<0.005		0.026	<0.005		
10/2/2018		<0.005				
3/12/2019	<0.005		0.017	<0.005		
4/1/2019				<0.005		
4/2/2019	<0.005		0.019			
8/22/2019		<0.005				
9/23/2019	<0.005		0.038	<0.005		
10/21/2019		<0.005				
3/2/2020	<0.005		0.019	<0.005		
3/24/2020		<0.005				
3/25/2020	<0.005		0.02	<0.005		
8/24/2020		<0.005				
8/25/2020			0.018	<0.005		
8/28/2020	<0.005					
9/15/2020	<0.005	<0.005	0.021	<0.005		
9/16/2020					<0.005	<0.005
11/10/2020					<0.005	<0.005
12/15/2020					<0.005	<0.005
1/19/2021					<0.005	<0.005
3/10/2021	<0.005					<0.005
3/11/2021		<0.005	0.013	<0.005	<0.005	
8/11/2021	<0.005				<0.005	
8/12/2021			0.022	<0.005		
8/13/2021		<0.005				<0.005
2/1/2022	<0.005	<0.005	0.025	<0.005	<0.005	<0.005
8/2/2022	0.00054 (J)	<0.005	0.024	<0.005	<0.005	<0.005
1/23/2023				<0.005		
1/24/2023	<0.005	<0.005	0.024		<0.005	<0.005
8/8/2023	0.0008 (J)	<0.005	0.029	<0.005	<0.005	<0.005
2/13/2024	<0.005	<0.005	0.022	<0.005	<0.005	<0.005
8/5/2024	0.00055 (J)		0.032	<0.005		
8/6/2024		<0.005			<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		0.0052 (J)	<0.005	<0.005		
10/26/2016		0.0041 (J)		<0.005		
11/7/2016			<0.005			
1/13/2017			<0.005			
1/27/2017		0.0034 (J)		<0.005		
5/25/2017		0.0035 (J)		<0.005		
6/3/2017			0.0005 (J)			
8/11/2017				<0.005		
10/2/2017		0.0036 (J)	0.0003 (J)			
11/15/2017		0.0032 (J)	0.0003 (J)	<0.005		
6/5/2018		0.0031 (J)	<0.005	<0.005		
10/2/2018		0.0025 (J)		<0.005		
10/5/2018			<0.005			
8/22/2019		0.0028 (J)	<0.005			
8/23/2019				<0.005		
10/21/2019			<0.005	<0.005		
10/22/2019		0.0031 (J)				
3/24/2020				<0.005		
3/25/2020		0.0036 (J)	<0.005			
5/22/2020					0.01	<0.005
6/16/2020					0.0096	<0.005
8/25/2020					0.0087	<0.005
8/26/2020		0.0023 (J)	<0.005			
8/27/2020				<0.005		
9/18/2020						<0.005
9/21/2020		0.0041 (J)			0.012	
9/25/2020	<0.005					
9/28/2020			<0.005	<0.005		
11/11/2020	<0.005					<0.005
11/12/2020					0.012	
12/16/2020	<0.005				0.0055	<0.005
1/20/2021	<0.005				0.012	<0.005
3/12/2021	<0.005	0.0027 (J)			0.014	<0.005
3/15/2021			<0.005	<0.005		
8/13/2021	<0.005					
8/16/2021		0.0037 (J)	<0.005	<0.005		
8/19/2021					0.0054	<0.005
2/1/2022	<0.005					
2/2/2022		0.0072	<0.005	<0.005		
2/3/2022					0.0086	<0.005
8/2/2022	<0.005					
8/4/2022		0.0058	<0.005	<0.005	0.014	<0.005
1/24/2023	<0.005		<0.005	<0.005		
1/25/2023		0.0055			0.0097	<0.005
8/8/2023	<0.005					
8/10/2023		0.0048 (J)	<0.005		0.012	
8/11/2023				<0.005		<0.005
2/13/2024	<0.005					
2/14/2024					0.004 (J)	<0.005
2/15/2024		0.005 (J)	<0.005			
2/16/2024				<0.005		
8/6/2024	<0.005		<0.005			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/7/2024		0.0064		<0.005	0.012	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	0.397 (U)		0.627 (U)	0.342 (U)		
7/11/2016	0.738 (U)		1.38			
7/12/2016				0.499 (U)		
8/30/2016	0.581 (U)	0.972 (U)	1.05 (U)	0.976 (U)		
10/19/2016	0.213 (U)		1.11 (U)	0.626 (U)		
10/20/2016		0.496 (U)				
12/6/2016	0.444 (U)		0.741 (U)	0.805 (U)		
1/24/2017	0.373 (U)		0.908 (U)	0.336 (U)		
1/25/2017		1.13 (U)				
3/21/2017	0.816 (U)		0.567 (U)	0.358 (U)		
5/22/2017	0.554 (U)		0.638 (U)	0.744 (U)		
5/25/2017		0.192 (U)				
8/11/2017		0.908 (U)				
11/15/2017		0.662 (U)				
4/2/2018	0.405 (U)		0.761 (U)			
4/3/2018				0.684 (U)		
6/4/2018	1.13 (U)		0.975 (U)	0.0291 (U)		
6/5/2018		0.593 (U)				
10/1/2018	0.132 (U)		0.434 (U)	0.781 (U)		
10/2/2018		1.37				
3/12/2019	0.327 (U)		0.454 (U)	1.01 (U)		
4/1/2019				0.76 (U)		
4/2/2019	0.739 (U)		0.651 (U)			
8/22/2019		1.19 (U)				
9/30/2019	0.306 (U)		1.04 (U)	0.384 (U)		
10/21/2019		0.772 (U)				
3/2/2020	0.61 (U)		1.58	0.249 (U)		
3/24/2020		0.379 (U)				
3/25/2020	4.36		0.621 (U)	0.833 (U)		
8/24/2020		0.883 (U)				
8/25/2020			0.778 (U)	0.33 (U)		
8/28/2020	0 (U)					
9/15/2020	0.748 (U)	0.375 (U)	0.124 (U)	0.161 (U)		
9/16/2020					0.531 (U)	0.422 (U)
11/10/2020					0.788 (U)	0.293 (U)
12/15/2020					1.04 (U)	0.7 (U)
1/19/2021					0.685 (U)	0.79 (U)
8/11/2021	0.115 (U)				0.394 (U)	
8/12/2021			0.746 (U)	0.498 (U)		
8/13/2021		0.914 (U)				0.959 (U)
2/1/2022	0.143 (U)	0.276 (U)	0.588 (U)	0.266 (U)	1.12	0.665 (U)
8/2/2022	0.203 (U)	0.573 (U)	0.861 (U)	0.4 (U)	0.662 (U)	0.952 (U)
1/23/2023				0.311 (U)		
1/24/2023	0.549 (U)	0.442 (U)	0.829 (U)		1.25	0.421 (U)
8/8/2023	0.195 (U)	0.892 (U)	0.175 (U)	0.411 (U)	0.503 (U)	0.163 (U)
2/13/2024	0.194 (U)		0.325 (U)	0.213 (U)	0.86 (U)	0.909
5/3/2024		0.636 (U)				
8/5/2024	0.64 (U)		1.27	0.371 (U)		
8/6/2024		0.661 (U)			0.674 (U)	0.529 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		1.47	1.57	1.22		
10/26/2016		0.864 (U)		0.637 (U)		
11/7/2016			0.739 (U)			
1/13/2017			0.744 (U)			
1/27/2017		0.521 (U)		0.795 (U)		
5/25/2017		0.681 (U)		0.896 (U)		
6/3/2017			0 (U)			
8/11/2017				0.828 (U)		
10/2/2017		0.632 (U)	0.68 (U)			
11/15/2017		1.3	0.911 (U)	0.478 (U)		
6/5/2018		1.26 (U)	0.948 (U)	0.947 (U)		
10/2/2018		0.572 (U)		0.617 (U)		
10/5/2018			1.17 (U)			
8/22/2019		1.35	1.3			
8/23/2019				0.834		
10/21/2019			0.393 (U)	1.11 (U)		
10/22/2019		0.76 (U)				
3/24/2020				0.796 (U)		
3/25/2020		0.696 (U)	0.505 (U)			
5/22/2020					1.1 (U)	1.82
6/16/2020					1.62	1.82
8/25/2020					1.65	1.82
8/26/2020		0.357 (U)	1.96			
8/27/2020				0.494 (U)		
9/18/2020						0.841 (U)
9/21/2020		0.553 (U)			1.45	
9/25/2020	1.07 (U)					
9/28/2020			0.761 (U)	0.477 (U)		
11/11/2020	0.49 (U)					0.837 (U)
11/12/2020					0.633 (U)	
12/16/2020	0.963 (U)				0.818 (U)	1.26 (U)
1/20/2021	0.682 (U)				1.01 (U)	0.985 (U)
8/13/2021	1.2					
8/16/2021		1.25	0.192 (U)	0.734 (U)		
8/19/2021					0.721 (U)	1.11
2/1/2022	0.895					
2/2/2022		0.816 (U)	0.254 (U)	0.564 (U)		
2/3/2022					0.257 (U)	1.51
8/2/2022	0.509 (U)					
8/4/2022		0.687 (U)	1.16 (U)	0.16 (U)	0.971 (U)	1.34 (U)
1/24/2023	0.743 (U)		0.757 (U)	0.601 (U)		
1/25/2023		0.992			1.11	1.91
8/8/2023	1.54					
8/10/2023		0.682 (U)	0.585 (U)		0.953 (U)	
8/11/2023				0.449 (U)		1.34
2/13/2024	3.15					
2/14/2024					0.275 (U)	1.01 (U)
2/15/2024		0.669 (U)	0.0885 (U)			
2/16/2024				0.448 (U)		
8/6/2024	1.76		1.27			
8/7/2024		0.679 (U)		0.422 (U)	0.603 (U)	0.662 (U)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	0.105 (J)		0.0303 (J)	0.0513 (J)		
7/11/2016	0.16 (J)		0.05 (J)			
7/12/2016				0.12 (J)		
8/30/2016	0.09 (J)	0.19 (J)	0.06 (J)	0.09 (J)		
10/19/2016	0.1 (J)		0.04 (J)	0.1 (J)		
10/20/2016		0.13 (J)				
12/6/2016	0.11 (J)		0.36	0.21 (J)		
1/24/2017	0.09 (J)		<0.1	0.06 (J)		
1/25/2017		0.22 (J)				
3/21/2017	0.13 (J)		<0.1	0.005 (J)		
5/22/2017	0.12 (J)		<0.1	0.05 (J)		
5/25/2017		0.12 (J)				
8/11/2017		0.12 (J)				
10/3/2017	0.13 (J)		<0.1	0.13 (J)		
11/15/2017		0.05 (J)				
4/2/2018	<0.3		<0.1			
4/3/2018				<0.1		
6/4/2018	0.074 (J)		<0.1	<0.1		
6/5/2018		0.15 (J)				
10/1/2018	<0.3		<0.1	<0.1		
10/2/2018		0.22 (J)				
3/12/2019	0.29 (J)		0.038 (J)	0.072 (J)		
4/1/2019				0.029 (J)		
4/2/2019	0.1 (J)	0.2 (J)	0.071 (J)			
6/18/2019		0.14 (J)				
8/22/2019		0.12 (J)				
9/23/2019	0.078 (J)		<0.1	<0.1		
10/21/2019		0.15 (J)				
3/2/2020	0.076 (J)		<0.1	<0.1		
3/24/2020		0.085 (J)				
3/25/2020	0.098 (J)		<0.1	<0.1		
6/16/2020	0.071 (J)			<0.1		
8/24/2020		0.075 (J)				
8/25/2020			<0.1	<0.1		
8/28/2020	0.08 (J)					
9/15/2020	0.082 (J)	0.096 (J)	<0.1	<0.1		
9/16/2020					0.22	0.22
11/10/2020					0.19	0.59
12/15/2020					0.21	0.67
1/19/2021					0.16	0.74
3/10/2021	0.079 (J)					0.65
3/11/2021		0.059 (J)	0.1	<0.1	0.2	
8/11/2021	0.058 (J)				0.15	
8/12/2021			<0.1	<0.1		
8/13/2021		0.065 (J)				0.87
2/1/2022	0.064 (J)	0.062 (J)	<0.1	<0.1	0.19	0.96
8/2/2022	0.09 (J)	0.1	0.053 (J)	0.067 (J)	0.22	0.8
1/23/2023				0.061 (J)		
1/24/2023	0.089 (J)	0.13	0.053 (J)		0.23	1.3
8/8/2023	0.088 (J)	0.091 (J)	0.07 (J)	0.055 (J)	0.18	1.3
2/13/2024	0.071 (J)	0.081 (J)	0.17	<0.1	0.2	1.5
8/5/2024	0.11		0.12	0.077 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
8/6/2024		0.14			0.21	1.3

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		0.65	0.14 (J)	0.15 (J)		
10/26/2016		0.6		0.3		
11/7/2016			0.18 (J)			
1/13/2017			0.14 (J)			
1/27/2017		1.2		0.3		
5/25/2017		1.4		0.05 (J)		
6/3/2017			0.15 (J)			
8/11/2017				0.1 (J)		
10/2/2017		1	1.2			
11/15/2017		1.3	0.6	<0.1		
6/5/2018		0.48	0.19 (J)	0.078 (J)		
10/2/2018		0.34		0.078 (J)		
10/5/2018			0.23 (J)			
4/2/2019		0.47				
4/3/2019			0.14 (J)	0.089 (J)		
6/17/2019		1.2				
8/22/2019		0.3 (J)	0.2 (J)			
8/23/2019				0.11 (J)		
10/21/2019			0.18 (J)	0.073 (J)		
10/22/2019		0.53				
3/24/2020				<0.1		
3/25/2020		0.43	0.095 (J)			
5/22/2020					0.1 (J)	0.46
6/15/2020		0.37				
6/16/2020					0.12	0.44
8/25/2020					0.16	0.52
8/26/2020		0.48	0.16			
8/27/2020				<0.1		
9/18/2020						0.43
9/21/2020		0.33			0.11	
9/25/2020	0.21					
9/28/2020			0.15	<0.1		
11/11/2020	0.19					0.45
11/12/2020					0.12	
12/16/2020	0.18				0.2	0.49
1/20/2021	0.22				0.13	0.44
3/12/2021	0.2	0.42			0.12	0.46
3/15/2021			0.16	<0.1		
8/13/2021	0.2					
8/16/2021		0.39	0.15	<0.1		
8/19/2021					0.17	0.43
2/1/2022	0.15					
2/2/2022		0.36	0.15	<0.1		
2/3/2022					0.18	0.51
8/2/2022	0.21					
8/4/2022		0.38	0.18	0.074 (J)	0.15	0.5
1/24/2023	0.19		0.18	0.068 (J)		
1/25/2023		0.42			0.17	0.57
8/8/2023	0.19					
8/10/2023		0.36	0.18		0.15	
8/11/2023				<0.1		0.49
2/13/2024	0.17					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
2/14/2024					0.2	0.49
2/15/2024		0.35	0.18			
2/16/2024				<0.1		
8/6/2024	0.2		0.2			
8/7/2024		0.34		<0.1	0.12	0.5

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.001		<0.001	<0.001		
7/11/2016	<0.001		<0.001			
7/12/2016				0.0001 (J)		
8/30/2016	<0.001	<0.001	<0.001	<0.001		
10/19/2016	<0.001		<0.001	<0.001		
10/20/2016		<0.001				
12/6/2016	<0.001		<0.001	<0.001		
1/24/2017	<0.001		<0.001	<0.001		
1/25/2017		<0.001				
3/21/2017	<0.001		6E-05 (J)	0.0001 (J)		
5/22/2017	<0.001		9E-05 (J)	<0.001		
5/25/2017		<0.001				
8/11/2017		0.0001 (J)				
11/15/2017		0.0002 (J)				
4/2/2018	<0.001		<0.001			
4/3/2018				<0.001		
6/5/2018		<0.001				
10/2/2018		<0.001				
3/12/2019	<0.001		<0.001	<0.001		
4/1/2019				<0.001		
4/2/2019	<0.001		<0.001			
8/22/2019		<0.001				
9/23/2019	7.8E-05 (J)		9.2E-05 (J)	<0.001		
10/21/2019		9.7E-05 (J)				
3/2/2020	4.8E-05 (J)		9.5E-05 (J)	<0.001		
3/24/2020		0.00012 (J)				
3/25/2020	<0.001		0.00011 (J)	<0.001		
8/24/2020		7.7E-05 (J)				
8/25/2020			8.5E-05 (J)	<0.001		
8/28/2020	7E-05 (J)					
9/15/2020	<0.001	4.3E-05 (J)	8E-05 (J)	4.2E-05 (J)		
9/16/2020					5E-05 (J)	0.00021 (J)
11/10/2020					6.9E-05 (J)	0.0002 (J)
12/15/2020					8.2E-05 (J)	0.00011 (J)
1/19/2021					4.4E-05 (J)	<0.001
3/10/2021	<0.001					<0.001
3/11/2021		9.3E-05 (J)	7.6E-05 (J)	<0.001	9.4E-05 (J)	
8/11/2021	<0.001				<0.001	
8/12/2021			<0.001	<0.001		
8/13/2021		<0.001				<0.001
2/1/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/2/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/23/2023				<0.001		
1/24/2023	<0.001	<0.001	<0.001		<0.001	<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/13/2024	<0.001	<0.001	0.00018 (J)	<0.001	<0.001	<0.001
8/5/2024	<0.001		<0.001	<0.001		
8/6/2024		<0.001			<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		<0.001	<0.001	<0.001		
10/26/2016		0.0002 (J)		<0.001		
11/7/2016			<0.001			
1/13/2017			<0.001			
1/27/2017		<0.001		<0.001		
5/25/2017		9E-05 (J)		<0.001		
6/3/2017			7E-05 (J)			
8/11/2017				8E-05 (J)		
10/2/2017		8E-05 (J)	<0.001			
11/15/2017		<0.001	<0.001	<0.001		
6/5/2018		<0.001	0.00036 (J)	<0.001		
10/2/2018		<0.001		<0.001		
10/5/2018			<0.001			
8/22/2019		<0.001	<0.001			
8/23/2019				4.9E-05 (J)		
10/21/2019			<0.001	4.9E-05 (J)		
10/22/2019		<0.001				
3/24/2020				9.4E-05 (J)		
3/25/2020		<0.001	<0.001			
5/22/2020					0.00014 (J)	<0.001
6/16/2020					0.00013 (J)	<0.001
8/25/2020					<0.001	4.5E-05 (J)
8/26/2020		<0.001	<0.001			
8/27/2020				<0.001		
9/18/2020						<0.001
9/21/2020		<0.001			<0.001	
9/25/2020	<0.001					
9/28/2020			<0.001	7.5E-05 (J)		
11/11/2020	4E-05 (J)					4.2E-05 (J)
11/12/2020					4.7E-05 (J)	
12/16/2020	5.8E-05 (J)				<0.001	<0.001
1/20/2021	8.2E-05 (J)				9.2E-05 (J)	<0.001
3/12/2021	5.5E-05 (J)	<0.001			4.4E-05 (J)	4.6E-05 (J)
3/15/2021			0.00015 (J)	<0.001		
8/13/2021	<0.001					
8/16/2021		<0.001	<0.001	<0.001		
8/19/2021					<0.001	<0.001
2/1/2022	<0.001					
2/2/2022		<0.001	<0.001	<0.001		
2/3/2022					<0.001	<0.001
8/2/2022	<0.001					
8/4/2022		<0.001	<0.001	<0.001	<0.001	<0.001
1/24/2023	<0.001		<0.001	<0.001		
1/25/2023		<0.001			<0.001	<0.001
8/8/2023	<0.001					
8/10/2023		<0.001	<0.001		<0.001	
8/11/2023				<0.001		<0.001
2/13/2024	<0.001					
2/14/2024					<0.001	<0.001
2/15/2024		<0.001	<0.001			
2/16/2024				<0.001		
8/6/2024	<0.001		<0.001			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/7/2024		<0.001		<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.03		<0.03	<0.03		
7/11/2016	<0.03		0.0014 (J)			
7/12/2016				0.0024 (J)		
8/30/2016	<0.03	<0.03	<0.03	0.0025 (J)		
10/19/2016	<0.03		<0.03	0.003 (J)		
10/20/2016		<0.03				
12/6/2016	<0.03		<0.03	0.0033 (J)		
1/24/2017	<0.03		<0.03	0.003 (J)		
1/25/2017		<0.03				
3/21/2017	<0.03		0.0012 (J)	0.0034 (J)		
5/22/2017	<0.03		<0.03	0.003 (J)		
5/25/2017		<0.03				
8/11/2017		<0.03				
11/15/2017		<0.03				
4/2/2018	<0.03		0.0015 (J)			
4/3/2018				0.003 (J)		
6/4/2018	0.001 (J)		0.0016 (J)	0.0027 (J)		
6/5/2018		<0.03				
10/1/2018	0.00099 (J)		0.0013 (J)	0.0032 (J)		
10/2/2018		<0.03				
3/12/2019	0.001 (J)		0.0018 (J)	0.0032 (J)		
4/1/2019				0.0032 (J)		
4/2/2019	0.001 (J)		0.0018 (J)			
8/22/2019		<0.03				
9/23/2019	0.0011 (J)		0.0016 (J)	0.0029 (J)		
10/21/2019		<0.03				
3/2/2020	0.0012 (J)		0.0017 (J)	0.0037 (J)		
3/24/2020		<0.03				
3/25/2020	0.00083 (J)		0.0017 (J)	0.0035 (J)		
8/24/2020		<0.03				
8/25/2020			0.0015 (J)	0.0027 (J)		
8/28/2020	0.00087 (J)					
9/15/2020	0.00087 (J)	<0.03	0.0015 (J)	0.0026 (J)		
9/16/2020					0.0018 (J)	0.014 (J)
11/10/2020					0.0013 (J)	0.025 (J)
12/15/2020					0.0019 (J)	0.028 (J)
1/19/2021					0.0025 (J)	<0.03
3/10/2021	0.0009 (J)					0.03
3/11/2021		<0.03	0.0011 (J)	0.0035 (J)	0.0022 (J)	
8/11/2021	0.00078 (J)				0.0024 (J)	
8/12/2021			0.0012 (J)	0.0028 (J)		
8/13/2021		<0.03				0.032
2/1/2022	0.0011 (J)	<0.03	0.0017 (J)	0.0037 (J)	0.0024 (J)	0.048
8/2/2022	<0.03	<0.03	0.0013 (J)	0.003 (J)	0.0019 (J)	0.041
1/23/2023				0.003 (J)		
1/24/2023	0.00092 (J)	<0.03	0.0014 (J)		0.002 (J)	0.064
8/8/2023	<0.03	<0.03	0.0017 (J)	0.0031 (J)	0.0021 (J)	0.092 (o)
2/13/2024	<0.03	<0.03	0.0017 (J)	0.0034 (J)	0.0024 (J)	0.088 (o)
8/5/2024	<0.03		0.0019 (J)	0.0034 (J)		
8/6/2024		<0.03			0.0025 (J)	0.1 (o)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		0.0333 (J)	0.0077 (J)	<0.03		
10/26/2016		0.0352 (J)		<0.03		
11/7/2016			0.0089 (J)			
1/13/2017			0.0091 (J)			
1/27/2017		0.0329 (J)		<0.03		
5/25/2017		0.0347 (J)		0.0011 (J)		
6/3/2017			0.0104 (J)			
8/11/2017				<0.03		
10/2/2017		0.0337 (J)	0.0095 (J)			
11/15/2017		0.0347 (J)	0.0086 (J)	<0.03		
6/5/2018		0.033 (J)	0.0092 (J)	0.0012 (J)		
10/2/2018		0.031 (J)		0.0012 (J)		
10/5/2018			0.0091 (J)			
8/22/2019		0.029 (J)	0.0084 (J)			
8/23/2019				0.0011 (J)		
10/21/2019			0.009 (J)	0.0011 (J)		
10/22/2019		0.03 (J)				
3/24/2020				0.0012 (J)		
3/25/2020		0.024 (J)	0.0066 (J)			
5/22/2020					0.0052 (J)	0.0046 (J)
6/16/2020					0.0053 (J)	0.0045 (J)
8/25/2020					0.0037 (J)	0.0037 (J)
8/26/2020		0.023 (J)	0.0071 (J)			
8/27/2020				0.00091 (J)		
9/18/2020						0.0035 (J)
9/21/2020		0.023 (J)			0.0038 (J)	
9/25/2020	0.0049 (J)					
9/28/2020			0.0076 (J)	0.0011 (J)		
11/11/2020	0.0032 (J)					0.0032 (J)
11/12/2020					0.0038 (J)	
12/16/2020	0.0045 (J)				0.0055 (J)	0.0029 (J)
1/20/2021	0.0025 (J)				0.0046 (J)	0.0038 (J)
3/12/2021	0.005 (J)	0.023 (J)			0.0039 (J)	0.0038 (J)
3/15/2021			0.0077 (J)	0.001 (J)		
8/13/2021	0.0044 (J)					
8/16/2021		0.025 (J)	0.0075 (J)	0.0011 (J)		
8/19/2021					0.0074 (J)	0.0032 (J)
2/1/2022	0.0055 (J)					
2/2/2022		0.025 (J)	0.0082 (J)	0.0012 (J)		
2/3/2022					0.0057 (J)	0.0038 (J)
8/2/2022	0.0045 (J)					
8/4/2022		0.023 (J)	0.0069 (J)	0.0011 (J)	0.0035 (J)	0.0034 (J)
1/24/2023	0.0044 (J)		0.0066 (J)	0.0011 (J)		
1/25/2023		0.018 (J)			0.0045 (J)	0.0046 (J)
8/8/2023	0.0049 (J)					
8/10/2023		0.023 (J)	0.0069 (J)		0.0042 (J)	
8/11/2023				0.00097 (J)		0.0041 (J)
2/13/2024	0.0052 (J)					
2/14/2024					0.0083 (J)	0.0041 (J)
2/15/2024		0.021 (J)	0.0056 (J)			
2/16/2024				<0.03		
8/6/2024	0.0048 (J)		0.0063 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/7/2024		0.023 (J)		<0.03	0.0038 (J)	0.0042 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.0002		<0.0002	<0.0002		
7/11/2016	<0.0002		<0.0002			
7/12/2016				<0.0002		
8/30/2016	4E-05 (J)	4.3E-05 (J)	4E-05 (J)	<0.0002		
10/19/2016	<0.0002		<0.0002	<0.0002		
10/20/2016		<0.0002				
12/6/2016	<0.0002		<0.0002	<0.0002		
1/24/2017	<0.0002		<0.0002	<0.0002		
1/25/2017		4E-05 (J)				
3/21/2017	<0.0002		<0.0002	<0.0002		
5/22/2017	<0.0002		<0.0002	<0.0002		
5/25/2017		7E-05 (J)				
8/11/2017		<0.0002				
11/15/2017		<0.0002				
4/2/2018	<0.0002		<0.0002			
4/3/2018				<0.0002		
6/5/2018		<0.0002				
10/2/2018		<0.0002				
3/12/2019	<0.0002		<0.0002	<0.0002		
8/22/2019		<0.0002				
3/2/2020	<0.0002		<0.0002	<0.0002		
8/24/2020		<0.0002				
8/25/2020			<0.0002	<0.0002		
8/28/2020	<0.0002					
9/16/2020					<0.0002	<0.0002
11/10/2020					<0.0002	<0.0002
12/15/2020					<0.0002	<0.0002
1/19/2021					<0.0002	<0.0002
8/11/2021	<0.0002				<0.0002	
8/12/2021			<0.0002	<0.0002		
8/13/2021		<0.0002				<0.0002
2/1/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/2/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/23/2023				<0.0002		
1/24/2023	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
8/8/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/13/2024	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/5/2024	<0.0002		<0.0002	<0.0002		
8/6/2024		<0.0002			<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		4E-05 (J)	<0.0002	<0.0002		
10/26/2016		<0.0002		<0.0002		
11/7/2016			<0.0002			
1/13/2017			<0.0002			
1/27/2017		<0.0002		<0.0002		
5/25/2017		7E-05 (J)		5.1E-05 (J)		
6/3/2017			<0.0002			
8/11/2017				<0.0002		
10/2/2017		<0.0002	<0.0002			
11/15/2017		<0.0002	<0.0002	<0.0002		
6/5/2018		<0.0002	<0.0002	<0.0002		
10/2/2018		<0.0002		<0.0002		
10/5/2018			<0.0002			
8/22/2019		<0.0002	<0.0002			
8/23/2019				<0.0002		
5/22/2020					<0.0002	<0.0002
6/16/2020					<0.0002	<0.0002
8/25/2020					<0.0002	<0.0002
8/26/2020		<0.0002	<0.0002			
8/27/2020				<0.0002		
9/18/2020						<0.0002
9/21/2020					<0.0002	
9/25/2020	<0.0002					
11/11/2020	<0.0002					<0.0002
11/12/2020					<0.0002	
12/16/2020	<0.0002				<0.0002	<0.0002
1/20/2021	<0.0002				<0.0002	<0.0002
8/13/2021	<0.0002					
8/16/2021		<0.0002	<0.0002	<0.0002		
8/19/2021					<0.0002	<0.0002
2/1/2022	<0.0002					
2/2/2022		<0.0002	<0.0002	<0.0002		
2/3/2022					<0.0002	<0.0002
8/2/2022	<0.0002					
8/4/2022		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/24/2023	<0.0002		<0.0002	<0.0002		
1/25/2023		<0.0002			<0.0002	<0.0002
8/8/2023	<0.0002					
8/10/2023		<0.0002	<0.0002		<0.0002	
8/11/2023				<0.0002		<0.0002
2/13/2024	<0.0002					
2/14/2024					<0.0002	<0.0002
2/15/2024		<0.0002	<0.0002			
2/16/2024				<0.0002		
8/6/2024	<0.0002		<0.0002			
8/7/2024		<0.0002		<0.0002	<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.01		<0.01	<0.01		
7/11/2016	<0.01		<0.01			
7/12/2016				<0.01		
8/30/2016	<0.01	0.0026 (J)	<0.01	<0.01		
10/19/2016	<0.01		<0.01	<0.01		
10/20/2016		0.005 (J)				
12/6/2016	<0.01		<0.01	<0.01		
1/24/2017	<0.01		<0.01	<0.01		
1/25/2017		0.0054 (J)				
3/21/2017	<0.01		<0.01	<0.01		
5/22/2017	<0.01		<0.01	<0.01		
5/25/2017		0.0018 (J)				
8/11/2017		0.0029 (J)				
11/15/2017		0.0018 (J)				
4/2/2018	<0.01		<0.01			
4/3/2018				<0.01		
6/4/2018	<0.01		<0.01	<0.01		
6/5/2018		0.0028 (J)				
10/1/2018	<0.01		<0.01	<0.01		
10/2/2018		<0.01				
3/12/2019	<0.01		<0.01	<0.01		
4/1/2019				<0.01		
4/2/2019	<0.01		<0.01			
8/22/2019		0.003 (J)				
9/23/2019	<0.01		<0.01	<0.01		
10/21/2019		0.0049 (J)				
3/2/2020	<0.01		<0.01	<0.01		
3/24/2020		0.0091 (J)				
3/25/2020	<0.01		<0.01	<0.01		
6/16/2020	<0.01			<0.01		
8/24/2020		0.0031 (J)				
8/25/2020			<0.01	<0.01		
8/28/2020	<0.01					
9/15/2020	<0.01	0.0045 (J)	<0.01	<0.01		
9/16/2020					0.0044 (J)	0.0019 (J)
11/10/2020					0.0072 (J)	0.0018 (J)
12/15/2020					0.0044 (J)	0.0019 (J)
1/19/2021					0.0038 (J)	<0.01
3/10/2021	<0.01					0.0019 (J)
3/11/2021		0.0014 (J)	<0.01	<0.01	0.0064 (J)	
8/11/2021	<0.01				0.0034 (J)	
8/12/2021			<0.01	<0.01		
8/13/2021		0.0022 (J)				0.0051 (J)
2/1/2022	<0.01	0.002 (J)	<0.01	<0.01	0.0036 (J)	0.0055 (J)
8/2/2022	<0.01	0.0042 (J)	<0.01	<0.01	0.0042 (J)	0.002 (J)
1/23/2023				<0.01		
1/24/2023	<0.01	0.0035 (J)	<0.01		0.0027 (J)	0.0026 (J)
8/8/2023	<0.01	0.0039 (J)	<0.01	<0.01	0.0019 (J)	0.0013 (J)
2/13/2024	<0.01	0.0042 (J)	<0.01	<0.01	0.0015 (J)	0.0018 (J)
8/5/2024	<0.01		<0.01	<0.01		
8/6/2024		0.0047 (J)			0.001 (J)	0.00079 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		0.0176	<0.01	<0.01		
10/26/2016		0.0187		<0.01		
11/7/2016			<0.01			
1/13/2017			<0.01			
1/27/2017		0.0214		<0.01		
5/25/2017		0.0231		0.0009 (J)		
6/3/2017			<0.01			
8/11/2017				0.0013 (J)		
10/2/2017		0.0259	<0.01			
11/15/2017		0.0281	<0.01	0.0012 (J)		
6/5/2018		0.033	<0.01	<0.01		
10/2/2018		0.036		<0.01		
10/5/2018			<0.01			
8/22/2019		0.039	<0.01			
8/23/2019				0.0014 (J)		
10/21/2019			<0.01	0.0013 (J)		
10/22/2019		0.04				
3/24/2020				0.001 (J)		
3/25/2020		0.034	<0.01			
5/22/2020					<0.01	<0.01
6/16/2020					<0.01	<0.01
8/25/2020					0.00099 (J)	<0.01
8/26/2020		0.05	<0.01			
8/27/2020				0.00091 (J)		
9/18/2020						<0.01
9/21/2020		0.043			<0.01	
9/25/2020	0.0014 (J)					
9/28/2020			<0.01	0.0009 (J)		
11/11/2020	0.0049 (J)					<0.01
11/12/2020					0.0017 (J)	
12/16/2020	0.0024 (J)				0.014	<0.01
1/20/2021	0.0063 (J)				0.0013 (J)	<0.01
3/12/2021	0.0019 (J)	0.033			0.0012 (J)	<0.01
3/15/2021			<0.01	0.00092 (J)		
8/13/2021	<0.01					
8/16/2021		0.035	<0.01	0.00091 (J)		
8/19/2021					0.021	<0.01
2/1/2022	<0.01					
2/2/2022		0.034	<0.01	0.001 (J)		
2/3/2022					0.0067 (J)	<0.01
8/2/2022	<0.01					
8/4/2022		0.032	<0.01	<0.01	0.0023 (J)	<0.01
1/24/2023	<0.01		<0.01	<0.01		
1/25/2023		0.03			0.0053 (J)	<0.01
8/8/2023	<0.01					
8/10/2023		0.035	<0.01		0.0031 (J)	
8/11/2023				<0.01		<0.01
2/13/2024	<0.01					
2/14/2024					0.026	<0.01
2/15/2024		0.033	<0.01			
2/16/2024				0.00072 (J)		
8/6/2024	<0.01		<0.01			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/7/2024		0.036		0.0012 (J)	0.0028 (J)	<0.01

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH (s.u.) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	7.27		5.81	7.45		
7/11/2016	7.06		5.68			
7/12/2016				7.32		
8/30/2016	7.28	6.75	5.63	7.43		
10/19/2016	7.02		5.46	7.03		
10/20/2016		6.73				
12/6/2016	7.09		5.38	7.08		
1/24/2017	7.2		5.37	7.39		
1/25/2017		6.88				
3/21/2017	7.01		4.9	6.83		
5/22/2017	7.11		5.2	7.02		
5/25/2017		6.55				
8/11/2017		6.56				
10/3/2017	7.21		5.3	7.47		
11/15/2017		6.47				
4/2/2018	7.1		5.4			
4/3/2018				7.38		
6/4/2018	7.06		5.27	7.38		
6/5/2018		6.66				
10/1/2018	7.09		5.31	7.13		
10/2/2018		6.44				
3/12/2019	7.03		5.42	7.29		
4/1/2019				7.16		
4/2/2019	6.86	6.57	5.41			
8/22/2019		6.51				
9/23/2019	7.02		5.33	7.3		
10/21/2019		6.69				
3/2/2020	7.1		5.43	7.12		
3/24/2020		7.08				
3/25/2020	6.95		5.36	7.4		
6/16/2020	6.97			7.31		
8/24/2020		6.54				
8/25/2020			5.17	7.14		
8/28/2020	7.02					
9/15/2020	7.15	6.68	5.22	7.29		
9/16/2020					7.52	7.83
11/10/2020					7.27	7.84
12/15/2020					7.39	7.87
1/19/2021					7.39	7.86
3/10/2021	6.95					7.92
3/11/2021		6.65	5.8	7.33	7.46	
8/11/2021	6.98				7.4	
8/12/2021			5.05	7.31		
8/13/2021		6.56				7.77
2/1/2022	7.19	6.57	5.24	7.45	7.52	8.25
8/2/2022	7.03	6.67	4.57	7.02	7.15	7.9
1/23/2023				7.32		
1/24/2023	6.76	6.43	5.22		7.56	8.22
8/8/2023	7.05	6.67	5.01	7.42	7.39	8.2
2/13/2024	7.06	6.82	5.49	7.35	7.47	8.1
8/5/2024	7.29		4.91	7.27		
8/6/2024		6.86			7.46	8.36

Time Series

Constituent: pH (s.u.) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		6.73	6.62	6.99		
10/27/2016		6.77		7.06		
11/7/2016			6.71			
1/13/2017			6.57			
1/27/2017		6.74		7.13		
5/25/2017		6.99		7.1		
6/3/2017			6.71			
8/11/2017				7.02		
10/2/2017		7.66	7.65			
11/15/2017		6.71	6.69	7.04		
6/5/2018		6.83	6.79	7.17		
10/2/2018		6.83		7.08		
10/5/2018			6.71			
4/2/2019		6.87				
4/3/2019			6.73	7.14		
8/22/2019		6.79	6.77			
8/23/2019				7.02		
10/21/2019			6.74	7.05		
10/22/2019		6.74				
3/24/2020				7.18		
3/25/2020		6.8	6.91			
5/22/2020					6.43	7.22
6/15/2020		6.8				
6/16/2020					6.29	6.92
8/25/2020					6.36	6.78
8/26/2020		6.96	6.73			
8/27/2020				7.15		
9/18/2020						6.97
9/21/2020		6.98			6.22	
9/25/2020	7.57					
9/28/2020			6.93	7.27		
11/11/2020	7.4					6.86
11/12/2020					6.13	
12/16/2020	7.39				6.61	6.93
1/20/2021	7.47				6.23	6.99
3/12/2021	7.52	6.95			6.18	7.05
3/15/2021			6.87	7.22		
8/13/2021	7.42					
8/16/2021		6.92	6.74	7.09		
8/19/2021					7.24	7.32
2/1/2022	7.45					
2/2/2022		7	6.92	7.28		
2/3/2022					6.56	7.01
8/2/2022	7.39					
8/4/2022		6.93	6.8	7.15	6.09	6.99
1/24/2023	7.15		6.75	7.05		
1/25/2023		6.32			6.32	6.89
8/8/2023	7.39					
8/10/2023		6.96	6.89		6.29	
8/11/2023				7.2		6.95
2/13/2024	7.47					
2/14/2024					6.76	6.98

Time Series

Constituent: pH (s.u.) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
2/15/2024		6.9	6.87			
2/16/2024				7.33		
8/6/2024	7.47		6.91			
8/7/2024		7.01		7.24	6.15	6.99

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.005		<0.005	<0.005		
7/11/2016	<0.005		<0.005			
7/12/2016				<0.005		
8/30/2016	<0.005	<0.005	<0.005	<0.005		
10/19/2016	<0.005		<0.005	<0.005		
10/20/2016		<0.005				
12/6/2016	<0.005		<0.005	<0.005		
1/24/2017	<0.005		<0.005	<0.005		
1/25/2017		<0.005				
3/21/2017	<0.005		<0.005	<0.005		
5/22/2017	<0.005		<0.005	<0.005		
5/25/2017		<0.005				
8/11/2017		<0.005				
11/15/2017		<0.005				
4/2/2018	<0.005		<0.005			
4/3/2018				<0.005		
6/4/2018	<0.005		<0.005	<0.005		
6/5/2018		<0.005				
10/1/2018	<0.005		<0.005	<0.005		
10/2/2018		0.0015 (J)				
3/12/2019	<0.005		<0.005	<0.005		
4/1/2019				<0.005		
4/2/2019	<0.005		<0.005			
8/22/2019		<0.005				
9/23/2019	<0.005		<0.005	<0.005		
3/2/2020	<0.005		<0.005	<0.005		
3/25/2020	<0.005		<0.005	<0.005		
8/24/2020		<0.005				
8/25/2020			<0.005	<0.005		
8/28/2020	<0.005					
9/15/2020	<0.005		<0.005	<0.005		
9/16/2020					<0.005	<0.005
11/10/2020					<0.005	<0.005
12/15/2020					<0.005	<0.005
1/19/2021					<0.005	<0.005
8/11/2021	<0.005				<0.005	
8/12/2021			<0.005	<0.005		
8/13/2021		<0.005				<0.005
2/1/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/2/2022	<0.005	<0.005	0.0014 (J)	<0.005	<0.005	<0.005
1/23/2023				<0.005		
1/24/2023	<0.005	<0.005	<0.005		<0.005	<0.005
8/8/2023	<0.005	<0.005	0.0019 (J)	<0.005	<0.005	<0.005
2/13/2024	<0.005	0.0016 (J)	0.002 (J)	<0.005	<0.005	<0.005
8/5/2024	<0.005		0.0013 (J)	<0.005		
8/6/2024		0.0012 (J)			<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		<0.005	<0.005	<0.005		
10/26/2016		<0.005		<0.005		
11/7/2016			<0.005			
1/13/2017			0.0011 (J)			
1/27/2017		<0.005		<0.005		
5/25/2017		<0.005		<0.005		
6/3/2017			<0.005			
8/11/2017				<0.005		
10/2/2017		0.002 (J)	<0.005			
11/15/2017		<0.005	<0.005	<0.005		
6/5/2018		<0.005	<0.005	<0.005		
10/2/2018		<0.005		0.0014 (J)		
10/5/2018			<0.005			
8/22/2019		<0.005	<0.005			
8/23/2019				<0.005		
5/22/2020					<0.005	<0.005
6/16/2020					<0.005	<0.005
8/25/2020					<0.005	<0.005
8/26/2020		<0.005	<0.005			
8/27/2020				<0.005		
9/18/2020						<0.005
9/21/2020					<0.005	
9/25/2020	<0.005					
11/11/2020	<0.005					<0.005
11/12/2020					<0.005	
12/16/2020	<0.005				<0.005	<0.005
1/20/2021	<0.005				<0.005	<0.005
8/13/2021	<0.005					
8/16/2021		<0.005	<0.005	<0.005		
8/19/2021					<0.005	<0.005
2/1/2022	<0.005					
2/2/2022		<0.005	<0.005	<0.005		
2/3/2022					<0.005	<0.005
8/2/2022	<0.005					
8/4/2022		<0.005	<0.005	<0.005	<0.005	<0.005
1/24/2023	<0.005		<0.005	<0.005		
1/25/2023		<0.005			<0.005	<0.005
8/8/2023	<0.005					
8/10/2023		<0.005	<0.005		<0.005	
8/11/2023				<0.005		<0.005
2/13/2024	<0.005					
2/14/2024					<0.005	<0.005
2/15/2024		<0.005	<0.005			
2/16/2024				<0.005		
8/6/2024	<0.005		<0.005			
8/7/2024		<0.005		<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	66.9		48.6	42.3		
7/11/2016	41		45			
7/12/2016				44		
8/30/2016	36	49	42	40		
10/19/2016	46		44	43		
10/20/2016		49				
12/6/2016	59		44	43		
1/24/2017	46		46	48		
1/25/2017		48				
3/21/2017	63		46	45		
5/22/2017	77		48	46		
5/25/2017		48				
8/11/2017		47				
10/3/2017	42		47	48		
11/15/2017		49				
6/4/2018	71.8		47.8	46.6		
6/5/2018		48.9				
10/1/2018	49.1		48.1	48.6		
10/2/2018		48.6				
4/1/2019				50.4		
4/2/2019	84.3	39.6	48.7			
6/18/2019		44.5				
9/23/2019	70.2		47.2	43.9		
10/21/2019		45.6				
3/24/2020		25.9				
3/25/2020	85.9		46.3	50.5		
6/16/2020	88.2			49.5		
9/15/2020	47.3	41.4	51.5	44.7		
9/16/2020					43	43
11/10/2020					39	6.3
12/15/2020					38.8	6.7
1/19/2021					37.3	7.4
3/10/2021	49.6					<1
3/11/2021		40.7	52.9	50.4	38.6	
8/11/2021	48.9				30.5	
8/12/2021			47.4	38.6		
8/13/2021		42.1				56.1
2/1/2022	43.7	41.1	67.1	46	37.5	56.3
8/2/2022	58.1	41.5	86.9	43.5	37	13.2
1/23/2023				39.5		
1/24/2023	48.3	36.5	79.7		34.7	10.1
8/8/2023	67.7	34.9	89.9	35	25.6	1.3
2/13/2024	50.4	35.6	93.9	35.5	28.9	2
8/5/2024	49.4		87.2	31.1		
8/6/2024		37.8			25.5	0.86 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		290	280	72		
10/26/2016		280		71		
11/7/2016			300			
1/13/2017			270			
1/27/2017		290		74		
5/25/2017		280		73		
6/3/2017			270			
8/11/2017				71		
10/2/2017		300	330			
11/15/2017		300	280	70		
6/5/2018		273	241	74		
10/2/2018		328		80.7		
10/5/2018			271			
4/2/2019		256				
4/3/2019			230	75.2		
6/17/2019		243	219			
6/18/2019				75.3		
10/21/2019			238	78.5		
10/22/2019		266				
3/24/2020				74.6		
3/25/2020		226	116			
5/22/2020					345	56.1
6/15/2020		212				
6/16/2020					320	57.6
8/25/2020					353	62.8
9/18/2020						62.7
9/21/2020		225			352	
9/25/2020	6.8					
9/28/2020			182	86.2		
11/11/2020	11.2					62.3
11/12/2020					300	
12/16/2020	11.3				306	68.1
1/20/2021	14.2				335	66.6
3/12/2021	8.7	210			293	69.7
3/15/2021			177	74		
8/13/2021	8.1					
8/16/2021		211	158	74		
8/19/2021					264	64.4
2/1/2022	2.5					
2/2/2022		201	147	70.7		
2/3/2022					304	66.8
8/2/2022	2.1					
8/4/2022		230	162	73.1	331	68.3
1/24/2023	5.2		151	69.6		
1/25/2023		230			306	63.7
8/8/2023	2.2					
8/10/2023		195	138		290	
8/11/2023				67.6		60.5
2/13/2024	6					
2/14/2024					243	66.4
2/15/2024		209	108			
2/16/2024				74.5		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/6/2024	2.9		127			
8/7/2024		191		69.7	289	72.8

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	<0.001		<0.001	<0.001		
7/11/2016	<0.001		<0.001			
7/12/2016				<0.001		
8/30/2016	<0.001	<0.001	<0.001	<0.001		
10/19/2016	<0.001		<0.001	<0.001		
10/20/2016		<0.001				
12/6/2016	<0.001		<0.001	<0.001		
1/24/2017	<0.001		<0.001	<0.001		
1/25/2017		<0.001				
3/21/2017	<0.001		3E-05 (J)	<0.001		
5/22/2017	<0.001		<0.001	<0.001		
5/25/2017		<0.001				
8/11/2017		<0.001				
11/15/2017		<0.001				
4/2/2018	<0.001		<0.001			
4/3/2018				<0.001		
6/4/2018	<0.001		<0.001	<0.001		
6/5/2018		<0.001				
10/1/2018	<0.001		<0.001	<0.001		
10/2/2018		<0.001				
3/12/2019	<0.001		<0.001	<0.001		
4/1/2019				<0.001		
4/2/2019	<0.001		<0.001			
8/22/2019		<0.001				
9/23/2019	<0.001		<0.001	<0.001		
3/2/2020	<0.001		<0.001	<0.001		
3/25/2020	<0.001		<0.001	<0.001		
8/24/2020		<0.001				
8/25/2020			<0.001	<0.001		
8/28/2020	<0.001					
9/15/2020	<0.001		<0.001	<0.001		
9/16/2020					<0.001	<0.001
11/10/2020					<0.001	<0.001
12/15/2020					<0.001	<0.001
1/19/2021					<0.001	<0.001
8/11/2021	<0.001				<0.001	
8/12/2021			<0.001	<0.001		
8/13/2021		<0.001				<0.001
2/1/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/2/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/23/2023				<0.001		
1/24/2023	<0.001	<0.001	<0.001		<0.001	<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/13/2024	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/5/2024	<0.001		<0.001	<0.001		
8/6/2024		<0.001			<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		<0.001	<0.001	<0.001		
10/26/2016		<0.001		<0.001		
11/7/2016			<0.001			
1/13/2017			<0.001			
1/27/2017		<0.001		<0.001		
5/25/2017		<0.001		<0.001		
6/3/2017			<0.001			
8/11/2017				<0.001		
10/2/2017		<0.001	<0.001			
11/15/2017		<0.001	<0.001	<0.001		
6/5/2018		<0.001	<0.001	<0.001		
10/2/2018		<0.001		<0.001		
10/5/2018			<0.001			
8/22/2019		<0.001	<0.001			
8/23/2019				<0.001		
5/22/2020					<0.001	<0.001
6/16/2020					<0.001	<0.001
8/25/2020					<0.001	<0.001
8/26/2020		<0.001	<0.001			
8/27/2020				<0.001		
9/18/2020						<0.001
9/21/2020					<0.001	
9/25/2020	<0.001					
11/11/2020	<0.001					<0.001
11/12/2020					<0.001	
12/16/2020	<0.001				<0.001	<0.001
1/20/2021	<0.001				<0.001	<0.001
8/13/2021	<0.001					
8/16/2021		<0.001	<0.001	<0.001		
8/19/2021					<0.001	<0.001
2/1/2022	<0.001					
2/2/2022		<0.001	<0.001	<0.001		
2/3/2022					<0.001	<0.001
8/2/2022	<0.001					
8/4/2022		<0.001	<0.001	<0.001	<0.001	<0.001
1/24/2023	<0.001		<0.001	<0.001		
1/25/2023		<0.001			<0.001	<0.001
8/8/2023	<0.001					
8/10/2023		<0.001	<0.001		<0.001	
8/11/2023				<0.001		<0.001
2/13/2024	<0.001					
2/14/2024					<0.001	<0.001
2/15/2024		<0.001	<0.001			
2/16/2024				<0.001		
8/6/2024	<0.001		<0.001			
8/7/2024		<0.001		<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)
5/19/2016	421		143	267		
7/11/2016	363		125			
7/12/2016				249		
8/30/2016	330	280	168	254		
10/19/2016	380		176	357		
10/20/2016		265				
12/6/2016	377		145	285		
1/24/2017	342		129	300		
1/25/2017		371				
3/21/2017	340		103	288		
5/22/2017	338		92	263		
5/25/2017		237				
8/11/2017		253				
10/3/2017	343		127	300		
11/15/2017		261				
6/4/2018	415		140	266		
6/5/2018		276				
10/1/2018	354		135	291		
10/2/2018		256				
4/1/2019				284		
4/2/2019	452	814 (o)	133			
6/18/2019		233				
9/23/2019	442		129	268		
10/21/2019		296				
3/24/2020		278				
3/25/2020	496		138	284		
6/16/2020	632			448		
9/15/2020	265	267	124	258		
9/16/2020					272	270
11/10/2020					307	287
12/15/2020					289	295
1/19/2021					270	278
3/10/2021	348					289
3/11/2021		206	169	267	279	
8/11/2021	366				277	
8/12/2021			118	265		
8/13/2021		201				436
2/1/2022	270	203	156	350	156	444
8/2/2022	400	217	196	287	278	311
1/23/2023				293		
1/24/2023	369	246	164		271	363
8/8/2023	457	248	189	285	274	361
2/13/2024	402	222	214	284	291	379
8/5/2024	444		217	304		
8/6/2024		270			283	380

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016		700	876	379		
10/26/2016		795		409		
11/7/2016			1000			
1/13/2017			827			
1/27/2017		706		370		
5/25/2017		669		351		
6/3/2017			846			
8/11/2017				322		
10/2/2017		672	884			
11/15/2017		721	838	350		
6/5/2018		723	823	360		
10/2/2018		703		363		
10/5/2018			813			
4/2/2019		540				
4/3/2019			785	369		
6/17/2019			751			
10/21/2019			771	357		
10/22/2019		693				
3/24/2020				355		
3/25/2020		665	521			
5/22/2020					809	496
6/15/2020		685				
6/16/2020					665	508
8/25/2020					772	505
9/18/2020						452
9/21/2020		272			956	
9/25/2020	263					
9/28/2020			<10	176		
11/11/2020	276					468
11/12/2020					694	
12/16/2020	294				816	536
1/20/2021	289				726	472
3/12/2021	260	584			664	474
3/15/2021			614	340		
8/13/2021	272					
8/16/2021		632	626	352		
8/19/2021					732	488
2/1/2022	268					
2/2/2022		612	638	347		
2/3/2022					726	466
8/2/2022	261					
8/4/2022		632	640	334	706	510
1/24/2023	289		602	350		
1/25/2023		656			798	517
8/8/2023	261					
8/10/2023		661	642		760	
8/11/2023				361		535
2/13/2024	279					
2/14/2024					687	502
2/15/2024		620	524			
2/16/2024				333		
8/6/2024	256		661			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

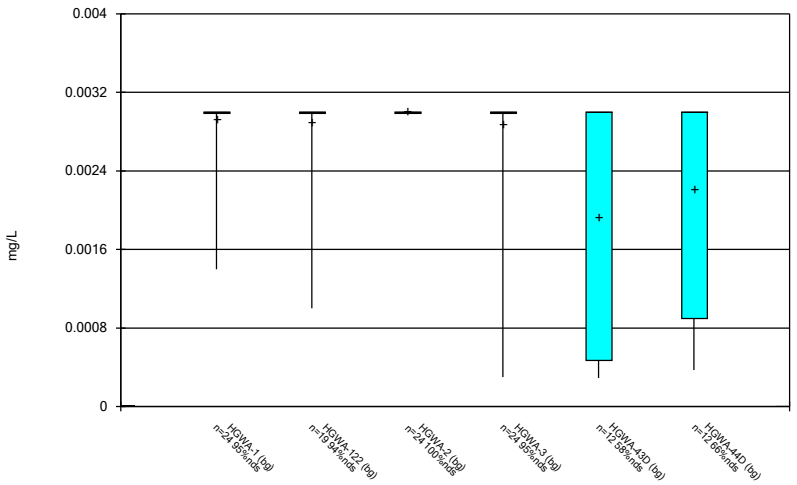
Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/22/2024 11:43 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-45D (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/7/2024		647		337	695	518

FIGURE B.

Box & Whiskers Plot

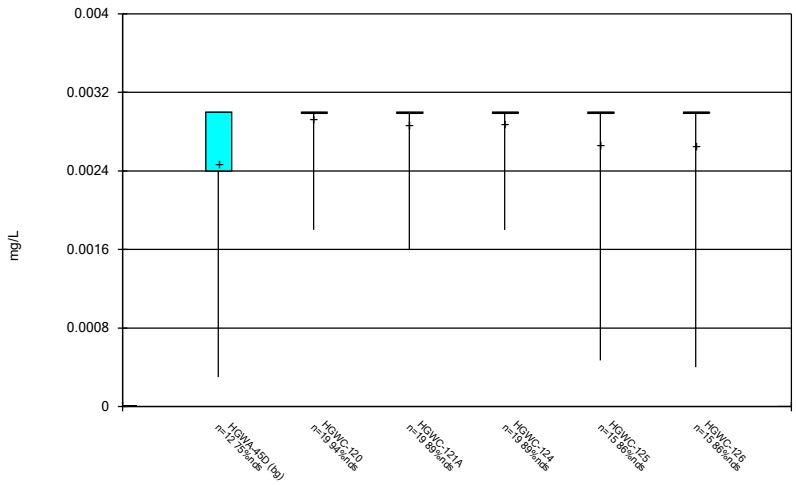


Constituent: Antimony Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

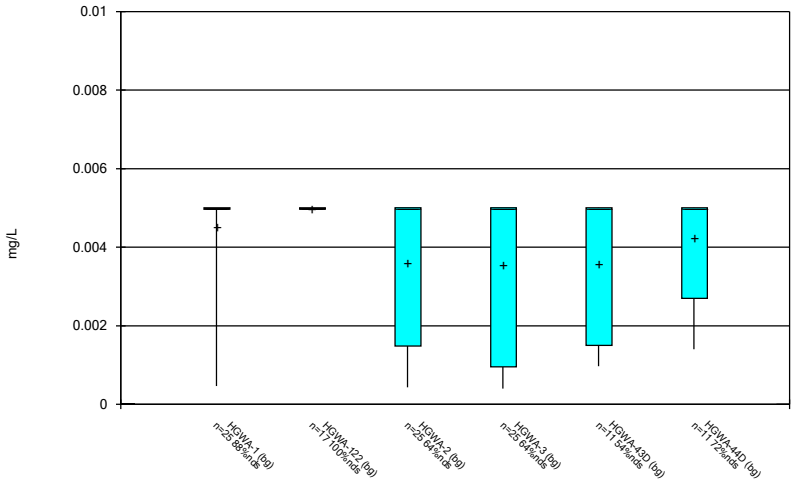


Constituent: Antimony Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

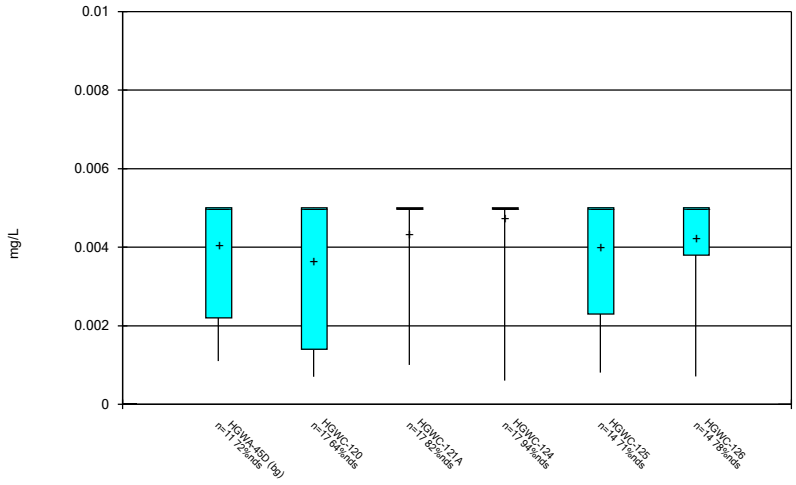


Constituent: Arsenic Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

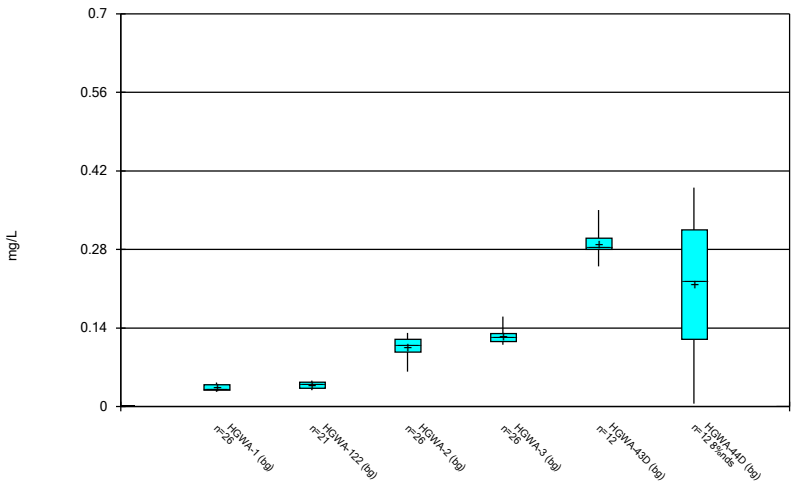
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot

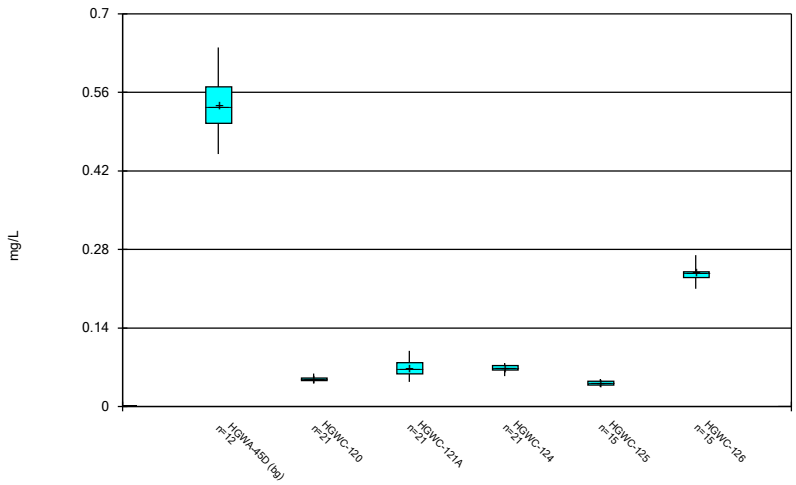


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Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

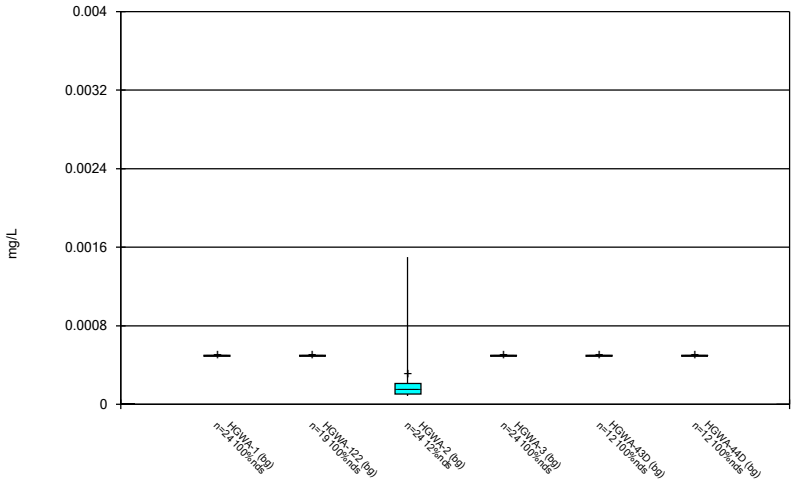


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Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

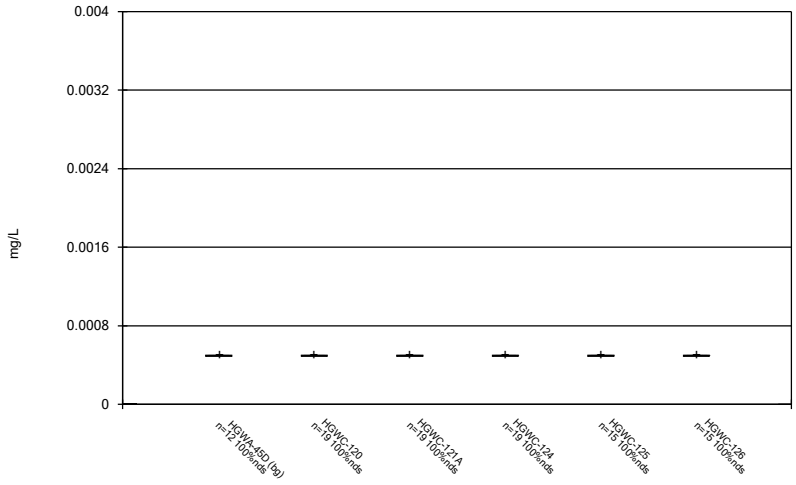


Constituent: Beryllium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

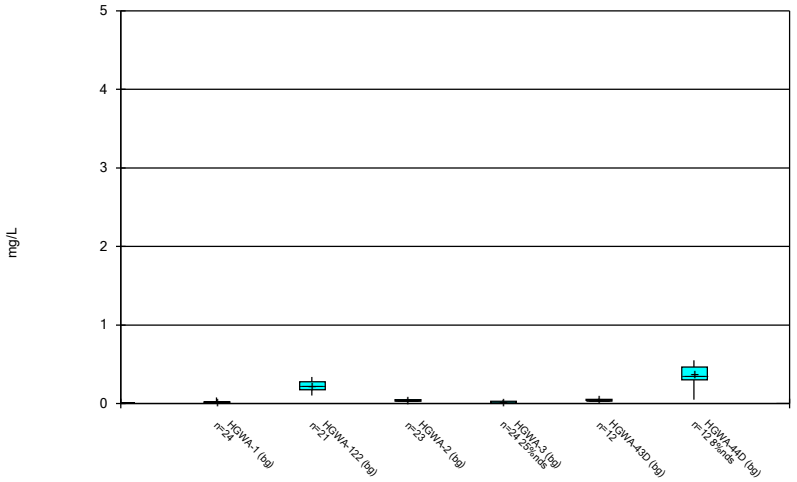
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot

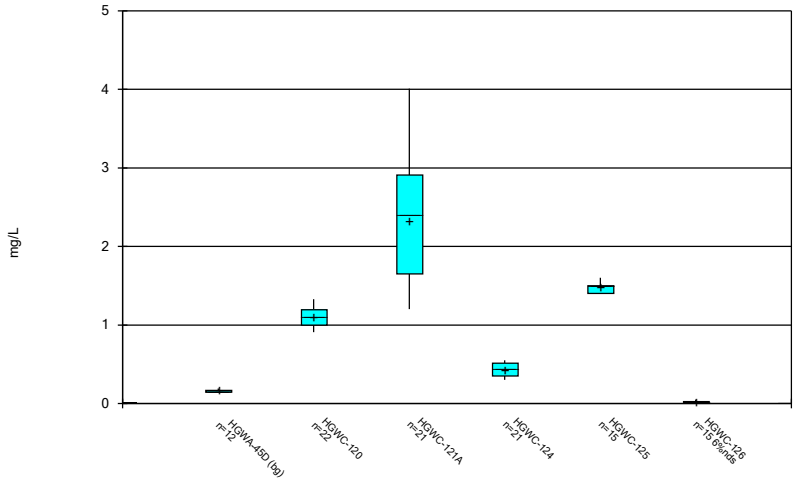


Constituent: Boron Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

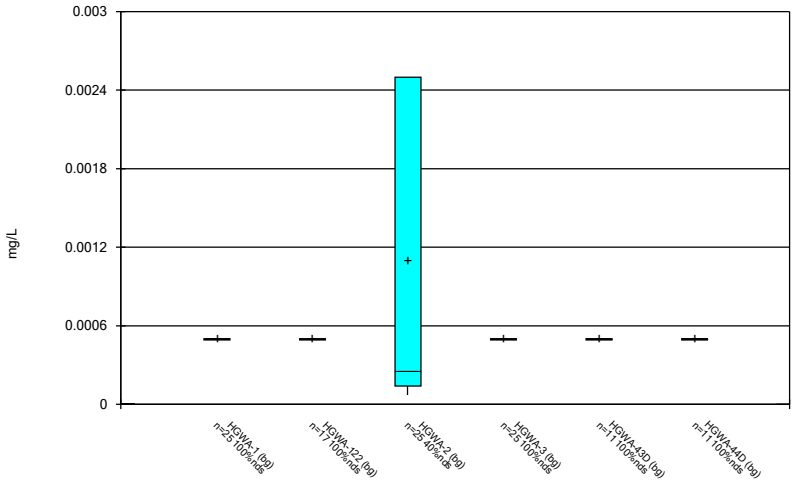


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Plant Hammond Client: Southern Company Data: Hammond AP-3

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Box & Whiskers Plot

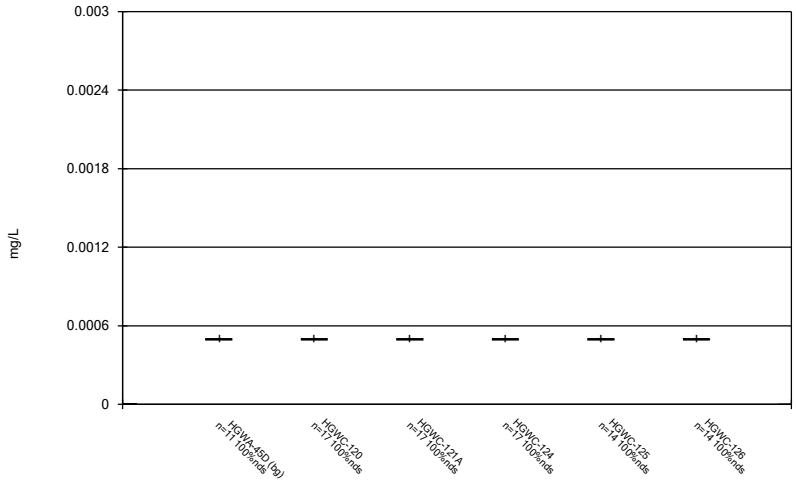


Constituent: Cadmium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

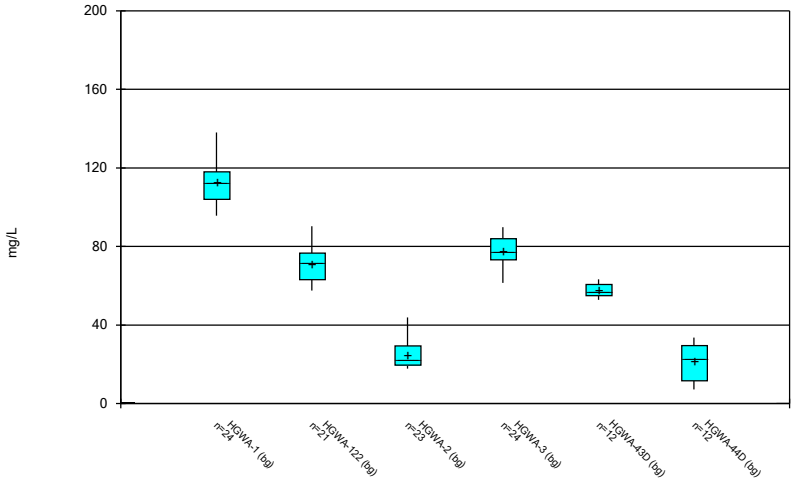
Box & Whiskers Plot



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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot

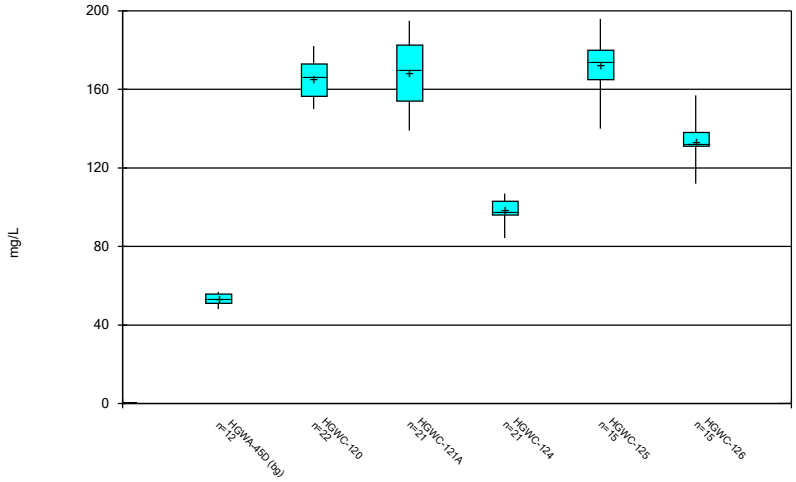


Constituent: Calcium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

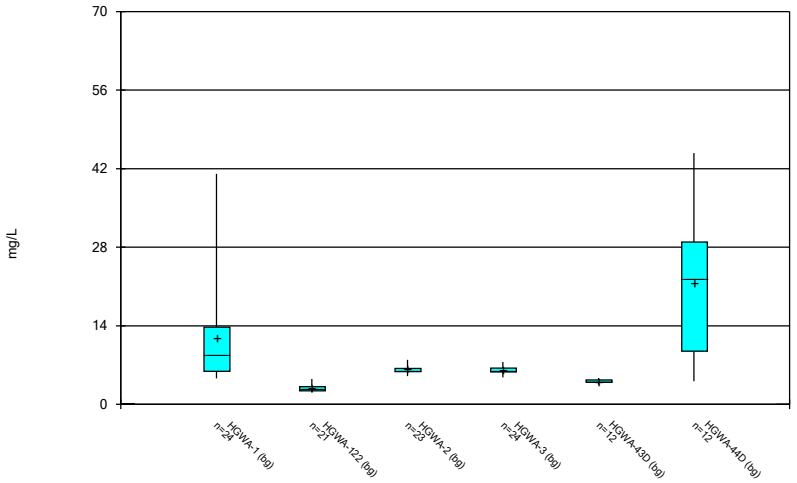


Constituent: Calcium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

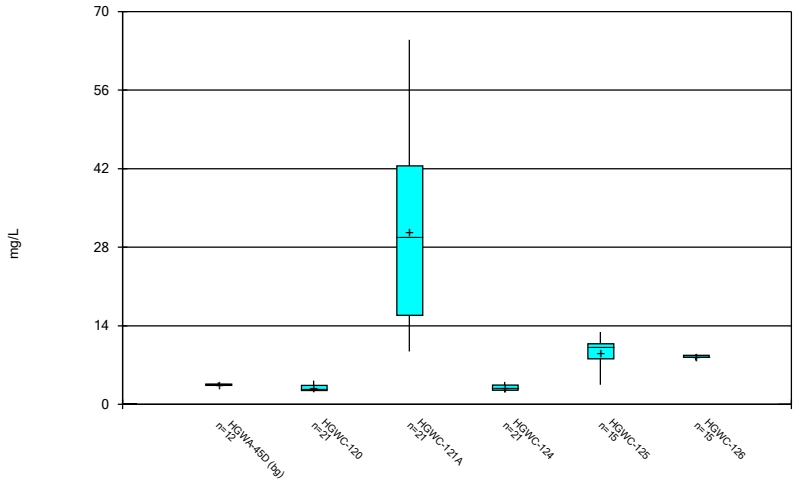


Constituent: Chloride Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

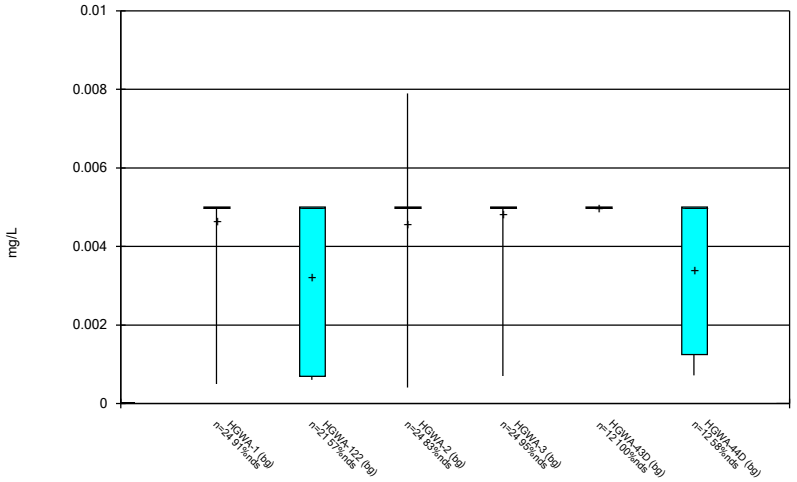
Box & Whiskers Plot



Constituent: Chloride Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot

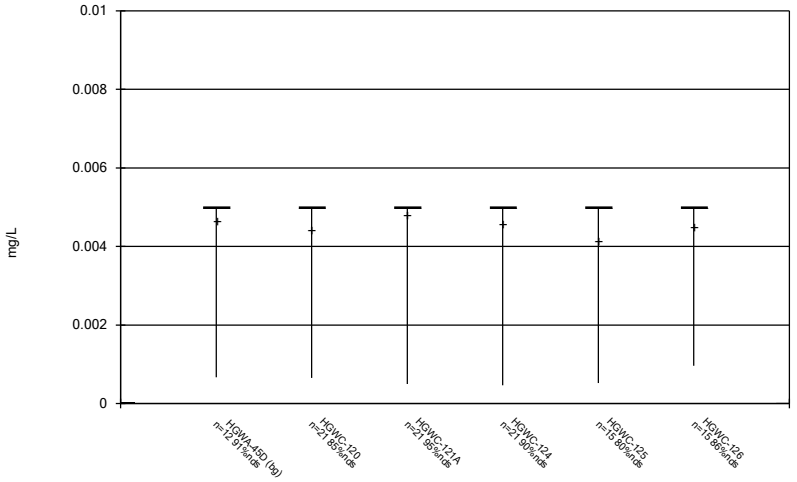


Constituent: Chromium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

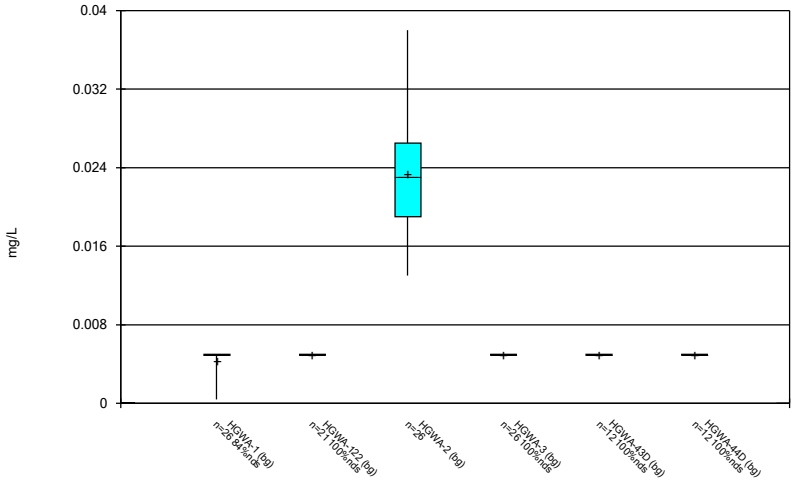


Constituent: Chromium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

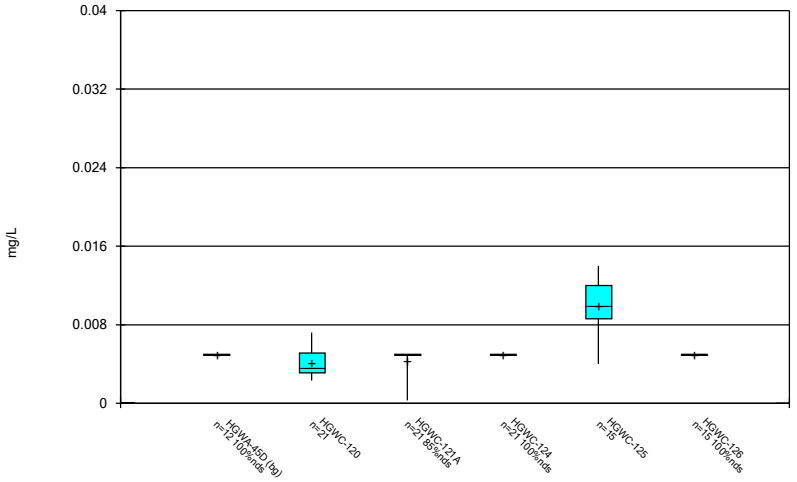


Constituent: Cobalt Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

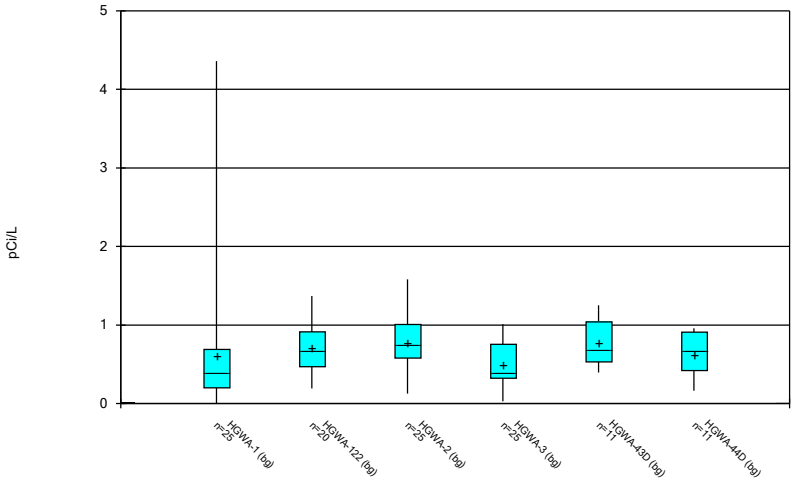
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot

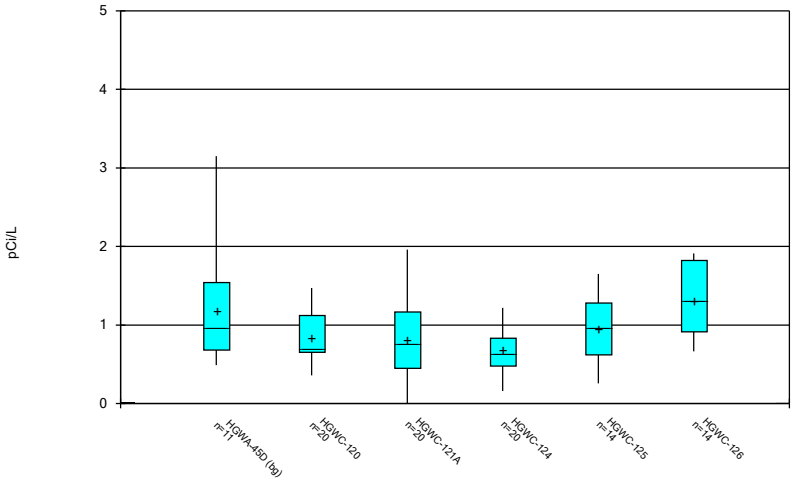


Constituent: Combined Radium 226 + 228 Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

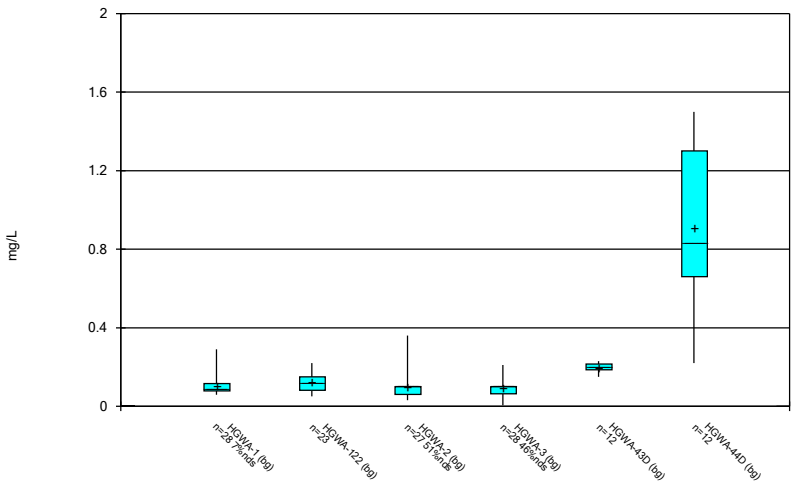


Constituent: Combined Radium 226 + 228 Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

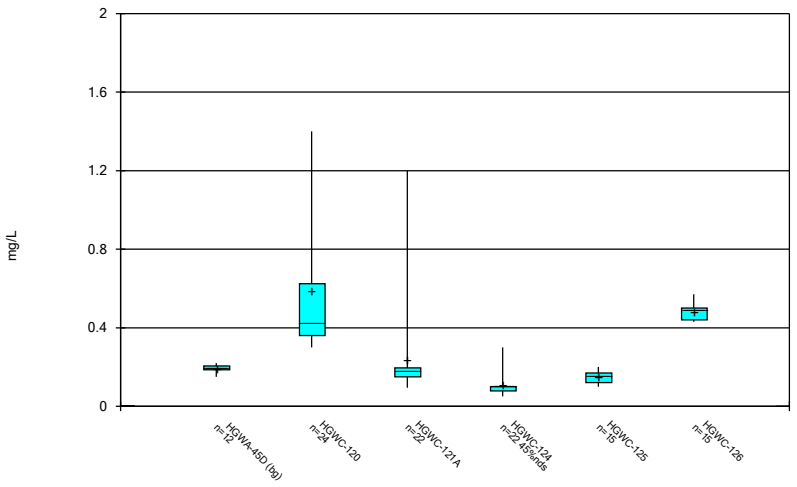


Constituent: Fluoride Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

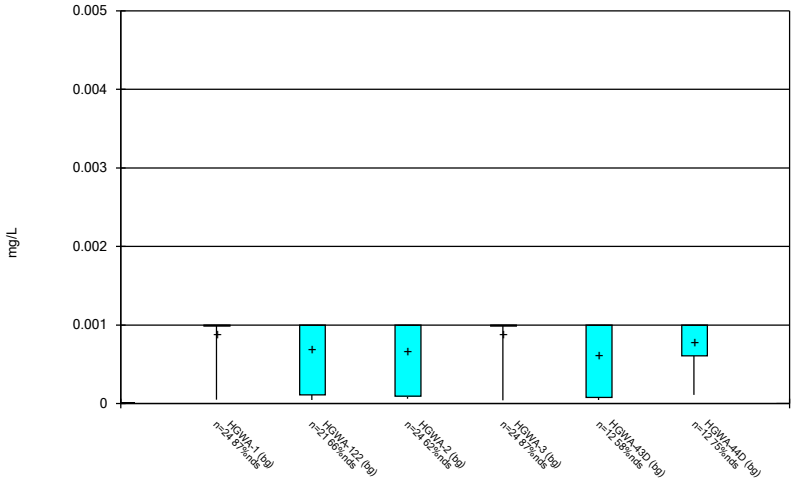
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot

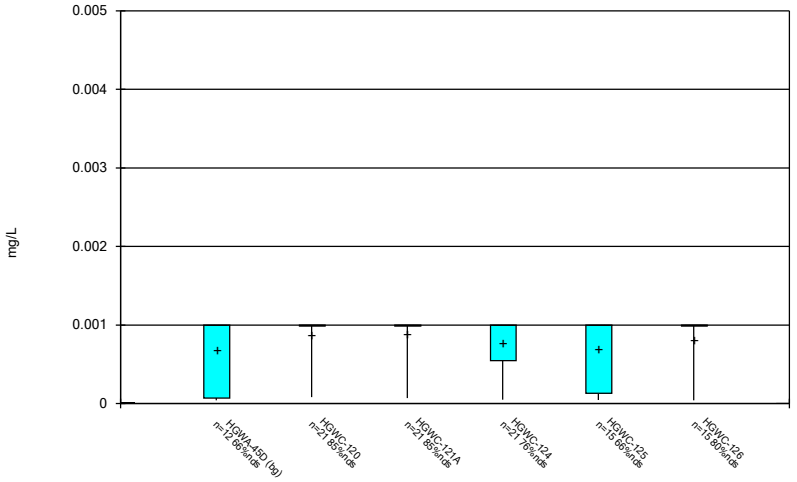


Constituent: Lead Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

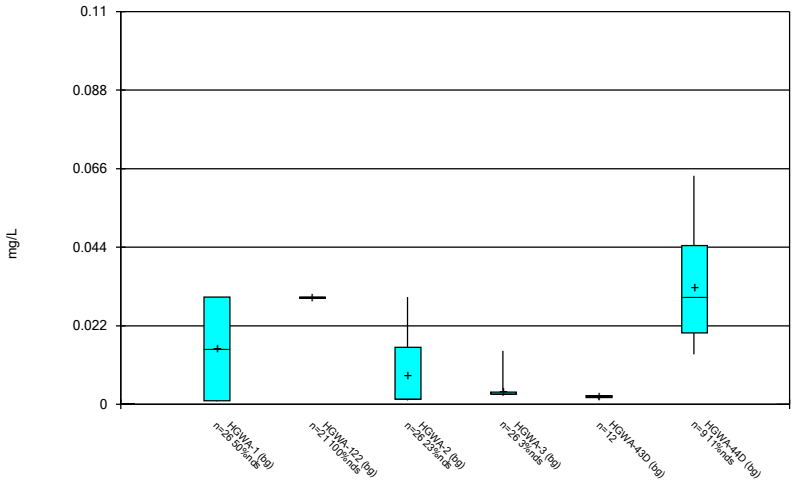


Constituent: Lead Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

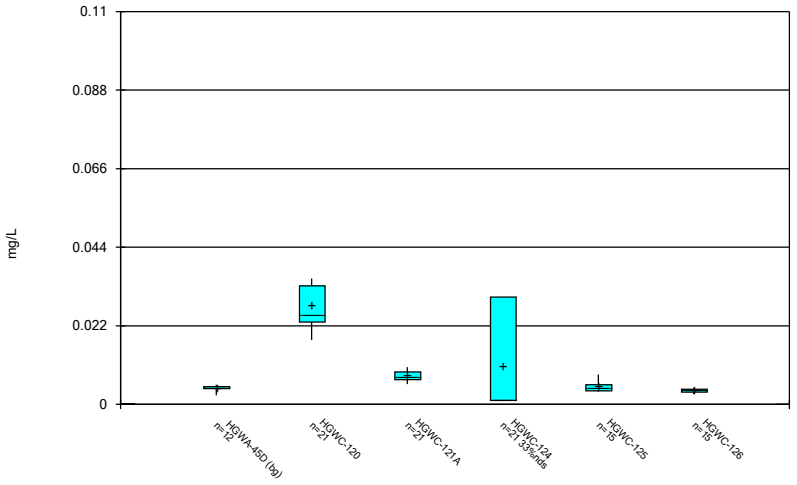


Constituent: Lithium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

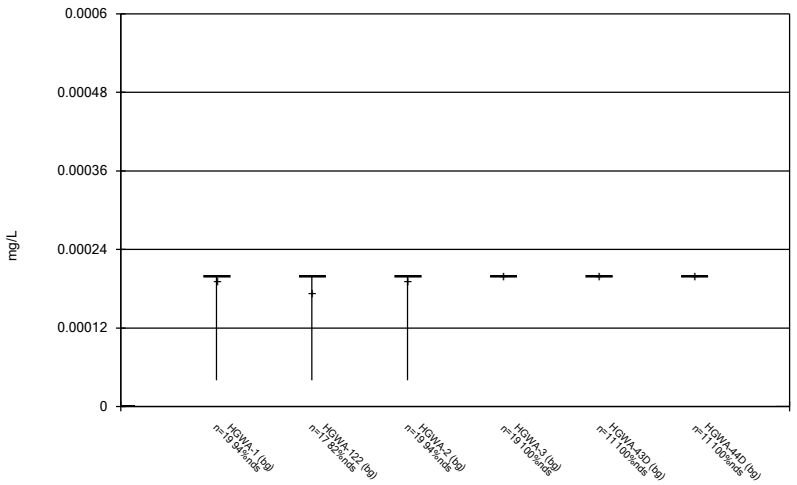
Box & Whiskers Plot



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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot

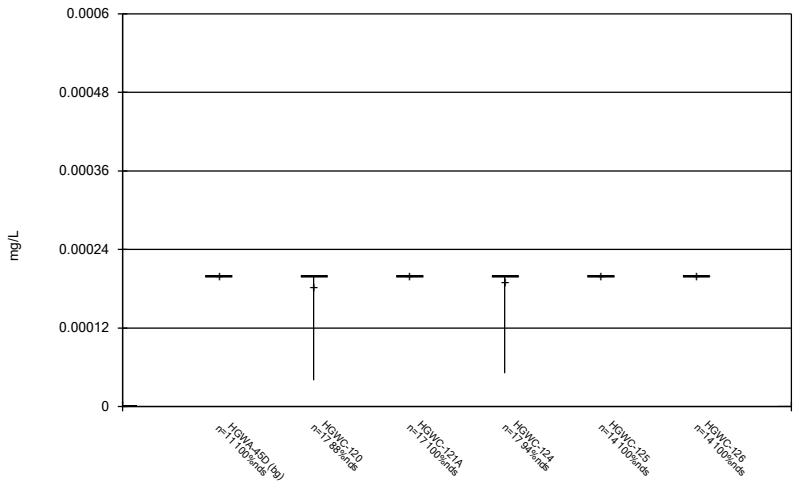


Constituent: Mercury Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

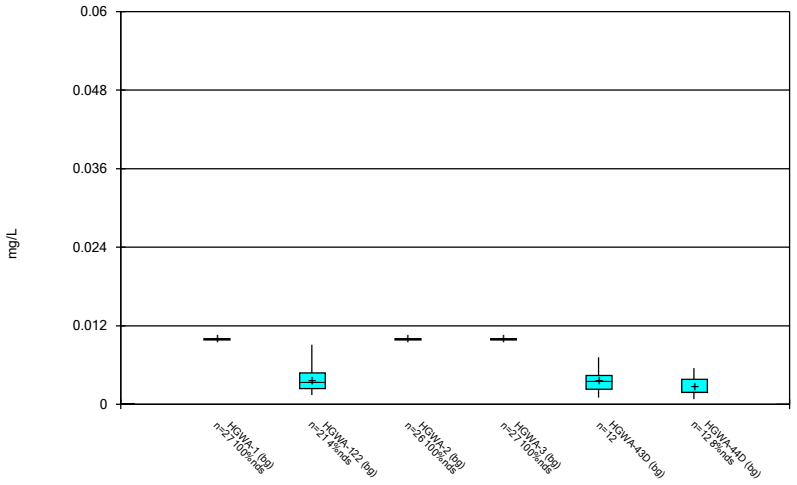


Constituent: Mercury Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

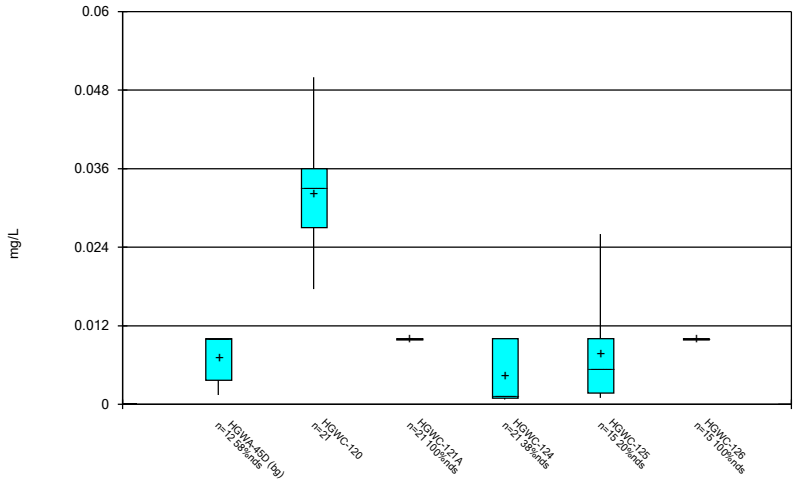


Constituent: Molybdenum Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

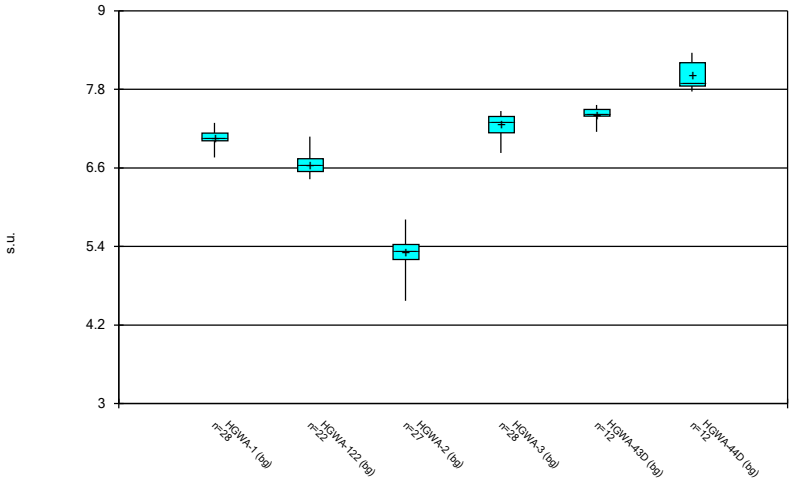
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot

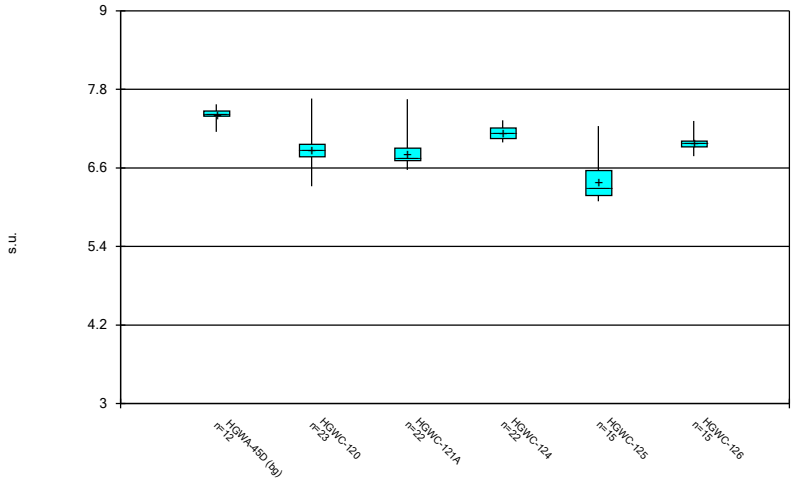


Constituent: pH Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

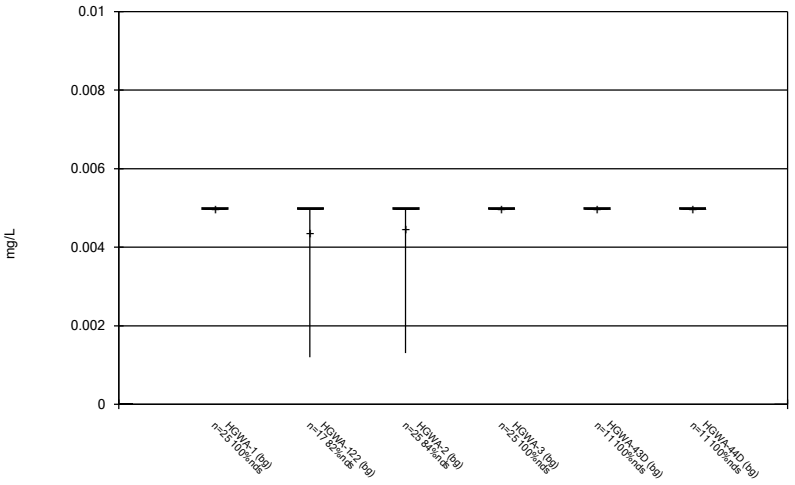


Constituent: pH Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

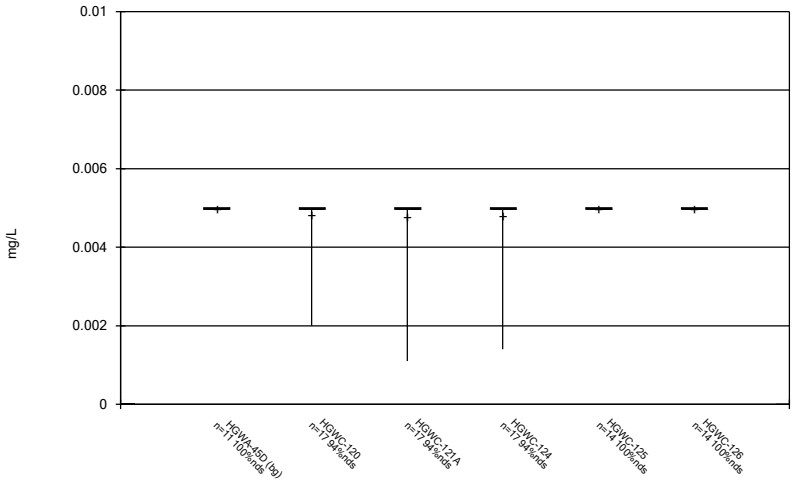


Constituent: Selenium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

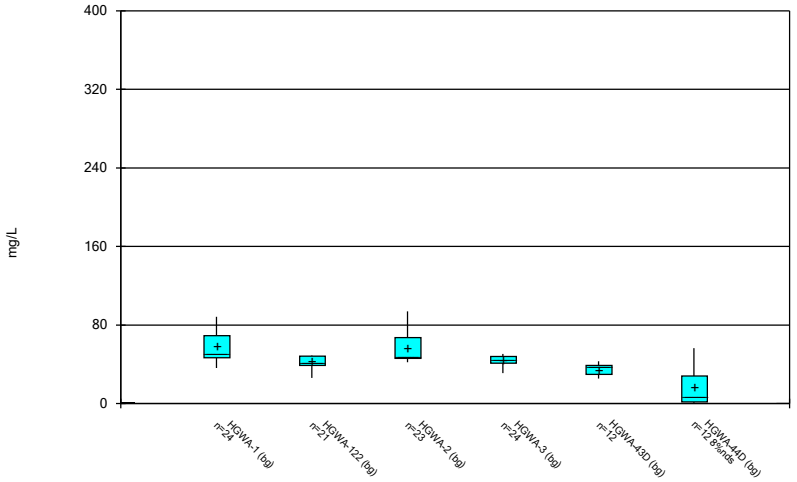
Box & Whiskers Plot



Constituent: Selenium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot

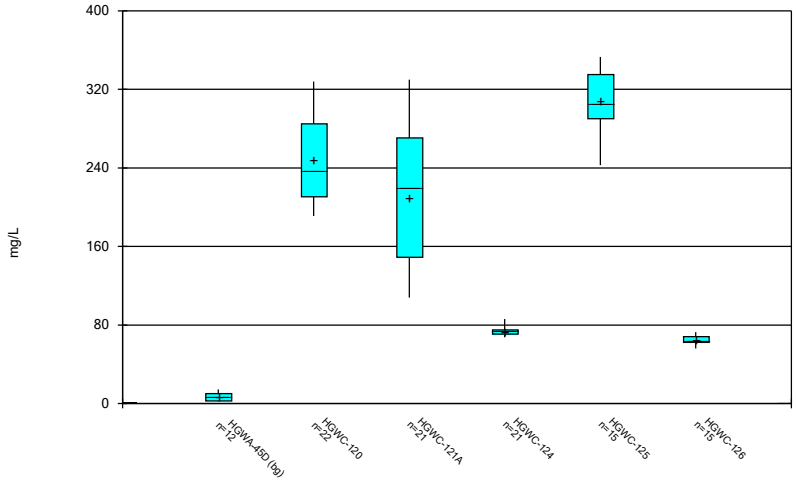


Constituent: Sulfate Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

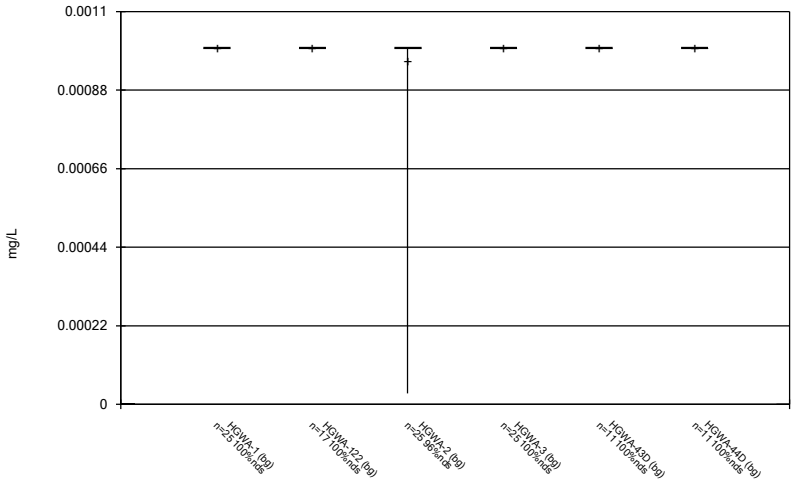


Constituent: Sulfate Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot

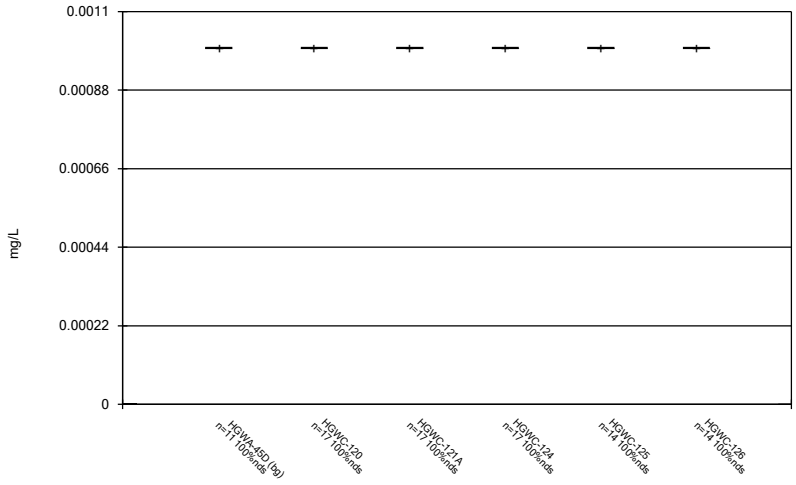


Constituent: Thallium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

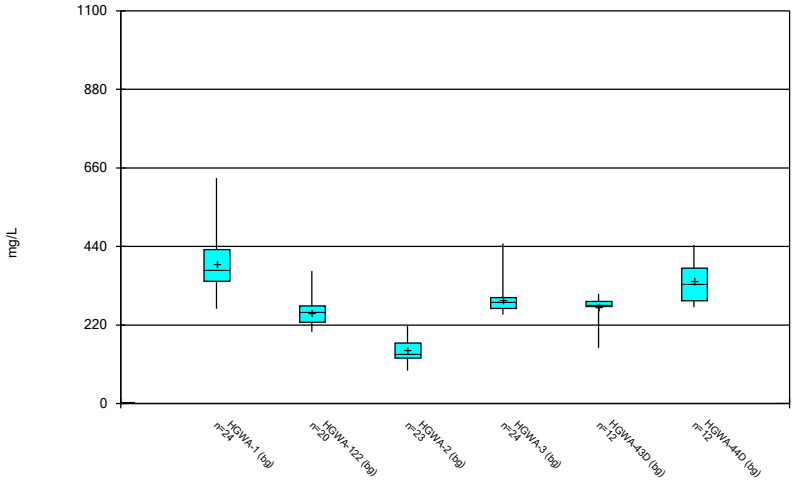
Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot

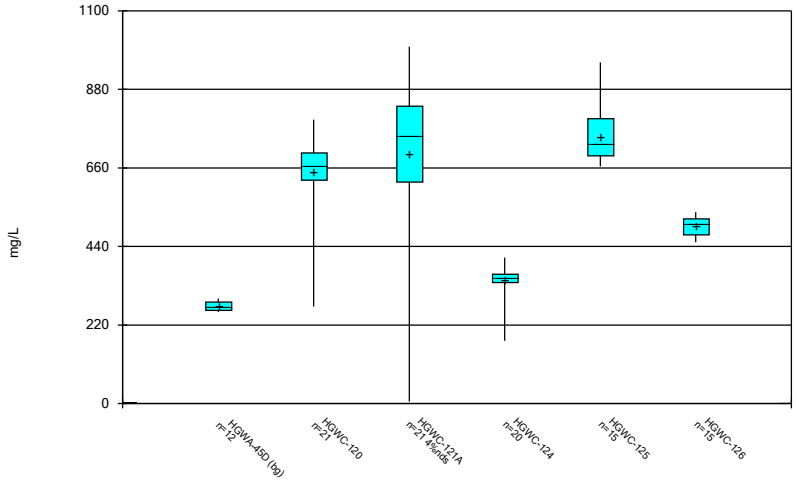


Constituent: Total Dissolved Solids Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 10/22/2024 11:44 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

FIGURE C.

Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/22/2024, 11:45 AM

	HGWA-44D Lithium (mg/L)	HGWA-122 Total Dissolved Solids (mg/L)
4/2/2019		814 (o)
8/8/2023	0.092 (o)	
2/13/2024	0.088 (o)	
8/6/2024	0.1 (o)	

FIGURE D.

Appendix III - Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/16/2024, 3:52 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**HGWC-120**	**0.55**	**n/a**	**8/7/2024**	**1.1**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-121A**	**0.55**	**n/a**	**8/6/2024**	**1.4**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-125**	**0.55**	**n/a**	**8/7/2024**	**1.5**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-120**	**138**	**n/a**	**8/7/2024**	**154**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-121A**	**138**	**n/a**	**8/6/2024**	**152**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-125**	**138**	**n/a**	**8/7/2024**	**159**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-120**	**93.9**	**n/a**	**8/7/2024**	**191**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-121A**	**93.9**	**n/a**	**8/6/2024**	**127**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-125**	**93.9**	**n/a**	**8/7/2024**	**289**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-120**	**632**	**n/a**	**8/7/2024**	**647**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-121A**	**632**	**n/a**	**8/6/2024**	**661**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-125**	**632**	**n/a**	**8/7/2024**	**695**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**

Appendix III - Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/16/2024, 3:52 PM

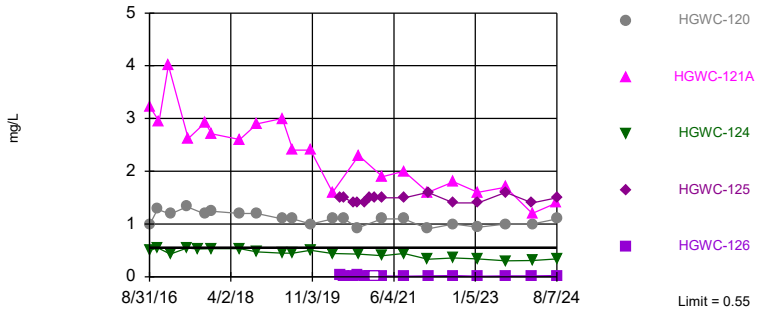
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**HGWC-120**	**0.55**	**n/a**	**8/7/2024**	**1.1**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-121A**	**0.55**	**n/a**	**8/6/2024**	**1.4**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	HGWC-124	0.55	n/a	8/7/2024	0.34	No	128	5.469	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Boron (mg/L)	**HGWC-125**	**0.55**	**n/a**	**8/7/2024**	**1.5**	**Yes**	**128**	**5.469**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	HGWC-126	0.55	n/a	8/7/2024	0.021J	No	128	5.469	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-120**	**138**	**n/a**	**8/7/2024**	**154**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-121A**	**138**	**n/a**	**8/6/2024**	**152**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-124	138	n/a	8/7/2024	97.7	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-125**	**138**	**n/a**	**8/7/2024**	**159**	**Yes**	**128**	**0**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-126	138	n/a	8/7/2024	136	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-120	44.8	n/a	8/7/2024	2.6	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-121A	44.8	n/a	8/6/2024	11.6	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-124	44.8	n/a	8/7/2024	2.2	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-125	44.8	n/a	8/7/2024	9.7	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-126	44.8	n/a	8/7/2024	8.7	No	128	0	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-120	1.5	n/a	8/7/2024	0.34	No	142	20.42	n/a	n/a	0.00009736	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-121A	1.5	n/a	8/6/2024	0.2	No	142	20.42	n/a	n/a	0.00009736	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-124	1.5	n/a	8/7/2024	0.1ND	No	142	20.42	n/a	n/a	0.00009736	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-125	1.5	n/a	8/7/2024	0.12	No	142	20.42	n/a	n/a	0.00009736	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-126	1.5	n/a	8/7/2024	0.5	No	142	20.42	n/a	n/a	0.00009736	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-120	8.36	4.57	8/7/2024	7.01	No	141	0	n/a	n/a	0.000197	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-121A	8.36	4.57	8/6/2024	6.91	No	141	0	n/a	n/a	0.000197	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-124	8.36	4.57	8/7/2024	7.24	No	141	0	n/a	n/a	0.000197	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-125	8.36	4.57	8/7/2024	6.15	No	141	0	n/a	n/a	0.000197	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-126	8.36	4.57	8/7/2024	6.99	No	141	0	n/a	n/a	0.000197	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-120**	**93.9**	**n/a**	**8/7/2024**	**191**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-121A**	**93.9**	**n/a**	**8/6/2024**	**127**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	HGWC-124	93.9	n/a	8/7/2024	69.7	No	128	0.7813	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-125**	**93.9**	**n/a**	**8/7/2024**	**289**	**Yes**	**128**	**0.7813**	**n/a**	**n/a**	**0.0001209**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	HGWC-126	93.9	n/a	8/7/2024	72.8	No	128	0.7813	n/a	n/a	0.0001209	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-120**	**632**	**n/a**	**8/7/2024**	**647**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**HGWC-121A**	**632**	**n/a**	**8/6/2024**	**661**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-124	632	n/a	8/7/2024	337	No	127	0	n/a	n/a	0.0001227	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**HGWC-125**	**632**	**n/a**	**8/7/2024**	**695**	**Yes**	**127**	**0**	**n/a**	**n/a**	**0.0001227**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	HGWC-126	632	n/a	8/7/2024	518	No	127	0	n/a	n/a	0.0001227	NP Inter (normality) 1 of 2

Sanitas™ v.10.0.22 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: HGWC-120, HGWC-121A, HGWC-125

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 128 background values. 5.469% NDs. Annual per-constituent alpha = 0.001209. Individual comparison alpha = 0.0001209 (1 of 2). Comparing 5 points to limit.

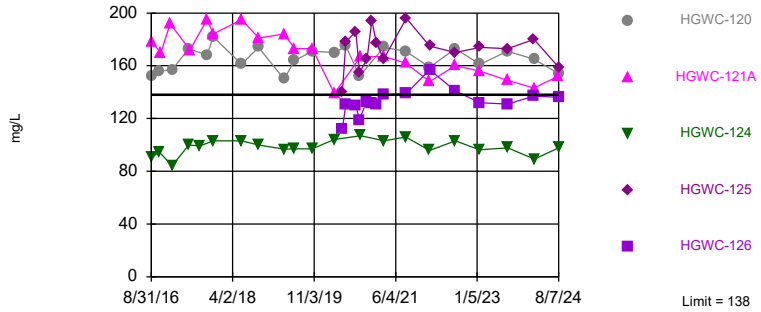
Constituent: Boron Analysis Run 10/16/2024 3:51 PM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.22 Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: HGWC-120, HGWC-121A, HGWC-125

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 128 background values. Annual per-constituent alpha = 0.001209. Individual comparison alpha = 0.0001209 (1 of 2). Comparing 5 points to limit.

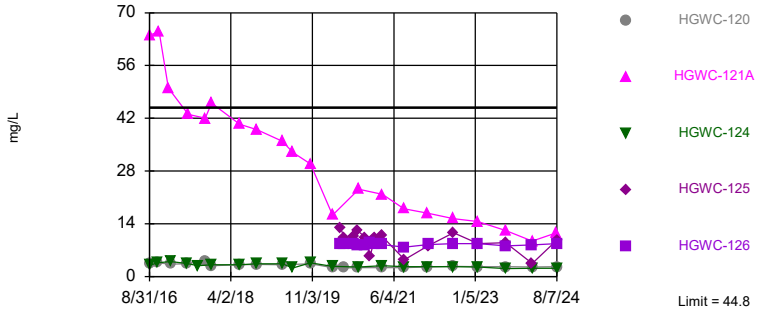
Constituent: Calcium Analysis Run 10/16/2024 3:51 PM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.22 Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 128 background values. Annual per-constituent alpha = 0.001209. Individual comparison alpha = 0.0001209 (1 of 2). Comparing 5 points to limit.

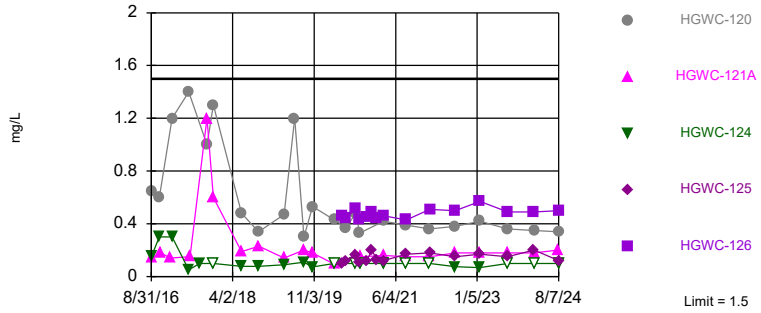
Constituent: Chloride Analysis Run 10/16/2024 3:51 PM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.22 Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



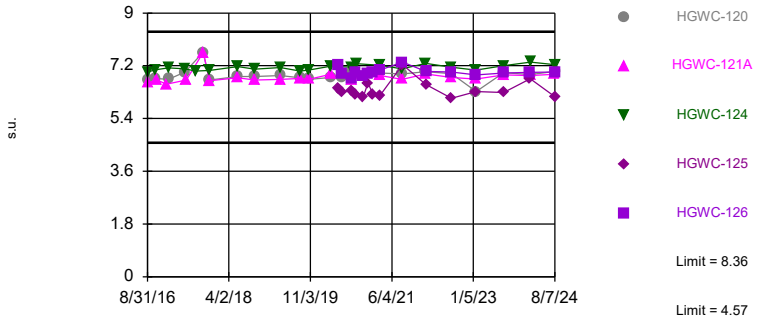
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 142 background values. 20.42% NDs. Annual per-constituent alpha = 0.0009732. Individual comparison alpha = 0.00009736 (1 of 2). Comparing 5 points to limit.

Constituent: Fluoride Analysis Run 10/16/2024 3:51 PM View: Appendix III
Plant Hammond Client: Southern Company Data: Hammond AP-3

Within Limits

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 141 background values. Annual per-constituent alpha = 0.00197. Individual comparison alpha = 0.000197 (1 of 2). Comparing 5 points to limit.

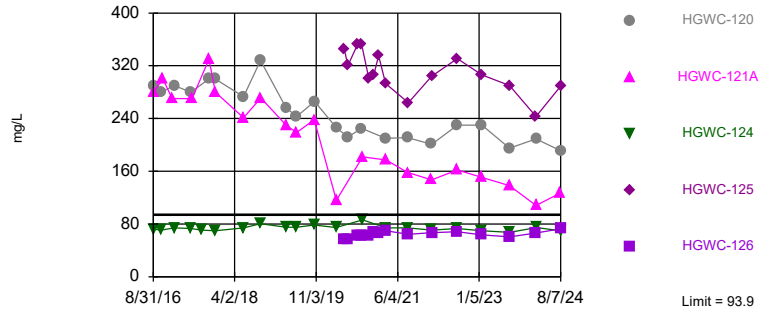
Constituent: pH Analysis Run 10/16/2024 3:51 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

Exceeds Limit: HGWC-120, HGWC-121A, HGWC-125

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 128 background values. 0.7813% NDs. Annual per-constituent alpha = 0.001209. Individual comparison alpha = 0.0001209 (1 of 2). Comparing 5 points to limit.

Constituent: Sulfate Analysis Run 10/16/2024 3:51 PM View: Appendix III

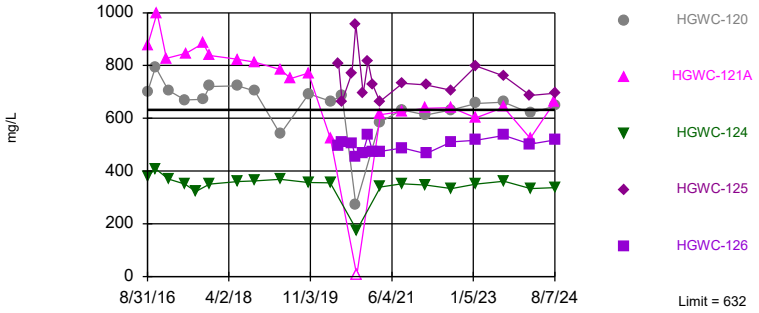
Plant Hammond Client: Southern Company Data: Hammond AP-3

Hollow symbols indicate censored values.

Exceeds Limit: HGWC-120, HGWC-121A, HGWC-125

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 127 background values. Annual per-constituent alpha = 0.001226. Individual comparison alpha = 0.0001227 (1 of 2). Comparing 5 points to limit.

Constituent: Total Dissolved Solids Analysis Run 10/16/2024 3:51 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-126	HGWC-125
5/19/2016	0.0214 (J)	<0.04	0.0321 (J)						
7/11/2016	0.0142 (J)		0.0337 (J)						
7/12/2016		0.0074 (J)							
8/30/2016	0.0074 (J)	<0.04	0.0173 (J)	0.277					
8/31/2016					0.981	0.494	3.23		
10/19/2016	0.0224 (J)	0.0085 (J)	0.0341 (J)						
10/20/2016				0.336					
10/26/2016					1.28	0.55			
11/7/2016							2.95		
12/6/2016	0.0211 (J)	0.0085 (J)	0.0326 (J)						
1/13/2017							4.01		
1/24/2017	0.0165 (J)	0.01 (J)	0.0365 (J)						
1/25/2017				0.274					
1/27/2017					1.19	0.428			
3/21/2017	0.0187 (J)	0.0079 (J)	0.0349 (J)						
5/22/2017	0.0782	0.0131 (J)	0.0475						
5/25/2017				0.298	1.33	0.544			
6/3/2017							2.62		
8/11/2017				0.285		0.524			
10/2/2017					1.19		2.92		
10/3/2017	0.0198 (J)	0.0097 (J)	0.0386 (J)						
11/15/2017				0.322	1.24	0.531	2.71		
6/4/2018	0.02 (J)	0.017 (J)	0.036 (J)						
6/5/2018				0.24	1.2	0.53	2.6		
10/1/2018	0.013 (J)	0.0061 (J)	0.035 (J)						
10/2/2018				0.28	1.2	0.47			
10/5/2018							2.9		
4/1/2019		0.0066 (J)							
4/2/2019	0.016 (J)		0.034 (J)	0.18	1.1				
4/3/2019						0.45	3		
6/17/2019					1.1		2.4		
6/18/2019				0.25		0.45			
9/23/2019	0.021 (J)	0.0081 (J)	0.04 (J)						
10/21/2019				0.25		0.5	2.4		
10/22/2019					1				
3/24/2020				0.1		0.44			
3/25/2020	0.025 (J)	0.0096 (J)	0.039 (J)		1.1		1.6		
5/22/2020								0.026 (J)	1.5
6/15/2020					1.1				
6/16/2020	0.021 (J)	0.01 (J)						0.023 (J)	1.5
8/25/2020								0.016 (J)	1.4
9/15/2020	0.017 (J)	0.0071 (J)	0.044 (J)	0.22					
9/16/2020									
9/18/2020								0.041 (J)	
9/21/2020					0.93				1.4
9/25/2020									
9/28/2020						0.43	2.3		
11/10/2020									
11/11/2020								0.009 (J)	
11/12/2020									1.4
12/15/2020									
12/16/2020								0.011 (J)	1.5

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-126	HGWC-125
1/19/2021									
1/20/2021								<0.04	1.5
3/10/2021	0.015 (J)								
3/11/2021		0.015 (J)	0.056	0.2					
3/12/2021					1.1			0.016 (J)	1.5
3/15/2021						0.4	1.9		
8/11/2021	0.02 (J)								
8/12/2021		<0.04	0.044						
8/13/2021				0.19					
8/16/2021					1.1	0.44	2		
8/19/2021								0.011 (J)	1.5
2/1/2022	0.016 (J)	0.011 (J)	0.056	0.17					
2/2/2022					0.91	0.33	1.6		
2/3/2022								0.016 (J)	1.6
8/2/2022	0.012 (J)	<0.04	0.047	0.18					
8/4/2022					1	0.36	1.8	0.023 (J)	1.4
1/23/2023		0.012 (J)							
1/24/2023	0.015 (J)		0.046	0.17		0.34	1.6		
1/25/2023					0.94			0.014 (J)	1.4
8/8/2023	0.023 (J)	0.011 (J)	0.06	0.18					
8/10/2023					1		1.7		1.6
8/11/2023						0.3		0.016 (J)	
2/13/2024	0.02 (J)	<0.04	0.051	0.15					
2/14/2024								0.019 (J)	1.4
2/15/2024					1		1.2		
2/16/2024						0.31			
8/5/2024	0.02 (J)	<0.04	0.057						
8/6/2024				0.15			1.4		
8/7/2024					1.1	0.34		0.021 (J)	1.5

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/25/2020			
9/15/2020			
9/16/2020	0.23	0.061 (J)	
9/18/2020			
9/21/2020			
9/25/2020			0.16
9/28/2020			
11/10/2020	0.29	0.057 (J)	
11/11/2020			0.17
11/12/2020			
12/15/2020	0.31	0.052 (J)	
12/16/2020			0.16

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
1/19/2021	<0.04	0.049 (J)	
1/20/2021			0.19
3/10/2021	0.39		
3/11/2021		0.06	
3/12/2021			0.19
3/15/2021			
8/11/2021		0.042	
8/12/2021			
8/13/2021	0.31		0.15
8/16/2021			
8/19/2021			
2/1/2022	0.44	0.05	0.14
2/2/2022			
2/3/2022			
8/2/2022	0.31	0.043	0.14
8/4/2022			
1/23/2023			
1/24/2023	0.44	0.037 (J)	0.14
1/25/2023			
8/8/2023	0.55	0.038 (J)	0.15
8/10/2023			
8/11/2023			
2/13/2024	0.49	0.037 (J)	0.15
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	0.52	0.043	0.16
8/7/2024			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-126	HGWC-125
5/19/2016	138	76.2	22.9						
7/11/2016	97.2		22.3						
7/12/2016		61.5							
8/30/2016	97.5	65.1	26.4	71.3					
8/31/2016					152	90.4	178		
10/19/2016	99.2	73.2	21.7						
10/20/2016				90.3					
10/26/2016					156	94.5			
11/7/2016							170		
12/6/2016	105	74.9	18.2						
1/13/2017							192		
1/24/2017	95.7	69.6	18.5						
1/25/2017				77.3					
1/27/2017					157	84.2			
3/21/2017	106	75.7	18.6						
5/22/2017	107	71.5	17.8						
5/25/2017				69.9	173	100			
6/3/2017							172		
8/11/2017				79.5		99.1			
10/2/2017					168		195		
10/3/2017	102	76.3	20.2						
11/15/2017				72.8	182	103	184		
6/4/2018	124	73.4	19.1						
6/5/2018				71.4	161	103	195		
10/1/2018	108	80.9	20.5 (J)						
10/2/2018				66.6	174	100			
10/5/2018							181		
4/1/2019		80.5							
4/2/2019	132		22.5 (J)	60.9	150				
4/3/2019						96.7	184		
6/17/2019					164		173		
6/18/2019				75		97.1			
9/23/2019	118	71	19.5						
10/21/2019				80.8		96.9	173		
10/22/2019					171				
3/24/2020				81.2		104			
3/25/2020	127	89.8	23		170		139		
5/22/2020								112	140
6/15/2020					175				
6/16/2020	130	85.1						131	178
8/25/2020								130	186
9/15/2020	103	73.1	21.1	75.8					
9/16/2020									
9/18/2020								119	
9/21/2020					152				155
9/25/2020									
9/28/2020						107	167		
11/10/2020									
11/11/2020								133	
11/12/2020									165
12/15/2020									
12/16/2020								132	194

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-126	HGWC-125
1/19/2021									
1/20/2021								131	177 (M1)
3/10/2021	111								
3/11/2021		83.8	43.8	60.4 (M1)					
3/12/2021					174			138	165
3/15/2021						103	167		
8/11/2021	113								
8/12/2021		84	21.9						
8/13/2021				62.9					
8/16/2021					171	106	162		
8/19/2021								139	196
2/1/2022	106	85.1	27.2	57.5					
2/2/2022					159	95.9	148		
2/3/2022								157	175
8/2/2022	117	84.6	31.2	69.5					
8/4/2022					173	103	160	141	170
1/23/2023		85							
1/24/2023	117		29.4	63.3		96.2	156		
1/25/2023					161			132	174
8/8/2023	118	78.3	30.7	64.4					
8/10/2023					171		149		173
8/11/2023						97.8		131	
2/13/2024	116	83.6	38.8	61.9					
2/14/2024								137	180
2/15/2024					165		143		
2/16/2024						89.2			
8/5/2024	113	83.3	34.7						
8/6/2024				73.7			152		
8/7/2024					154	97.7		136	159

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/25/2020			
9/15/2020			
9/16/2020	30	56	
9/18/2020			
9/21/2020			
9/25/2020			56.8
9/28/2020			
11/10/2020	33.6	63.3	
11/11/2020			54.9
11/12/2020			
12/15/2020	28.7	62.6	
12/16/2020			56.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
1/19/2021	33	60.1	
1/20/2021			55
3/10/2021	18.3		
3/11/2021		59.6	
3/12/2021			56.5
3/15/2021			
8/11/2021		61	
8/12/2021			
8/13/2021	28.9		53
8/16/2021			
8/19/2021			
2/1/2022	24.8	55.9	51.3
2/2/2022			
2/3/2022			
8/2/2022	20.9	54.1	49.9
8/4/2022			
1/23/2023			
1/24/2023	13.2	56.6	53.9
1/25/2023			
8/8/2023	8.1	52.8	48.1
8/10/2023			
8/11/2023			
2/13/2024	9.9	53.3	50.7
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	7.1	57.2	53.3
8/7/2024			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
5/19/2016	9.94	5.93	6.14						
7/11/2016	6.3		5.9						
7/12/2016		6.2							
8/30/2016	6	6.4	6.2	2.8					
8/31/2016					3.5	3	64		
10/19/2016	5.8	6.5	6.1						
10/20/2016				2.8					
10/26/2016					3.6	3.6			
11/7/2016							65		
12/6/2016	5.4	7.2	6						
1/13/2017							50		
1/24/2017	5.2	6.4	6.1						
1/25/2017				2.8					
1/27/2017					3.3	4			
3/21/2017	4.6	7.5	5.9						
5/22/2017	4.6	6.5	5.9						
5/25/2017				2.9	3.4	3.5			
6/3/2017							43		
8/11/2017				3		2.9			
10/2/2017					4.2		42		
10/3/2017	5.6	6.5	6.3						
11/15/2017				3.1	2.9	3.1	46		
6/4/2018	13.1	6.3	6.1						
6/5/2018				3	3.1	3.1	40.4		
10/1/2018	6.6	6.4	6.4						
10/2/2018				3.1	3.2	3.4			
10/5/2018							39		
4/1/2019		6.5							
4/2/2019	20.3		5.8	3.6	3.1				
4/3/2019						3.4	35.9		
6/17/2019							32.9		
6/18/2019				3.2		2.3 (J)			
9/23/2019	17.7	5.9	5.1						
10/21/2019				4.5		3.6	29.9		
10/22/2019					3.4				
3/24/2020				4.5		2.7			
3/25/2020	20.4	6.1	5.2		2.4		16.3		
5/22/2020								12.9	8.6
6/15/2020					2.3				
6/16/2020	41.1	5.8						10.4	8.6
8/25/2020								10.6	8.7
9/15/2020	13.4	6	5	3.6					
9/16/2020									
9/18/2020									8.4
9/21/2020					2.4			12.1	
9/25/2020									
9/28/2020						2.5	23.2		
11/10/2020									
11/11/2020									8.3
11/12/2020								10.4	
12/15/2020									
12/16/2020								5.3	8.9

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
1/19/2021									
1/20/2021								10.2	8.5
3/10/2021	7.4								
3/11/2021		5.9	5.1	2.3					
3/12/2021					2.4			10.8	8.5
3/15/2021						2.9	21.8		
8/11/2021	9.6								
8/12/2021		4.8	5.2						
8/13/2021				2.6					
8/16/2021					2.4	2.6	18		
8/19/2021								4.5	7.8
2/1/2022	7.5	5.7	7	2.2					
2/2/2022					2.5	2.6	16.8		
2/3/2022								8.1	8.5
8/2/2022	14.1	5.9	7.8	2.7					
8/4/2022					2.7	2.6	15.4	11.6	8.7
1/23/2023		5.6							
1/24/2023	9		7.1	2.4		2.5	14.6		
1/25/2023					2.6			8.7	8.7
8/8/2023	26	5.3	6.6	2.2					
8/10/2023					2.6		12.2	9	
8/11/2023						2.1			8.1
2/13/2024	10	5.3	6.3	2.4					
2/14/2024								3.5	8.4
2/15/2024					2.5		9.4		
2/16/2024						2.2			
8/5/2024	8.7	5.2	7.9						
8/6/2024				2.1			11.6		
8/7/2024					2.6	2.2		9.7	8.7

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/25/2020			
9/15/2020			
9/16/2020	4.1	4.1	
9/18/2020			
9/21/2020			
9/25/2020			3.6
9/28/2020			
11/10/2020	7.8	4.4	
11/11/2020			3.3
11/12/2020			
12/15/2020	9.4	4.7	
12/16/2020			3.4

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
1/19/2021	9.5	4.1	
1/20/2021			3.5
3/10/2021	12.3		
3/11/2021		4.5	
3/12/2021			3.3
3/15/2021			
8/11/2021		3.5	
8/12/2021			
8/13/2021	39.9		3.3
8/16/2021			
8/19/2021			
2/1/2022	44.8	4.1	3.5
2/2/2022			
2/3/2022			
8/2/2022	19.8	4.3	3.9
8/4/2022			
1/23/2023			
1/24/2023	24.9	4.3	3.5
1/25/2023			
8/8/2023	27	3.5	3.6
8/10/2023			
8/11/2023			
2/13/2024	27.7	3.9	3.4
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	30.2	4	3.6
8/7/2024			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-121A	HGWC-124	HGWC-120	HGWC-126	HGWC-125
5/19/2016	0.105 (J)	0.0303 (J)	0.0513 (J)						
7/11/2016	0.16 (J)	0.05 (J)							
7/12/2016			0.12 (J)						
8/30/2016	0.09 (J)	0.06 (J)	0.09 (J)	0.19 (J)					
8/31/2016					0.14 (J)	0.15 (J)	0.65		
10/19/2016	0.1 (J)	0.04 (J)	0.1 (J)						
10/20/2016				0.13 (J)					
10/26/2016						0.3	0.6		
11/7/2016					0.18 (J)				
12/6/2016	0.11 (J)	0.36	0.21 (J)						
1/13/2017					0.14 (J)				
1/24/2017	0.09 (J)	<0.1	0.06 (J)						
1/25/2017				0.22 (J)					
1/27/2017						0.3	1.2		
3/21/2017	0.13 (J)	<0.1	0.005 (J)						
5/22/2017	0.12 (J)	<0.1	0.05 (J)						
5/25/2017				0.12 (J)		0.05 (J)	1.4		
6/3/2017					0.15 (J)				
8/11/2017				0.12 (J)		0.1 (J)			
10/2/2017					1.2		1		
10/3/2017	0.13 (J)	<0.1	0.13 (J)						
11/15/2017				0.05 (J)	0.6	<0.1	1.3		
4/2/2018	<0.1	<0.1							
4/3/2018			<0.1						
6/4/2018	0.074 (J)	<0.1	<0.1						
6/5/2018				0.15 (J)	0.19 (J)	0.078 (J)	0.48		
10/1/2018	<0.1	<0.1	<0.1						
10/2/2018				0.22 (J)		0.078 (J)	0.34		
10/5/2018					0.23 (J)				
3/12/2019	0.29 (J)	0.038 (J)	0.072 (J)						
4/1/2019			0.029 (J)						
4/2/2019	0.1 (J)	0.071 (J)		0.2 (J)			0.47		
4/3/2019					0.14 (J)	0.089 (J)			
6/17/2019							1.2		
6/18/2019				0.14 (J)					
8/22/2019				0.12 (J)	0.2 (J)		0.3 (J)		
8/23/2019						0.11 (J)			
9/23/2019	0.078 (J)	<0.1	<0.1						
10/21/2019				0.15 (J)	0.18 (J)	0.073 (J)			
10/22/2019							0.53		
3/2/2020	0.076 (J)	<0.1	<0.1						
3/24/2020				0.085 (J)		<0.1			
3/25/2020	0.098 (J)	<0.1	<0.1		0.095 (J)		0.43		
5/22/2020								0.46	0.1 (J)
6/15/2020							0.37		
6/16/2020	0.071 (J)		<0.1					0.44	0.12
8/24/2020				0.075 (J)					
8/25/2020		<0.1	<0.1					0.52	0.16
8/26/2020					0.16		0.48		
8/27/2020						<0.1			
8/28/2020	0.08 (J)								
9/15/2020	0.082 (J)	<0.1	<0.1	0.096 (J)					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-121A	HGWC-124	HGWC-120	HGWC-126	HGWC-125
9/16/2020									
9/18/2020								0.43	
9/21/2020							0.33		0.11
9/25/2020									
9/28/2020					0.15	<0.1			
11/10/2020									
11/11/2020								0.45	
11/12/2020									0.12
12/15/2020									
12/16/2020								0.49	0.2
1/19/2021									
1/20/2021								0.44	0.13
3/10/2021	0.079 (J)								
3/11/2021		0.1	<0.1	0.059 (J)					
3/12/2021							0.42	0.46	0.12
3/15/2021					0.16	<0.1			
8/11/2021	0.058 (J)								
8/12/2021		<0.1	<0.1						
8/13/2021				0.065 (J)					
8/16/2021					0.15	<0.1	0.39		
8/19/2021								0.43	0.17
2/1/2022	0.064 (J)	<0.1	<0.1	0.062 (J)					
2/2/2022					0.15	<0.1	0.36		
2/3/2022								0.51	0.18
8/2/2022	0.09 (J)	0.053 (J)	0.067 (J)	0.1					
8/4/2022					0.18	0.074 (J)	0.38	0.5	0.15
1/23/2023			0.061 (J)						
1/24/2023	0.089 (J)	0.053 (J)		0.13	0.18	0.068 (J)			
1/25/2023							0.42	0.57	0.17
8/8/2023	0.088 (J)	0.07 (J)	0.055 (J)	0.091 (J)					
8/10/2023					0.18		0.36		0.15
8/11/2023						<0.1		0.49	
2/13/2024	0.071 (J)	0.17	<0.1	0.081 (J)					
2/14/2024								0.49	0.2
2/15/2024					0.18		0.35		
2/16/2024						<0.1			
8/5/2024	0.11	0.12	0.077 (J)						
8/6/2024				0.14	0.2				
8/7/2024						<0.1	0.34	0.5	0.12

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
4/2/2018			
4/3/2018			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
3/12/2019			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
8/22/2019			
8/23/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/2/2020			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/24/2020			
8/25/2020			
8/26/2020			
8/27/2020			
8/28/2020			
9/15/2020			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)
9/16/2020	0.22	0.22	
9/18/2020			
9/21/2020			
9/25/2020			0.21
9/28/2020			
11/10/2020	0.19	0.59	
11/11/2020			0.19
11/12/2020			
12/15/2020	0.21	0.67	
12/16/2020			0.18
1/19/2021	0.16	0.74	
1/20/2021			0.22
3/10/2021		0.65	
3/11/2021	0.2		
3/12/2021			0.2
3/15/2021			
8/11/2021	0.15		
8/12/2021			
8/13/2021		0.87	0.2
8/16/2021			
8/19/2021			
2/1/2022	0.19	0.96	0.15
2/2/2022			
2/3/2022			
8/2/2022	0.22	0.8	0.21
8/4/2022			
1/23/2023			
1/24/2023	0.23	1.3	0.19
1/25/2023			
8/8/2023	0.18	1.3	0.19
8/10/2023			
8/11/2023			
2/13/2024	0.2	1.5	0.17
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	0.21	1.3	0.2
8/7/2024			

Prediction Limit

Constituent: pH (s.u.) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-121A	HGWC-120	HGWC-124	HGWC-125	HGWC-126
5/19/2016	7.27	5.81	7.45						
7/11/2016	7.06	5.68							
7/12/2016			7.32						
8/30/2016	7.28	5.63	7.43	6.75					
8/31/2016					6.62	6.73	6.99		
10/19/2016	7.02	5.46	7.03						
10/20/2016				6.73					
10/27/2016						6.77	7.06		
11/7/2016					6.71				
12/6/2016	7.09	5.38	7.08						
1/13/2017					6.57				
1/24/2017	7.2	5.37	7.39						
1/25/2017				6.88					
1/27/2017						6.74	7.13		
3/21/2017	7.01	4.9	6.83						
5/22/2017	7.11	5.2	7.02						
5/25/2017				6.55		6.99	7.1		
6/3/2017					6.71				
8/11/2017				6.56			7.02		
10/2/2017					7.65	7.66			
10/3/2017	7.21	5.3	7.47						
11/15/2017				6.47	6.69	6.71	7.04		
4/2/2018	7.1	5.4							
4/3/2018			7.38						
6/4/2018	7.06	5.27	7.38						
6/5/2018				6.66	6.79	6.83	7.17		
10/1/2018	7.09	5.31	7.13						
10/2/2018				6.44		6.83	7.08		
10/5/2018					6.71				
3/12/2019	7.03	5.42	7.29						
4/1/2019			7.16						
4/2/2019	6.86	5.41		6.57		6.87			
4/3/2019					6.73		7.14		
8/22/2019				6.51	6.77	6.79			
8/23/2019							7.02		
9/23/2019	7.02	5.33	7.3						
10/21/2019				6.69	6.74		7.05		
10/22/2019						6.74			
3/2/2020	7.1	5.43	7.12						
3/24/2020				7.08			7.18		
3/25/2020	6.95	5.36	7.4		6.91	6.8			
5/22/2020								6.43	7.22
6/15/2020						6.8			
6/16/2020	6.97		7.31					6.29	6.92
8/24/2020				6.54					
8/25/2020		5.17	7.14					6.36	6.78
8/26/2020					6.73	6.96			
8/27/2020							7.15		
8/28/2020	7.02								
9/15/2020	7.15	5.22	7.29	6.68					
9/16/2020									
9/18/2020									6.97

Prediction Limit

Constituent: pH (s.u.) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-121A	HGWC-120	HGWC-124	HGWC-125	HGWC-126
9/21/2020						6.98		6.22	
9/25/2020									
9/28/2020					6.93		7.27		
11/10/2020									
11/11/2020									6.86
11/12/2020								6.13	
12/15/2020									
12/16/2020								6.61	6.93
1/19/2021									
1/20/2021								6.23	6.99
3/10/2021	6.95								
3/11/2021		5.8	7.33	6.65					
3/12/2021						6.95		6.18	7.05
3/15/2021					6.87		7.22		
8/11/2021	6.98								
8/12/2021		5.05	7.31						
8/13/2021				6.56					
8/16/2021					6.74	6.92	7.09		
8/19/2021								7.24	7.32
2/1/2022	7.19	5.24	7.45	6.57					
2/2/2022					6.92	7	7.28		
2/3/2022								6.56	7.01
8/2/2022	7.03	4.57	7.02	6.67					
8/4/2022					6.8	6.93	7.15	6.09	6.99
1/23/2023			7.32						
1/24/2023	6.76	5.22		6.43	6.75		7.05		
1/25/2023						6.32		6.32	6.89
8/8/2023	7.05	5.01	7.42	6.67					
8/10/2023					6.89	6.96		6.29	
8/11/2023							7.2		6.95
2/13/2024	7.06	5.49	7.35	6.82					
2/14/2024								6.76	6.98
2/15/2024					6.87	6.9			
2/16/2024							7.33		
8/5/2024	7.29	4.91	7.27						
8/6/2024				6.86	6.91				
8/7/2024						7.01	7.24	6.15	6.99

Prediction Limit

Constituent: pH (s.u.) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/27/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
4/2/2018			
4/3/2018			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
3/12/2019			
4/1/2019			
4/2/2019			
4/3/2019			
8/22/2019			
8/23/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/2/2020			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/24/2020			
8/25/2020			
8/26/2020			
8/27/2020			
8/28/2020			
9/15/2020			
9/16/2020	7.52	7.83	
9/18/2020			

Prediction Limit

Constituent: pH (s.u.) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)
9/21/2020			
9/25/2020			7.57
9/28/2020			
11/10/2020	7.27	7.84	
11/11/2020			7.4
11/12/2020			
12/15/2020	7.39	7.87	
12/16/2020			7.39
1/19/2021	7.39	7.86	
1/20/2021			7.47
3/10/2021		7.92	
3/11/2021	7.46		
3/12/2021			7.52
3/15/2021			
8/11/2021	7.4		
8/12/2021			
8/13/2021		7.77	7.42
8/16/2021			
8/19/2021			
2/1/2022	7.52	8.25	7.45
2/2/2022			
2/3/2022			
8/2/2022	7.15	7.9	7.39
8/4/2022			
1/23/2023			
1/24/2023	7.56	8.22	7.15
1/25/2023			
8/8/2023	7.39	8.2	7.39
8/10/2023			
8/11/2023			
2/13/2024	7.47	8.1	7.47
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	7.46	8.36	7.47
8/7/2024			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-126	HGWC-125
5/19/2016	66.9	42.3	48.6						
7/11/2016	41		45						
7/12/2016		44							
8/30/2016	36	40	42	49					
8/31/2016					290	72	280		
10/19/2016	46	43	44						
10/20/2016				49					
10/26/2016					280	71			
11/7/2016							300		
12/6/2016	59	43	44						
1/13/2017							270		
1/24/2017	46	48	46						
1/25/2017				48					
1/27/2017					290	74			
3/21/2017	63	45	46						
5/22/2017	77	46	48						
5/25/2017				48	280	73			
6/3/2017							270		
8/11/2017				47		71			
10/2/2017					300		330		
10/3/2017	42	48	47						
11/15/2017				49	300	70	280		
6/4/2018	71.8	46.6	47.8						
6/5/2018				48.9	273	74	241		
10/1/2018	49.1	48.6	48.1						
10/2/2018				48.6	328	80.7			
10/5/2018							271		
4/1/2019		50.4							
4/2/2019	84.3		48.7	39.6	256				
4/3/2019						75.2	230		
6/17/2019					243		219		
6/18/2019				44.5		75.3			
9/23/2019	70.2	43.9	47.2						
10/21/2019				45.6		78.5	238		
10/22/2019					266				
3/24/2020				25.9		74.6			
3/25/2020	85.9	50.5	46.3		226		116		
5/22/2020								56.1	345
6/15/2020					212				
6/16/2020	88.2	49.5						57.6	320
8/25/2020								62.8	353
9/15/2020	47.3	44.7	51.5	41.4					
9/16/2020									
9/18/2020								62.7	
9/21/2020					225				352
9/25/2020									
9/28/2020						86.2	182		
11/10/2020									
11/11/2020								62.3	
11/12/2020									300
12/15/2020									
12/16/2020								68.1	306

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-126	HGWC-125
1/19/2021									
1/20/2021								66.6	335
3/10/2021	49.6								
3/11/2021		50.4	52.9	40.7					
3/12/2021					210			69.7	293
3/15/2021						74	177		
8/11/2021	48.9								
8/12/2021		38.6	47.4						
8/13/2021				42.1					
8/16/2021					211	74	158		
8/19/2021								64.4	264
2/1/2022	43.7	46	67.1	41.1					
2/2/2022					201	70.7	147		
2/3/2022								66.8	304
8/2/2022	58.1	43.5	86.9	41.5					
8/4/2022					230	73.1	162	68.3	331
1/23/2023		39.5							
1/24/2023	48.3		79.7	36.5		69.6	151		
1/25/2023					230			63.7	306
8/8/2023	67.7	35	89.9	34.9					
8/10/2023					195		138		290
8/11/2023						67.6		60.5	
2/13/2024	50.4	35.5	93.9	35.6					
2/14/2024								66.4	243
2/15/2024					209		108		
2/16/2024						74.5			
8/5/2024	49.4	31.1	87.2						
8/6/2024				37.8			127		
8/7/2024					191	69.7		72.8	289

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/25/2020			
9/15/2020			
9/16/2020	43	43	
9/18/2020			
9/21/2020			
9/25/2020			6.8
9/28/2020			
11/10/2020	6.3	39	
11/11/2020			11.2
11/12/2020			
12/15/2020	6.7	38.8	
12/16/2020			11.3

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
1/19/2021	7.4	37.3	
1/20/2021			14.2
3/10/2021	<1		
3/11/2021		38.6	
3/12/2021			8.7
3/15/2021			
8/11/2021		30.5	
8/12/2021			
8/13/2021	56.1		8.1
8/16/2021			
8/19/2021			
2/1/2022	56.3	37.5	2.5
2/2/2022			
2/3/2022			
8/2/2022	13.2	37	2.1
8/4/2022			
1/23/2023			
1/24/2023	10.1	34.7	5.2
1/25/2023			
8/8/2023	1.3	25.6	2.2
8/10/2023			
8/11/2023			
2/13/2024	2	28.9	6
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	0.86 (J)	25.5	2.9
8/7/2024			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
5/19/2016	421	267	143						
7/11/2016	363		125						
7/12/2016		249							
8/30/2016	330	254	168	280					
8/31/2016					700	379	876		
10/19/2016	380	357	176						
10/20/2016				265					
10/26/2016					795	409			
11/7/2016							1000		
12/6/2016	377	285	145						
1/13/2017							827		
1/24/2017	342	300	129						
1/25/2017				371					
1/27/2017					706	370			
3/21/2017	340	288	103						
5/22/2017	338	263	92						
5/25/2017				237	669	351			
6/3/2017							846		
8/11/2017				253		322			
10/2/2017					672		884		
10/3/2017	343	300	127						
11/15/2017				261	721	350	838		
6/4/2018	415	266	140						
6/5/2018				276	723	360	823		
10/1/2018	354	291	135						
10/2/2018				256	703	363			
10/5/2018							813		
4/1/2019		284							
4/2/2019	452		133	814 (o)	540				
4/3/2019						369	785		
6/17/2019							751		
6/18/2019				233					
9/23/2019	442	268	129						
10/21/2019				296		357	771		
10/22/2019					693				
3/24/2020				278		355			
3/25/2020	496	284	138		665		521		
5/22/2020								809	496
6/15/2020					685				
6/16/2020	632	448						665	508
8/25/2020								772	505
9/15/2020	265	258	124	267					
9/16/2020									
9/18/2020									452
9/21/2020					272			956	
9/25/2020									
9/28/2020						176	<10		
11/10/2020									
11/11/2020									468
11/12/2020								694	
12/15/2020									
12/16/2020								816	536

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
1/19/2021									
1/20/2021								726	472
3/10/2021	348								
3/11/2021		267	169	206					
3/12/2021					584			664	474
3/15/2021						340	614		
8/11/2021	366								
8/12/2021		265	118						
8/13/2021				201					
8/16/2021					632	352	626		
8/19/2021								732	488
2/1/2022	270	350	156	203					
2/2/2022					612	347	638		
2/3/2022								726	466
8/2/2022	400	287	196	217					
8/4/2022					632	334	640	706	510
1/23/2023		293							
1/24/2023	369		164	246		350	602		
1/25/2023					656			798	517
8/8/2023	457	285	189	248					
8/10/2023					661		642	760	
8/11/2023						361			535
2/13/2024	402	284	214	222					
2/14/2024								687	502
2/15/2024					620		524		
2/16/2024						333			
8/5/2024	444	304	217						
8/6/2024				270			661		
8/7/2024					647	337		695	518

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/25/2020			
9/15/2020			
9/16/2020	272	270	
9/18/2020			
9/21/2020			
9/25/2020			263
9/28/2020			
11/10/2020	307	287	
11/11/2020			276
11/12/2020			
12/15/2020	289	295	
12/16/2020			294

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/16/2024 3:52 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)
1/19/2021	270	278	
1/20/2021			289
3/10/2021		289	
3/11/2021	279		
3/12/2021			260
3/15/2021			
8/11/2021	277		
8/12/2021			
8/13/2021		436	272
8/16/2021			
8/19/2021			
2/1/2022	156	444	268
2/2/2022			
2/3/2022			
8/2/2022	278	311	261
8/4/2022			
1/23/2023			
1/24/2023	271	363	289
1/25/2023			
8/8/2023	274	361	261
8/10/2023			
8/11/2023			
2/13/2024	291	379	279
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	283	380	256
8/7/2024			

FIGURE E.

Appendix III Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/23/2024, 12:32 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**HGWA-122 (bg)**	**-0.02066**	**-142**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-2 (bg)**	**0.002641**	**177**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-43D (bg)**	**-0.005612**	**-42**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-44D (bg)**	**0.07224**	**46**	**38**	**Yes**	**12**	**8.333**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-120**	**-0.03508**	**-104**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-121A**	**-0.2362**	**-160**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-2 (bg)**	**1.536**	**119**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**1.859**	**131**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-44D (bg)**	**-7.17**	**-50**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWC-121A**	**-5.681**	**-124**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-122 (bg)**	**-1.765**	**-134**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-2 (bg)**	**4.063**	**177**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-43D (bg)**	**-3.566**	**-54**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-120**	**-14.01**	**-159**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-121A**	**-23.75**	**-160**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-125**	**-16.24**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**HGWC-120**	**-11.22**	**-91**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**HGWC-121A**	**-43.81**	**-128**	**-87**	**Yes**	**21**	**4.762**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

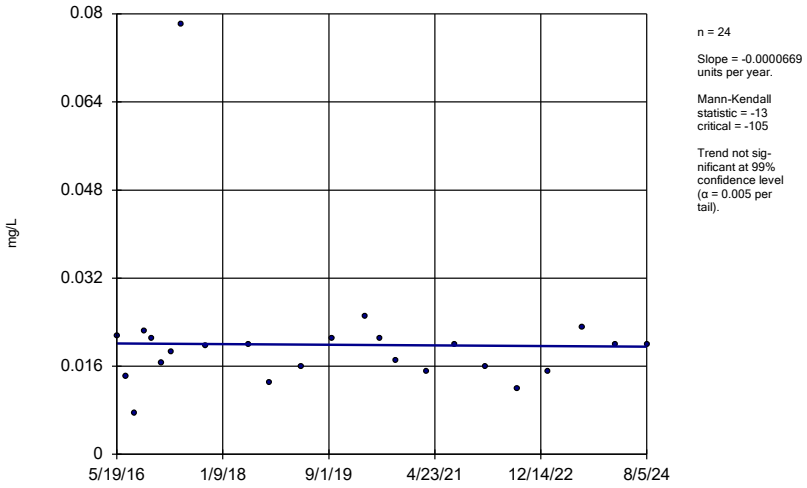
Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/23/2024, 12:32 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.0000669	-13	-105	No	24	0	n/a	0.01	NP
Boron (mg/L)	**HGWA-122 (bg)**	**-0.02066**	**-142**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-2 (bg)**	**0.002641**	**177**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-3 (bg)	0.0005613	68	105	No	24	25	n/a	0.01	NP
Boron (mg/L)	**HGWA-43D (bg)**	**-0.005612**	**-42**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-44D (bg)**	**0.07224**	**46**	**38**	**Yes**	**12**	**8.333**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-45D (bg)	-0.003634	-18	-38	No	12	0	n/a	0.01	NP
Boron (mg/L)	**HGWC-120**	**-0.03508**	**-104**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-121A**	**-0.2362**	**-160**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-125	0	8	53	No	15	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	1.902	84	105	No	24	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-122 (bg)	-1.705	-64	-87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**HGWA-2 (bg)**	**1.536**	**119**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**1.859**	**131**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWA-43D (bg)	-2.184	-32	-38	No	12	0	n/a	0.01	NP
Calcium (mg/L)	**HGWA-44D (bg)**	**-7.17**	**-50**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWA-45D (bg)	-1.791	-36	-38	No	12	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-120	0.3985	16	92	No	22	0	n/a	0.01	NP
Calcium (mg/L)	**HGWC-121A**	**-5.681**	**-124**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWC-125	0.9777	4	53	No	15	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-1 (bg)	0.5993	35	105	No	24	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-122 (bg)**	**-1.765**	**-134**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-2 (bg)**	**4.063**	**177**	**98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-3 (bg)	-0.4499	-30	-105	No	24	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-43D (bg)**	**-3.566**	**-54**	**-38**	**Yes**	**12**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-44D (bg)	-1.833	-14	-38	No	12	8.333	n/a	0.01	NP
Sulfate (mg/L)	HGWA-45D (bg)	-1.936	-30	-38	No	12	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWC-120**	**-14.01**	**-159**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-121A**	**-23.75**	**-160**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-125**	**-16.24**	**-56**	**-53**	**Yes**	**15**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	5.368	56	105	No	24	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-122 (bg)	-5.553	-56	-81	No	20	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	6.288	78	98	No	23	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	2.16	44	105	No	24	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	0.03609	0	38	No	12	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	28.25	38	38	No	12	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-45D (bg)	-3.941	-16	-38	No	12	0	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**HGWC-120**	**-11.22**	**-91**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**HGWC-121A**	**-43.81**	**-128**	**-87**	**Yes**	**21**	**4.762**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	HGWC-125	-12.46	-20	-53	No	15	0	n/a	0.01	NP

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Sen's Slope Estimator

HGWA-1 (bg)



n = 24

Slope = -0.0000669 units per year.

Mann-Kendall statistic = -13
critical = -105

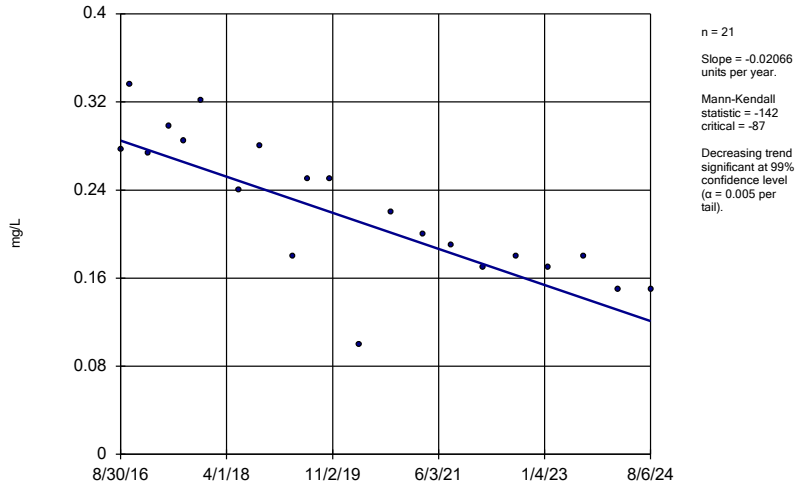
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-122 (bg)



n = 21

Slope = -0.02066 units per year.

Mann-Kendall statistic = -142
critical = -87

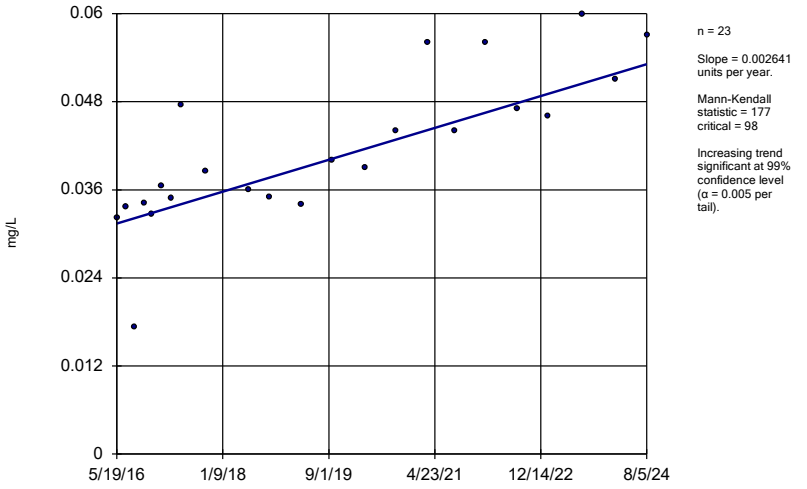
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 23

Slope = 0.002641 units per year.

Mann-Kendall statistic = 177
critical = 98

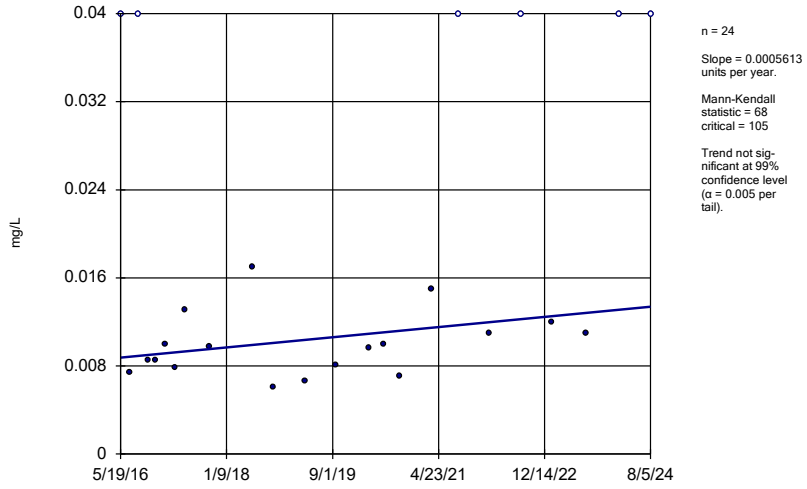
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-3 (bg)



n = 24

Slope = 0.0005613 units per year.

Mann-Kendall statistic = 68
critical = 105

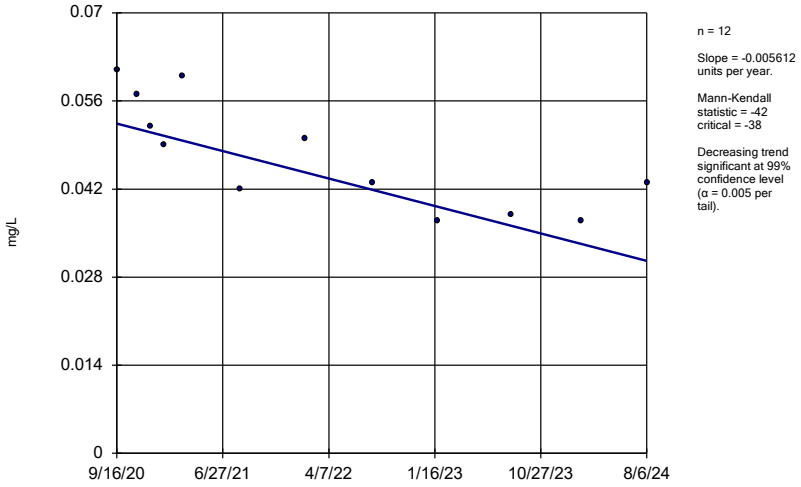
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 12

Slope = -0.005612 units per year.

Mann-Kendall statistic = -42
critical = -38

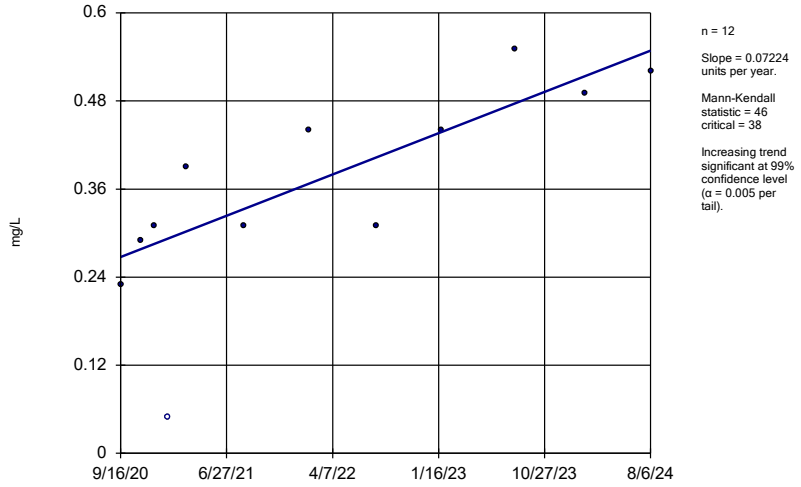
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

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Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-44D (bg)



n = 12

Slope = 0.07224 units per year.

Mann-Kendall statistic = 46
critical = 38

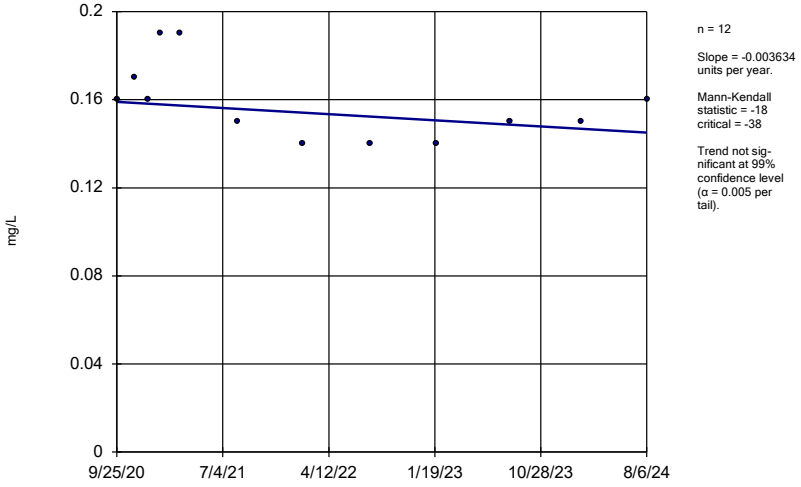
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWA-45D (bg)



n = 12

Slope = -0.003634 units per year.

Mann-Kendall statistic = -18
critical = -38

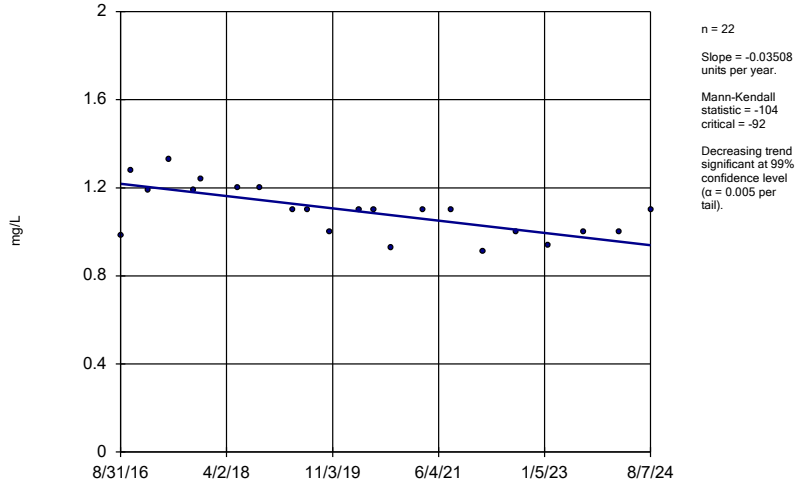
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-120



n = 22

Slope = -0.03508 units per year.

Mann-Kendall statistic = -104
critical = -92

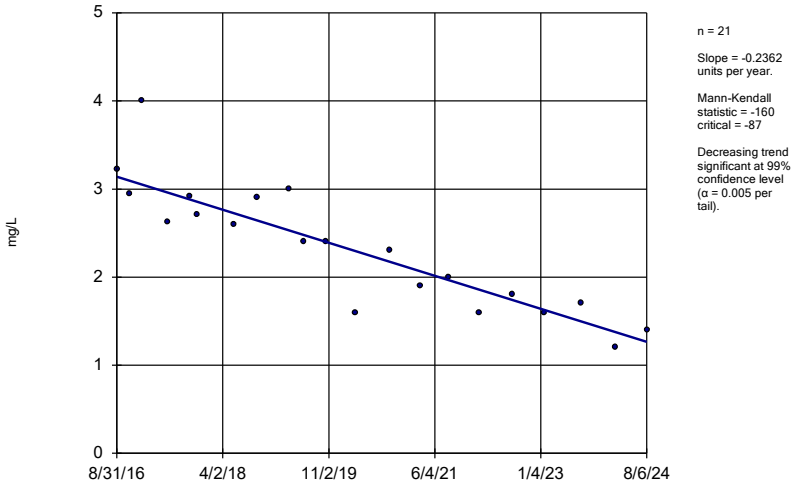
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-121A



n = 21

Slope = -0.2362 units per year.

Mann-Kendall statistic = -160 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

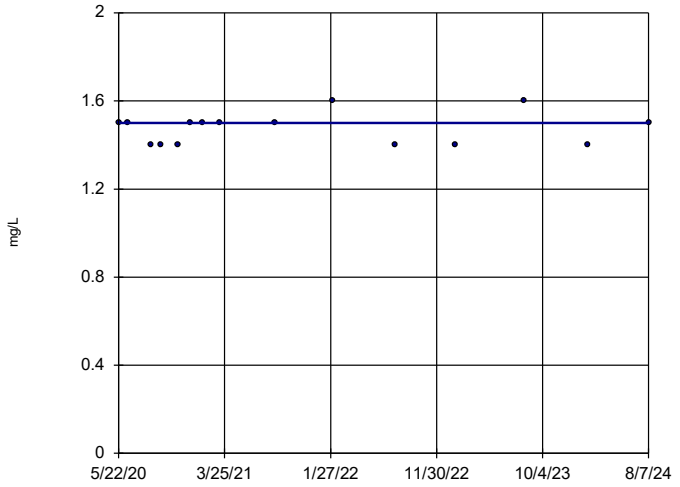
Constituent: Boron Analysis Run 10/23/2024 12:30 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-125



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 8 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

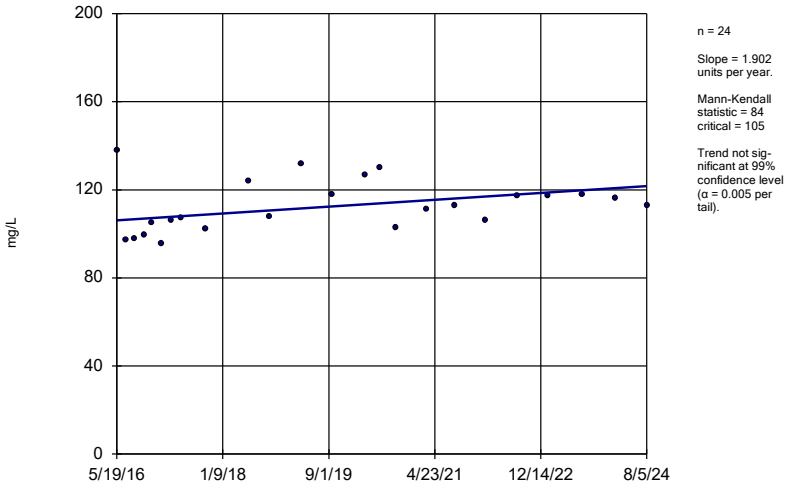
Constituent: Boron Analysis Run 10/23/2024 12:30 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 24

Slope = 1.902 units per year.

Mann-Kendall statistic = 84 critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

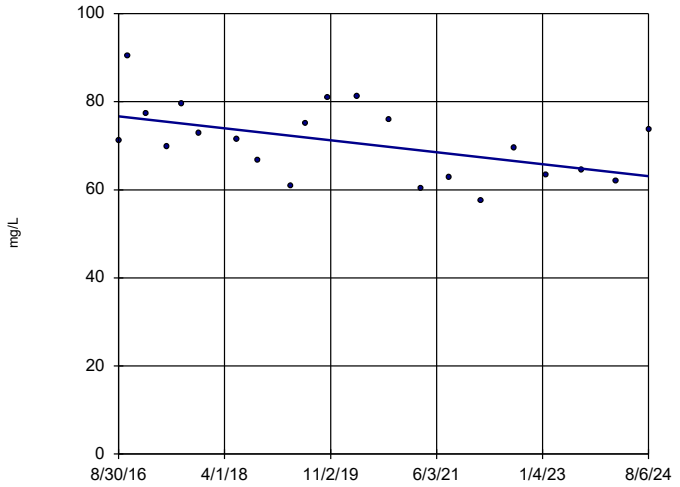
Constituent: Calcium Analysis Run 10/23/2024 12:30 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-122 (bg)



n = 21

Slope = -1.705 units per year.

Mann-Kendall statistic = -64 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

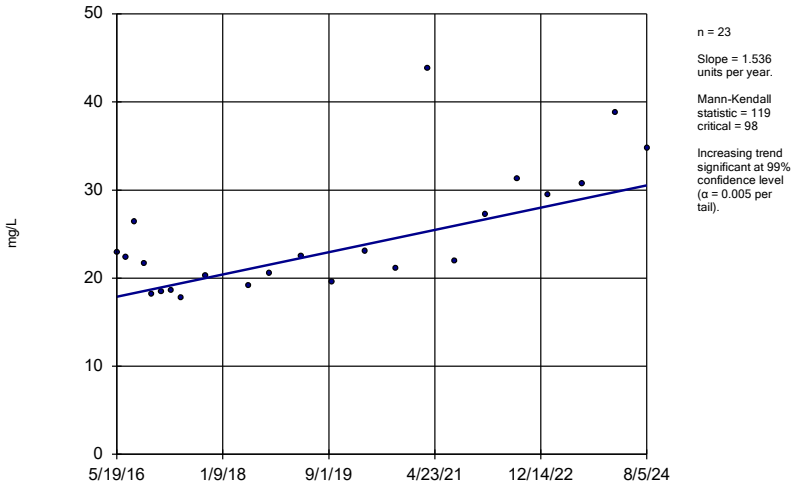
Constituent: Calcium Analysis Run 10/23/2024 12:30 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 23

Slope = 1.536 units per year.

Mann-Kendall statistic = 119 critical = 98

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

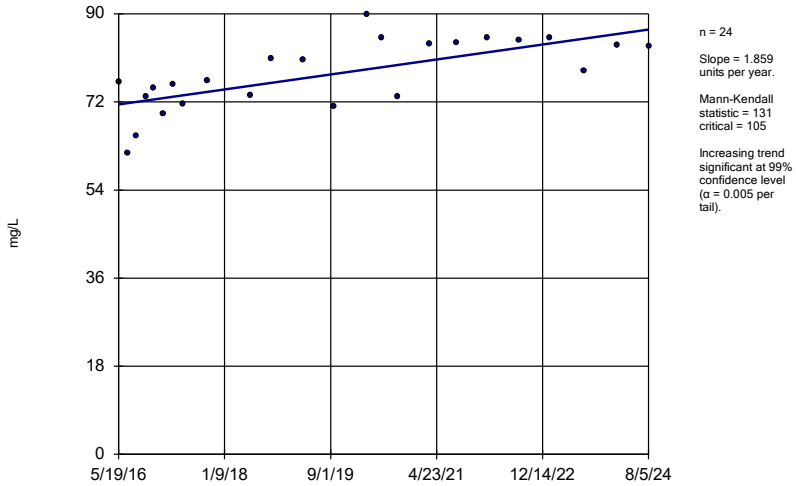
Constituent: Calcium Analysis Run 10/23/2024 12:30 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-3 (bg)



n = 24

Slope = 1.859 units per year.

Mann-Kendall statistic = 131 critical = 105

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

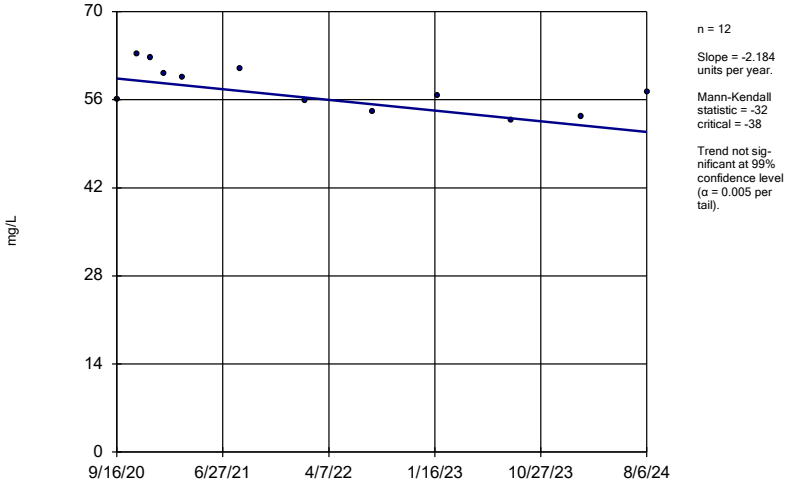
Constituent: Calcium Analysis Run 10/23/2024 12:30 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-43D (bg)



n = 12

Slope = -2.184 units per year.

Mann-Kendall statistic = -32 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

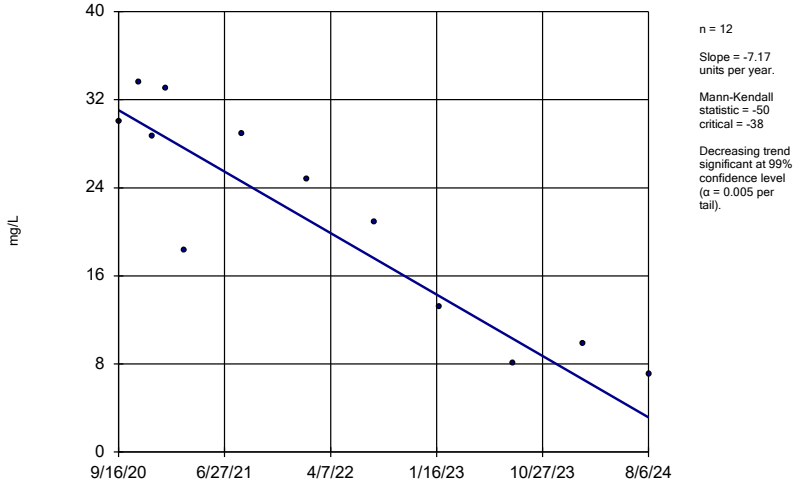
Constituent: Calcium Analysis Run 10/23/2024 12:30 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-44D (bg)



n = 12

Slope = -7.17 units per year.

Mann-Kendall statistic = -50 critical = -38

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

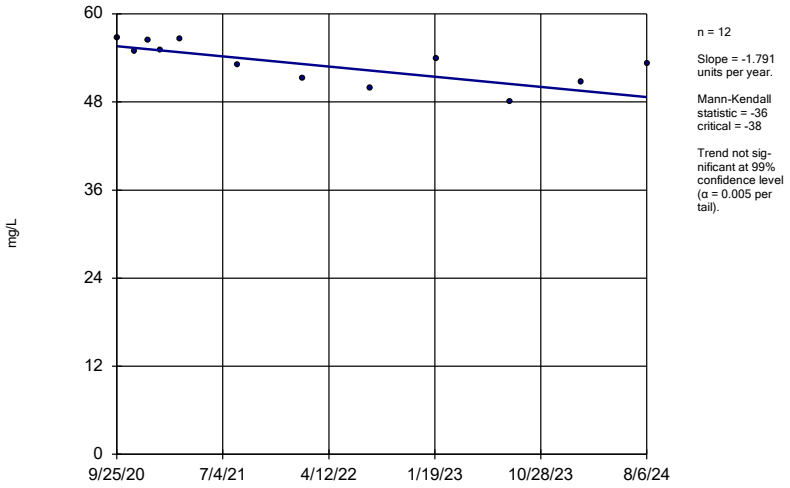
Constituent: Calcium Analysis Run 10/23/2024 12:30 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-45D (bg)



n = 12

Slope = -1.791 units per year.

Mann-Kendall statistic = -36
critical = -38

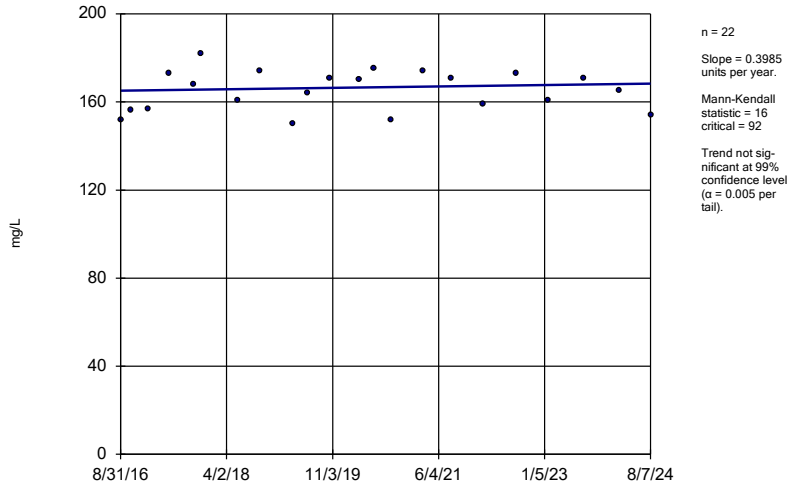
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-120



n = 22

Slope = 0.3985 units per year.

Mann-Kendall statistic = 16
critical = 92

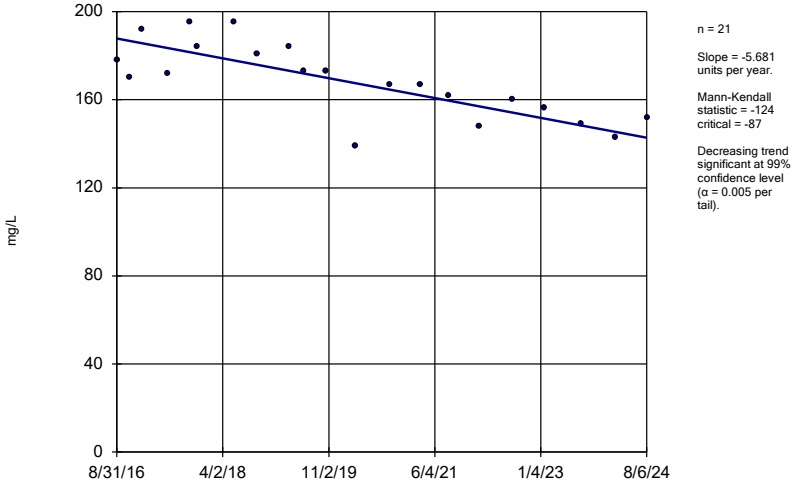
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-121A



n = 21

Slope = -5.681 units per year.

Mann-Kendall statistic = -124
critical = -87

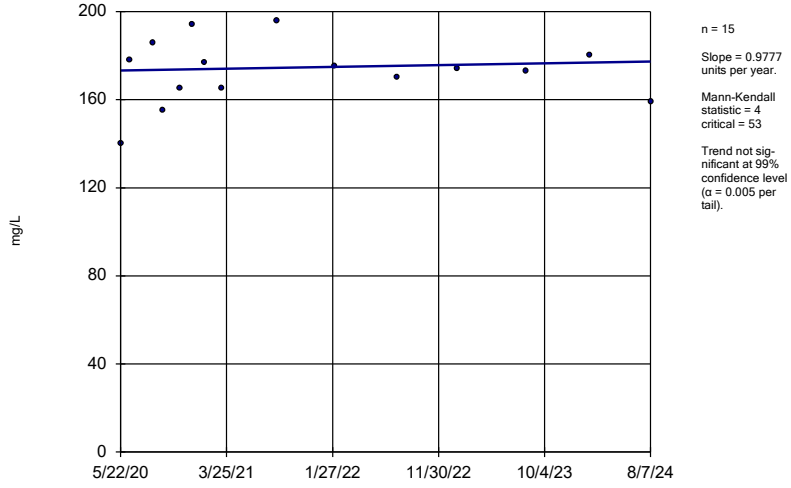
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-125



n = 15

Slope = 0.9777 units per year.

Mann-Kendall statistic = 4
critical = 53

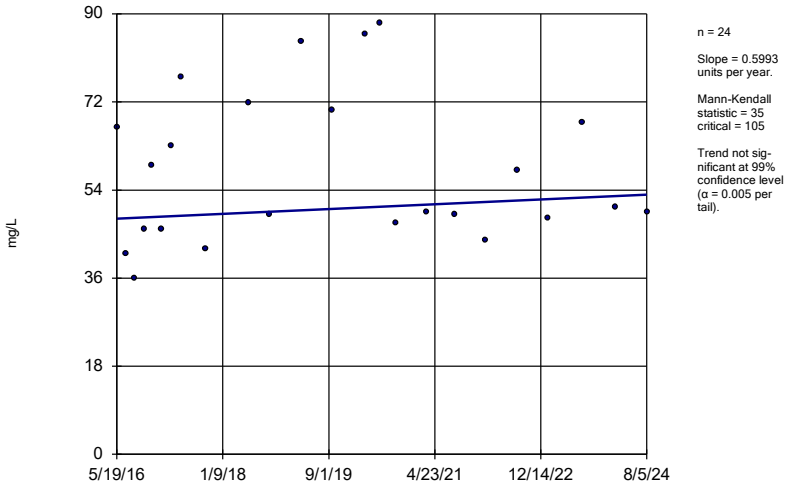
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/23/2024 12:30 PM View: Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-1 (bg)



n = 24

Slope = 0.5993 units per year.

Mann-Kendall statistic = 35 critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

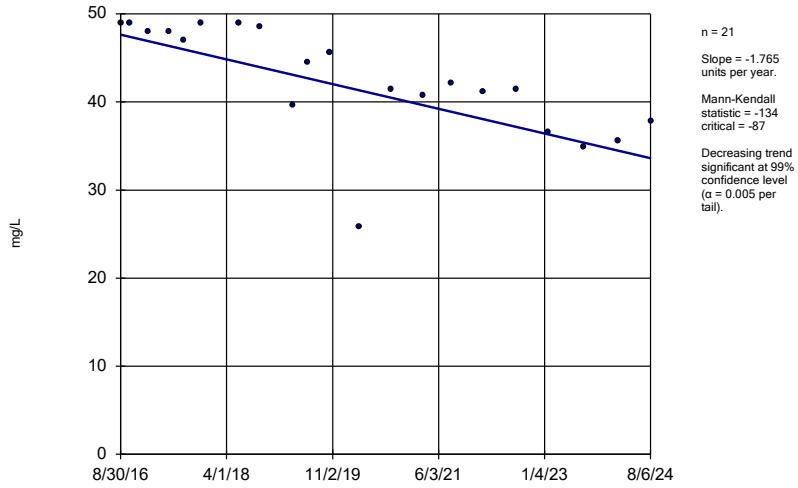
Constituent: Sulfate Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWA-122 (bg)



n = 21

Slope = -1.765 units per year.

Mann-Kendall statistic = -134 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

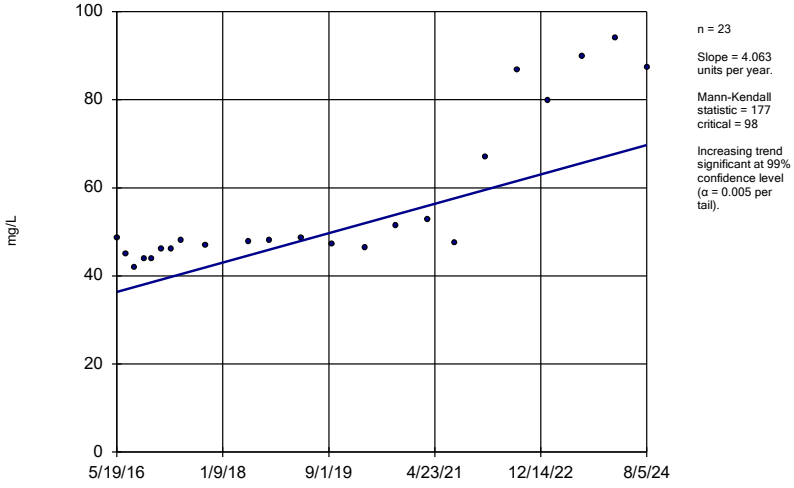
Constituent: Sulfate Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 23

Slope = 4.063 units per year.

Mann-Kendall statistic = 177 critical = 98

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

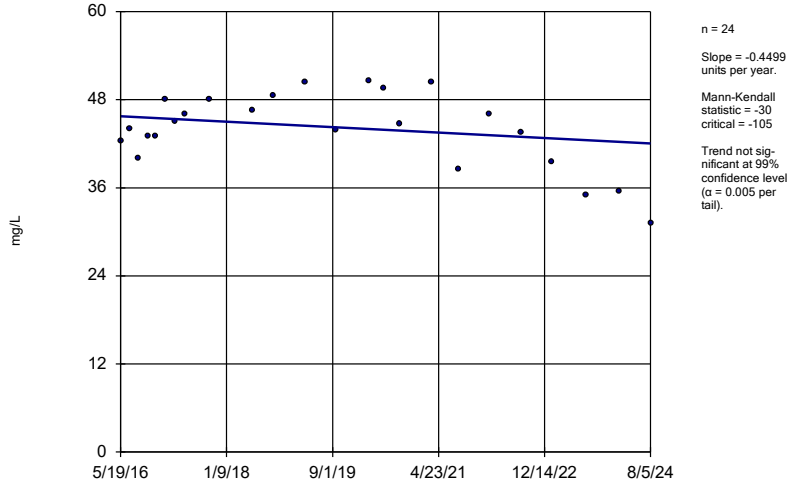
Constituent: Sulfate Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWA-3 (bg)



n = 24

Slope = -0.4499 units per year.

Mann-Kendall statistic = -30 critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

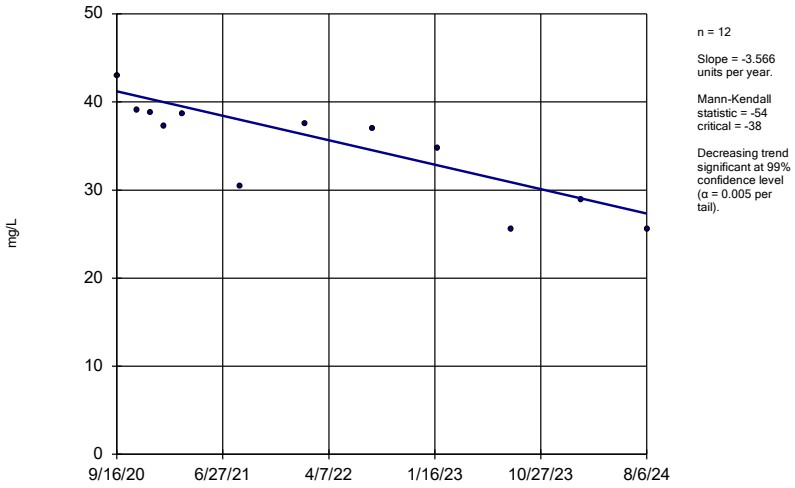
Constituent: Sulfate Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWA-43D (bg)



n = 12

Slope = -3.566 units per year.

Mann-Kendall statistic = -54 critical = -38

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/23/2024 12:31 PM View: Trend Tests

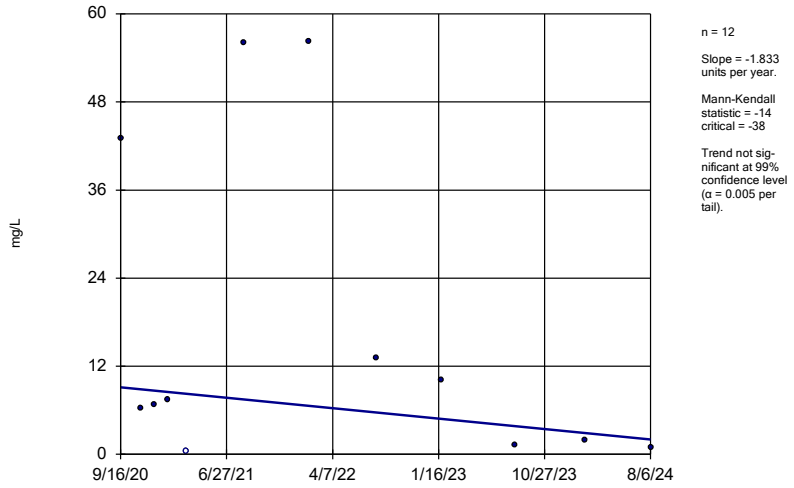
Plant Hammond Client: Southern Company Data: Hammond AP-3

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Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-44D (bg)



n = 12

Slope = -1.833 units per year.

Mann-Kendall statistic = -14 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

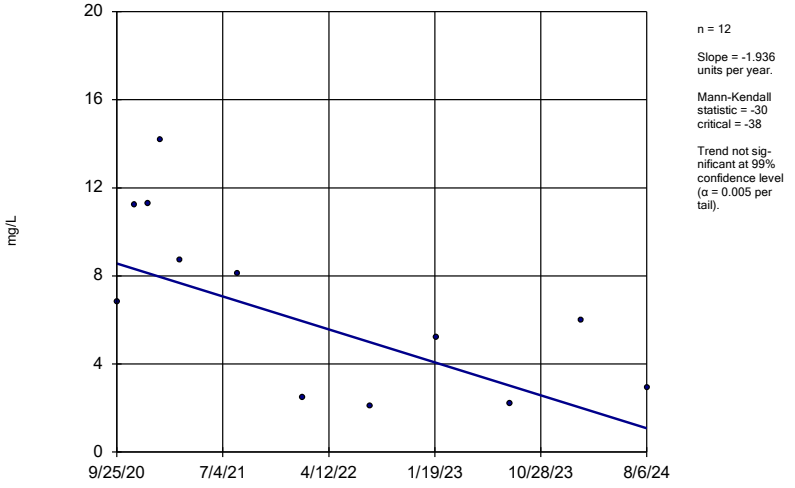
Constituent: Sulfate Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWA-45D (bg)



n = 12

Slope = -1.936 units per year.

Mann-Kendall statistic = -30 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

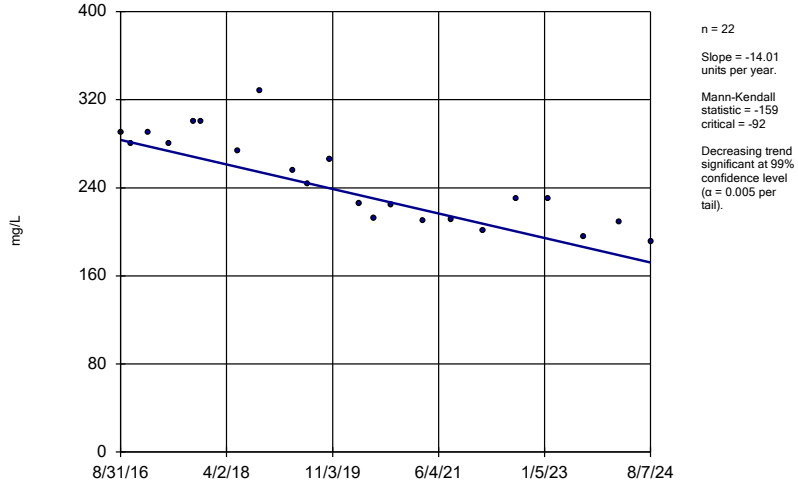
Constituent: Sulfate Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-120



n = 22

Slope = -14.01 units per year.

Mann-Kendall statistic = -159 critical = -92

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

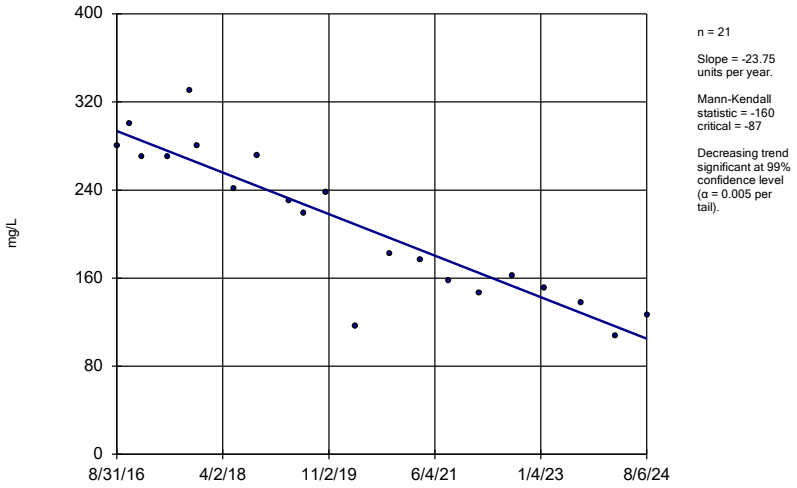
Constituent: Sulfate Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-121A



n = 21

Slope = -23.75 units per year.

Mann-Kendall statistic = -160 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

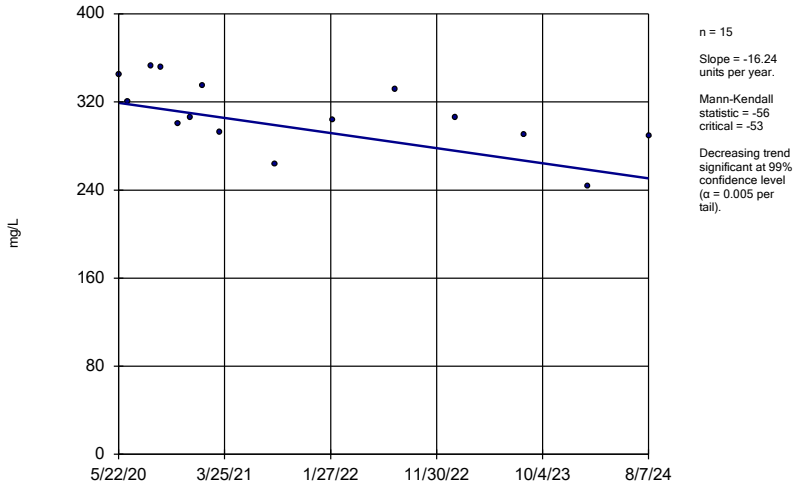
Constituent: Sulfate Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-125



n = 15

Slope = -16.24 units per year.

Mann-Kendall statistic = -56 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

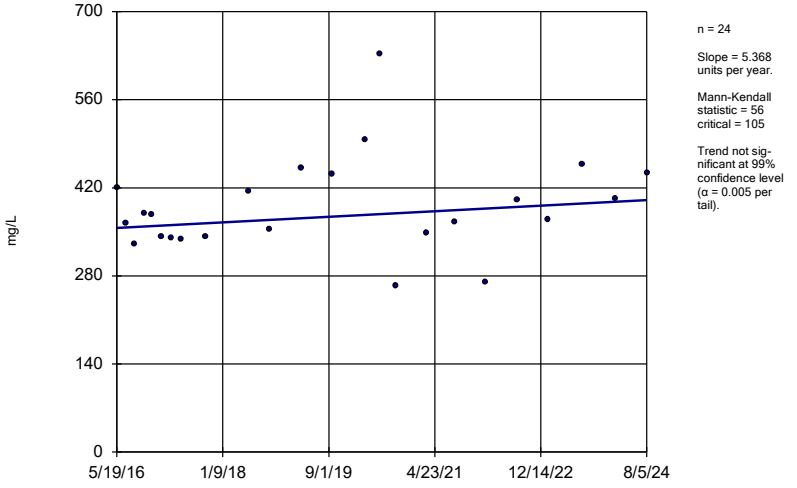
Constituent: Sulfate Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWA-1 (bg)



n = 24

Slope = 5.368 units per year.

Mann-Kendall statistic = 56 critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

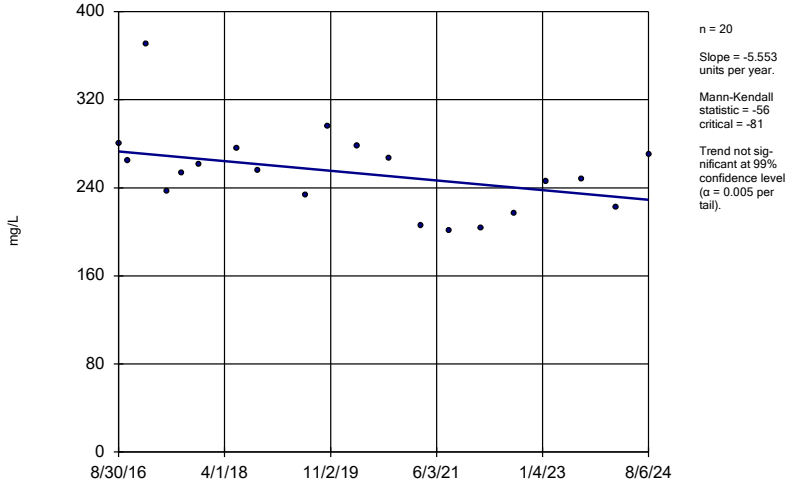
Constituent: Total Dissolved Solids Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-122 (bg)



n = 20

Slope = -5.553 units per year.

Mann-Kendall statistic = -56 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

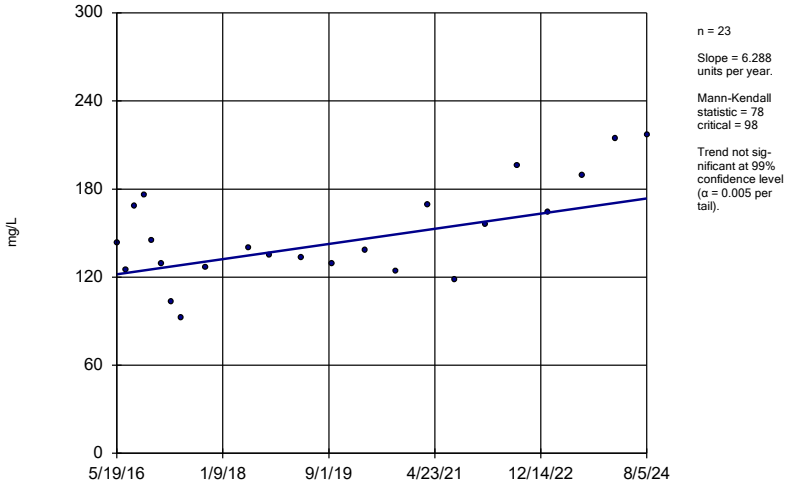
Constituent: Total Dissolved Solids Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWA-2 (bg)



n = 23

Slope = 6.288 units per year.

Mann-Kendall statistic = 78 critical = 98

Trend not significant at 99% confidence level (α = 0.005 per tail).

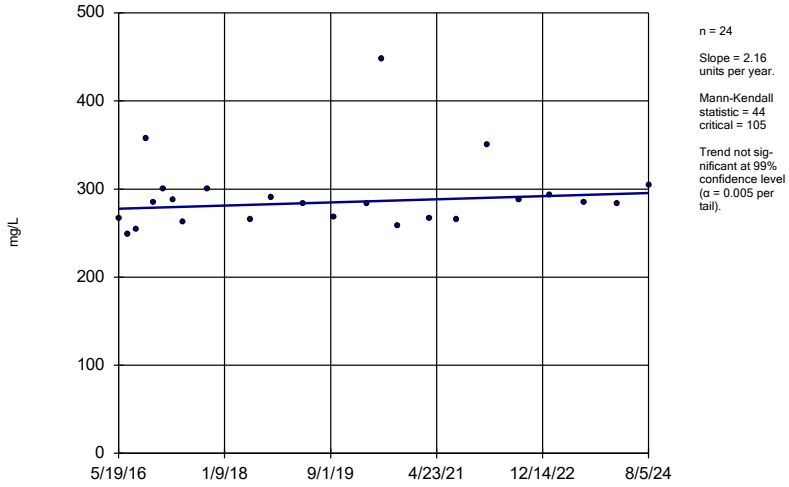
Constituent: Total Dissolved Solids Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWA-3 (bg)



n = 24

Slope = 2.16 units per year.

Mann-Kendall statistic = 44 critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

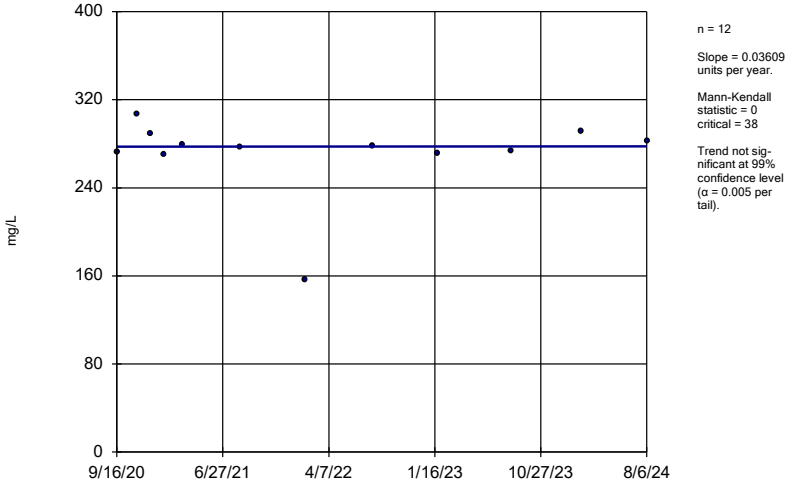
Constituent: Total Dissolved Solids Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWA-43D (bg)



n = 12

Slope = 0.03609 units per year.

Mann-Kendall statistic = 0 critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

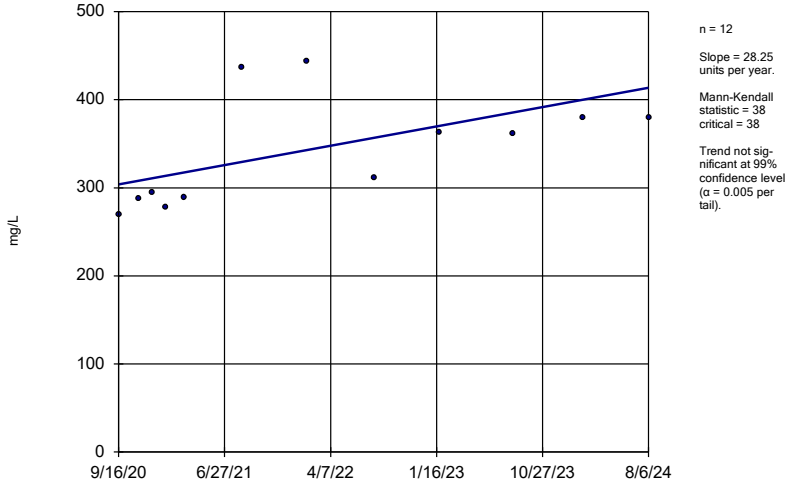
Constituent: Total Dissolved Solids Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWA-44D (bg)



n = 12

Slope = 28.25 units per year.

Mann-Kendall statistic = 38 critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

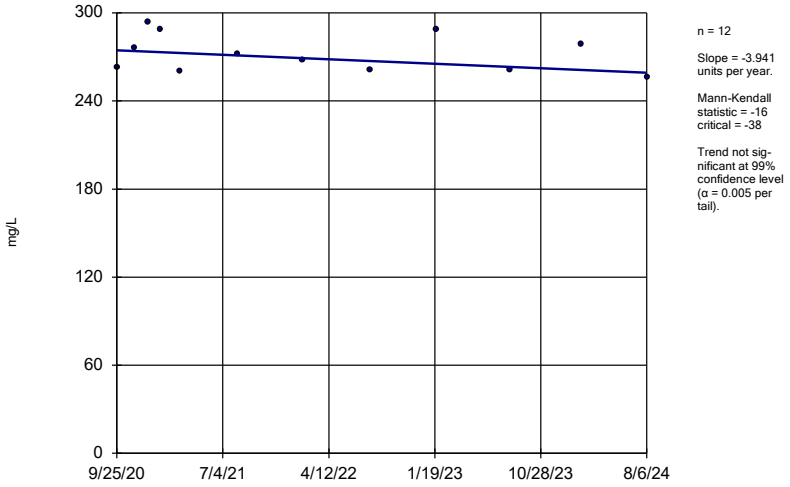
Constituent: Total Dissolved Solids Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWA-45D (bg)



n = 12

Slope = -3.941 units per year.

Mann-Kendall statistic = -16
critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

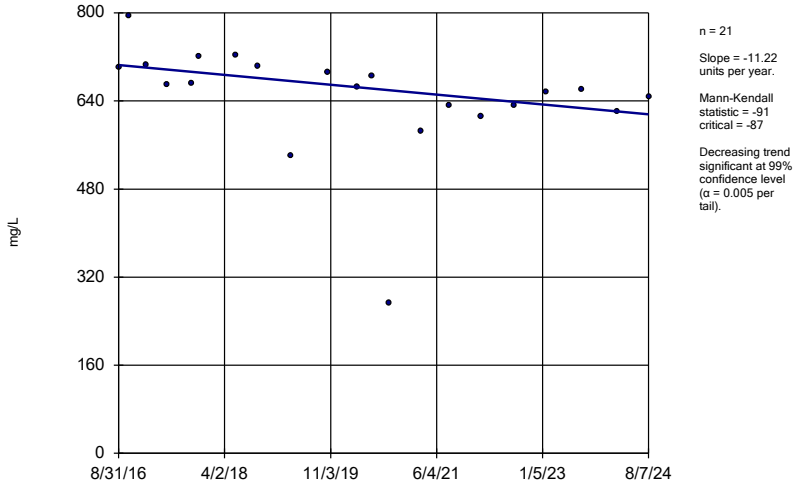
Constituent: Total Dissolved Solids Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWC-120



n = 21

Slope = -11.22 units per year.

Mann-Kendall statistic = -91
critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/23/2024 12:31 PM View: Trend Tests

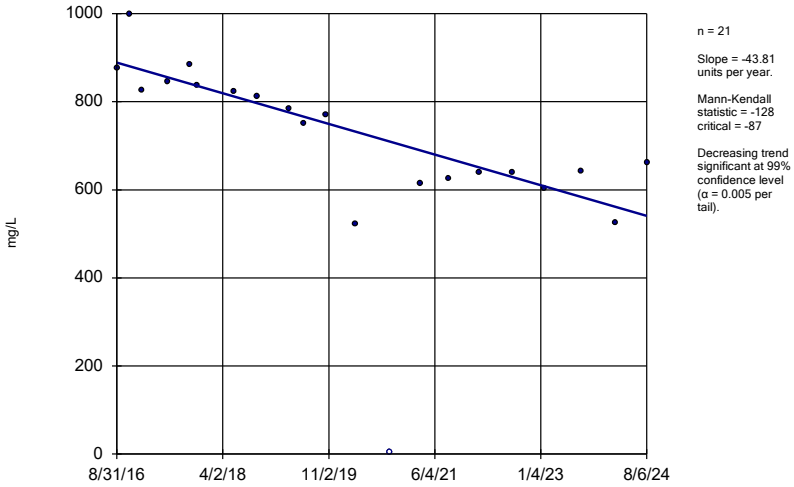
Plant Hammond Client: Southern Company Data: Hammond AP-3

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Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWC-121A



n = 21

Slope = -43.81 units per year.

Mann-Kendall statistic = -128
critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

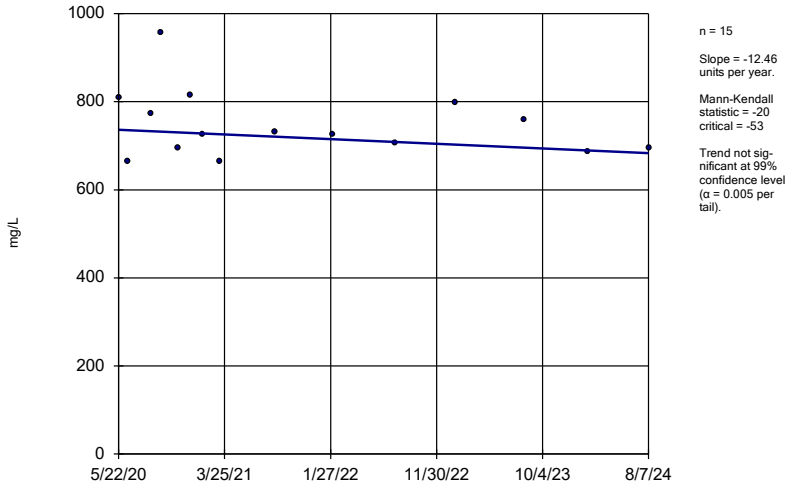
Constituent: Total Dissolved Solids Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Sen's Slope Estimator

HGWC-125



n = 15

Slope = -12.46 units per year.

Mann-Kendall statistic = -20
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/23/2024 12:31 PM View: Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP-3

FIGURE F.

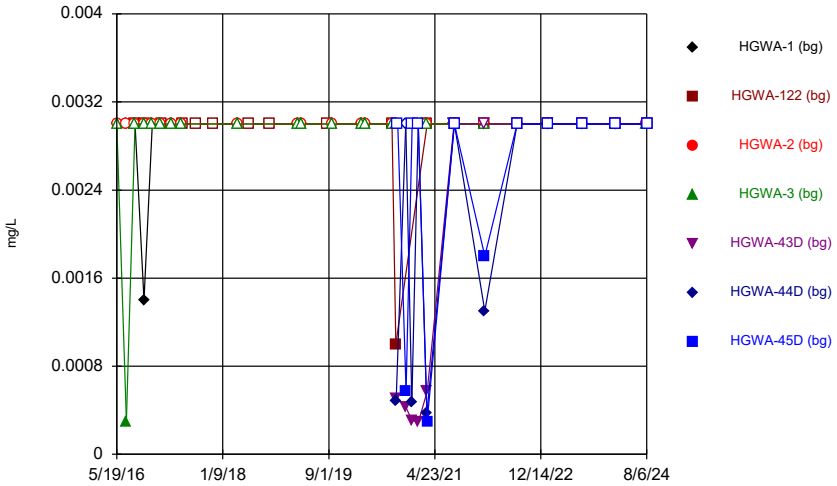
Upper Tolerance Limit Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/22/2024, 11:47 AM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	n/a	n/a	n/a	127	88.19	n/a	n/a	0.001482	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	n/a	n/a	125	74.4	n/a	n/a	0.001642	NP Inter(NDs)
Barium (mg/L)	0.64	n/a	n/a	n/a	n/a	135	0.7407	n/a	n/a	0.0009833	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	n/a	n/a	127	83.46	n/a	n/a	0.001482	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	n/a	125	88	n/a	n/a	0.001642	NP Inter(NDs)
Chromium (mg/L)	0.0079	n/a	n/a	n/a	n/a	129	82.95	n/a	n/a	0.001338	NP Inter(NDs)
Cobalt (mg/L)	0.038	n/a	n/a	n/a	n/a	135	77.78	n/a	n/a	0.0009833	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.687	n/a	n/a	n/a	n/a	128	0	None	sqrt(x)	0.05	Inter
Fluoride (mg/L)	1.5	n/a	n/a	n/a	n/a	142	20.42	n/a	n/a	0.0006867	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	129	73.64	n/a	n/a	0.001338	NP Inter(NDs)
Lithium (mg/L)	0.064	n/a	n/a	n/a	n/a	132	31.82	n/a	n/a	0.001147	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	107	95.33	n/a	n/a	0.004135	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	n/a	n/a	137	64.96	n/a	n/a	0.0008874	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	125	94.4	n/a	n/a	0.001642	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	125	99.2	n/a	n/a	0.001642	NP Inter(NDs)

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Hollow symbols indicate censored values.

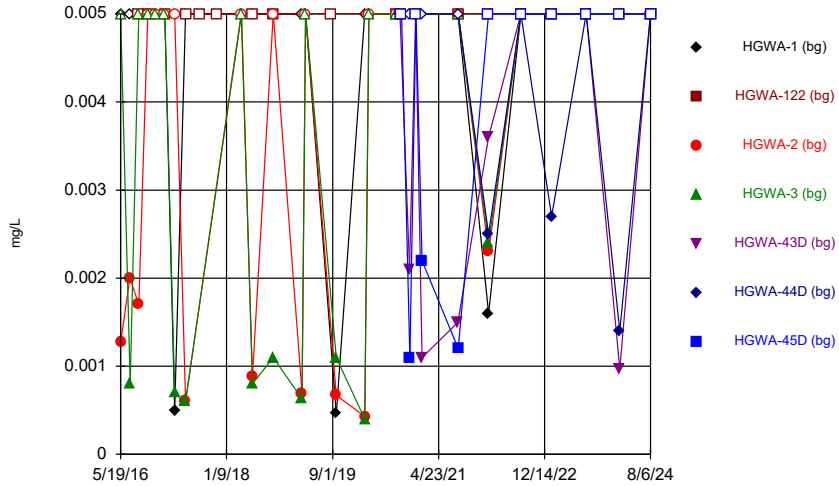
Time Series



Constituent: Antimony Analysis Run 10/23/2024 3:20 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

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Hollow symbols indicate censored values.

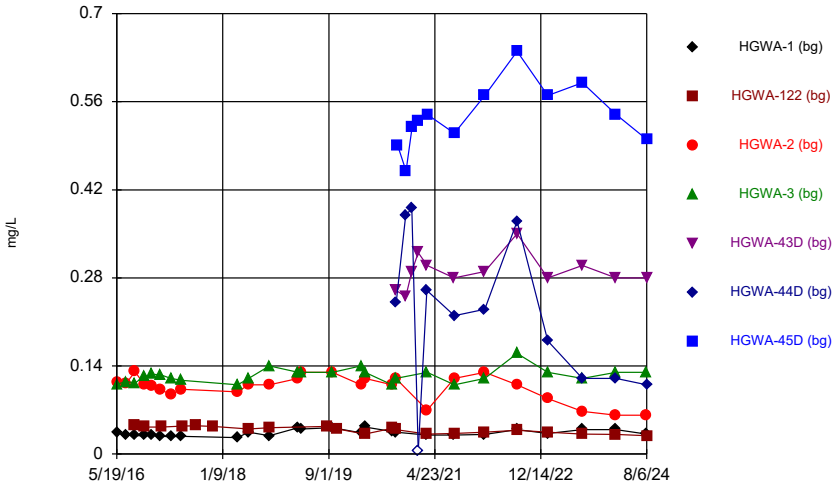
Time Series



Constituent: Arsenic Analysis Run 10/23/2024 3:20 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

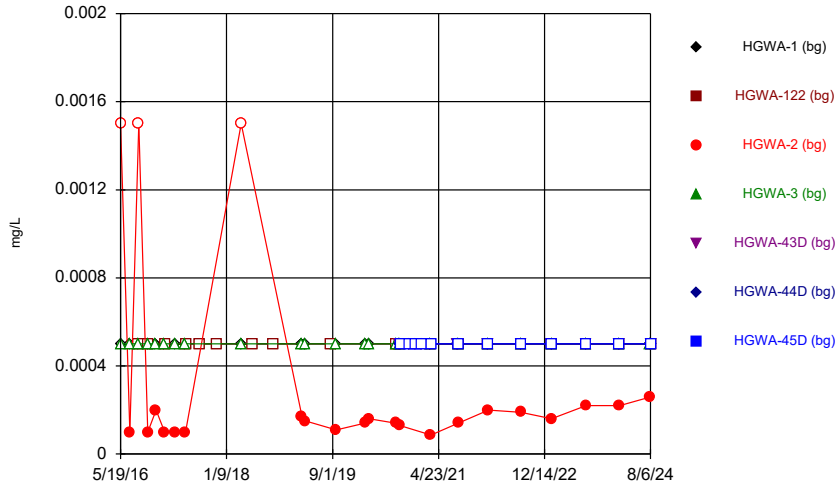
Time Series



Constituent: Barium Analysis Run 10/23/2024 3:20 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

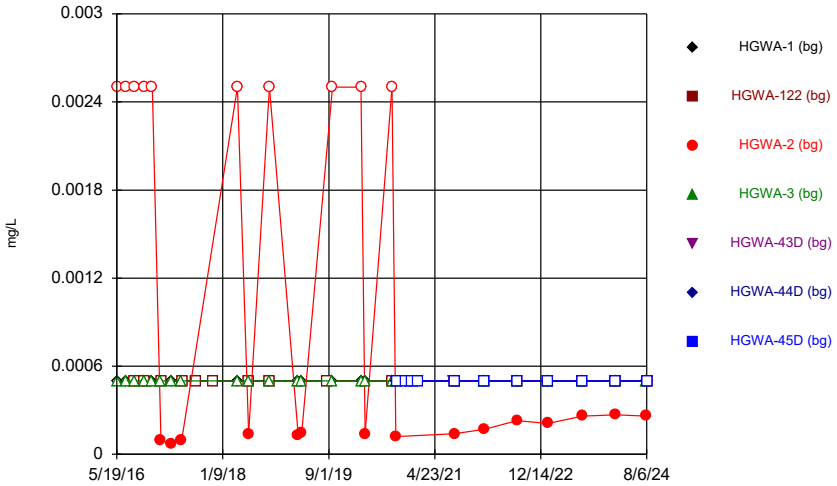
Time Series



Constituent: Beryllium Analysis Run 10/23/2024 3:20 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

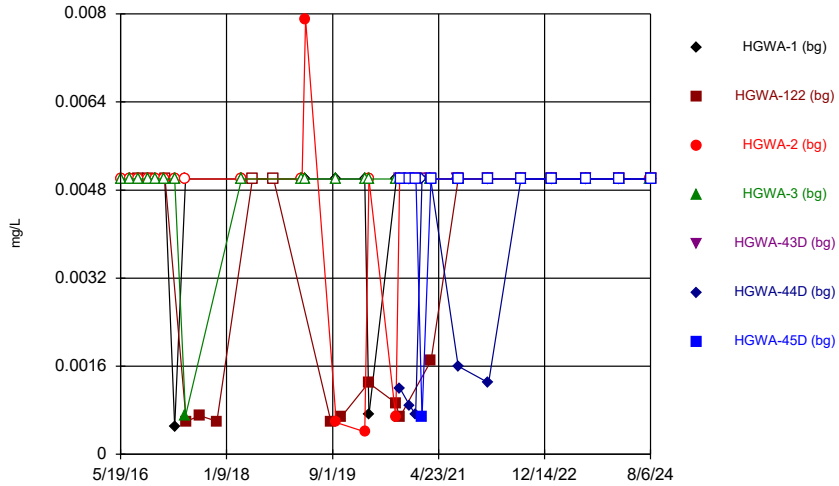
Time Series



Constituent: Cadmium Analysis Run 10/23/2024 3:20 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

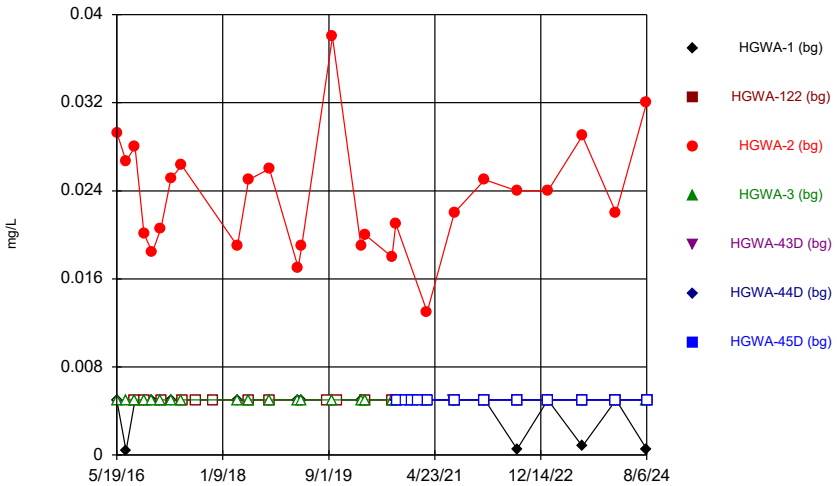
Time Series



Constituent: Chromium Analysis Run 10/23/2024 3:20 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

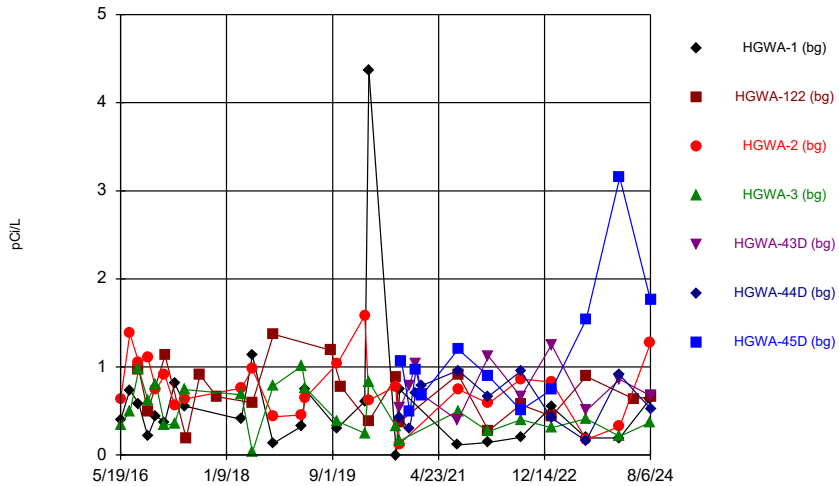
Time Series



Constituent: Cobalt Analysis Run 10/23/2024 3:20 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG

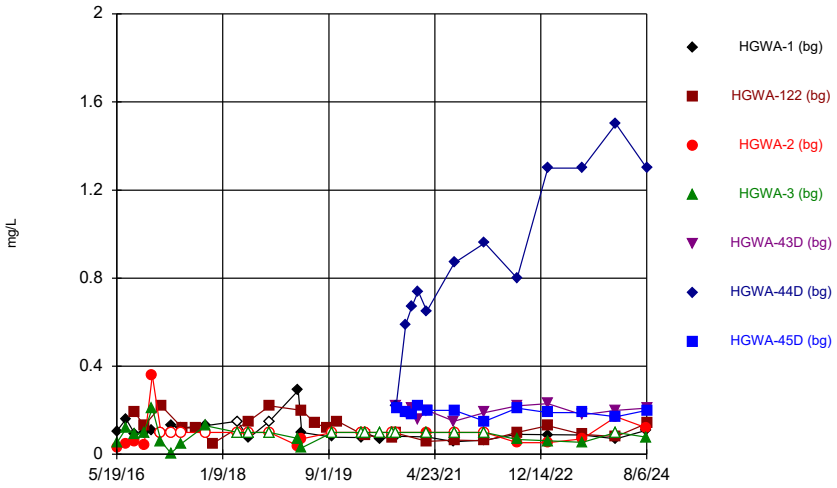
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 10/23/2024 3:21 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

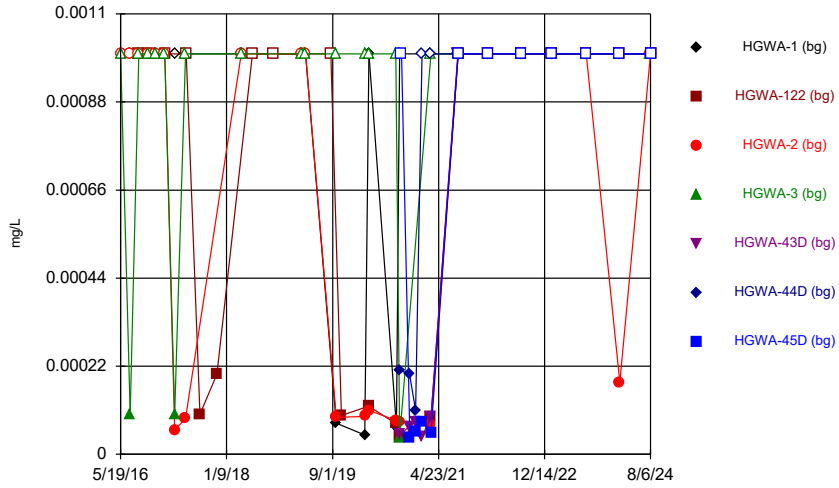
Time Series



Constituent: Fluoride Analysis Run 10/23/2024 3:21 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

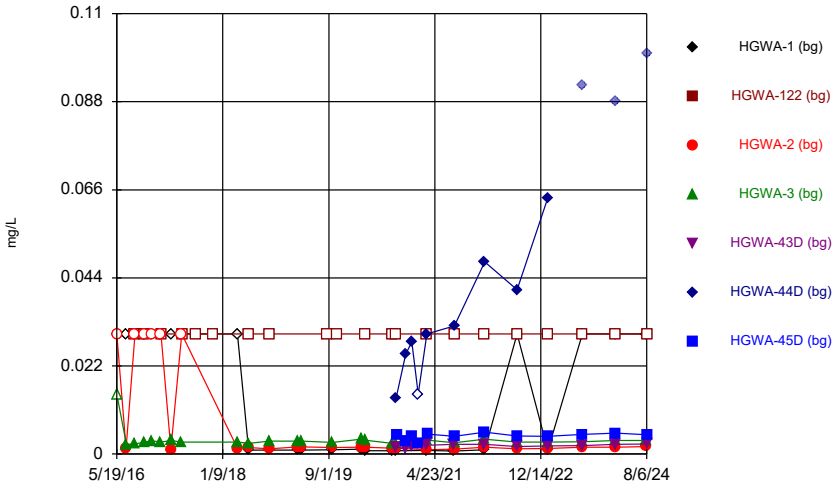
Time Series



Constituent: Lead Analysis Run 10/23/2024 3:21 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

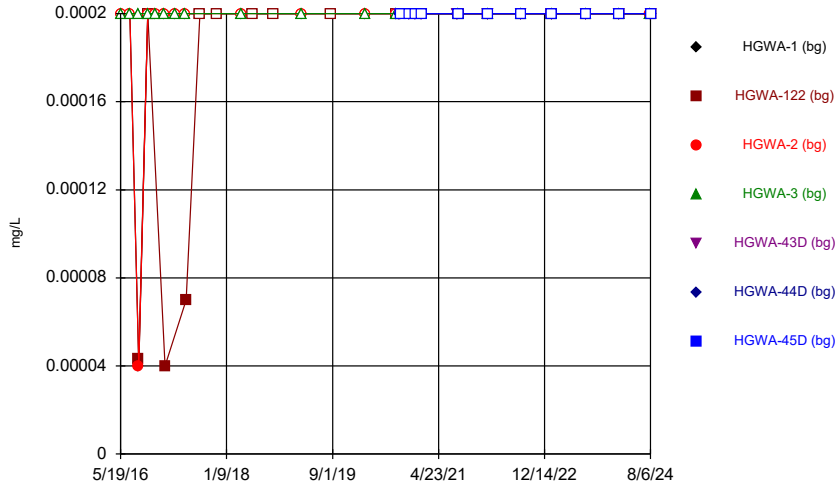
Time Series



Constituent: Lithium Analysis Run 10/23/2024 3:21 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

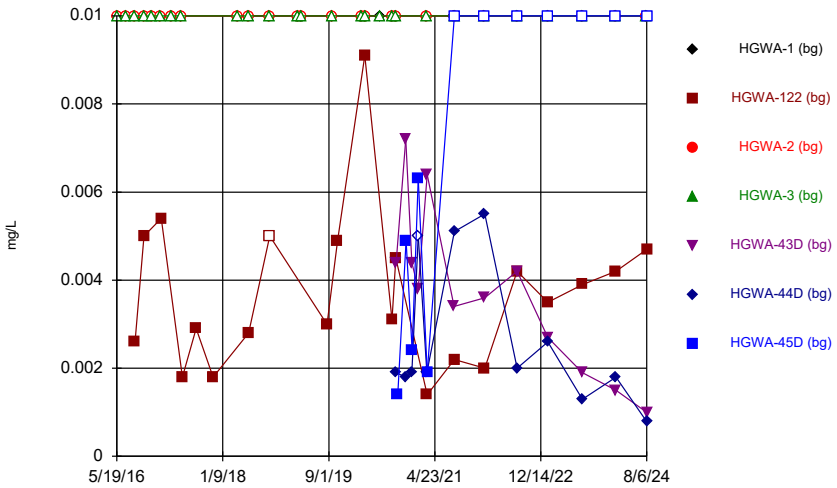
Time Series



Constituent: Mercury Analysis Run 10/23/2024 3:21 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

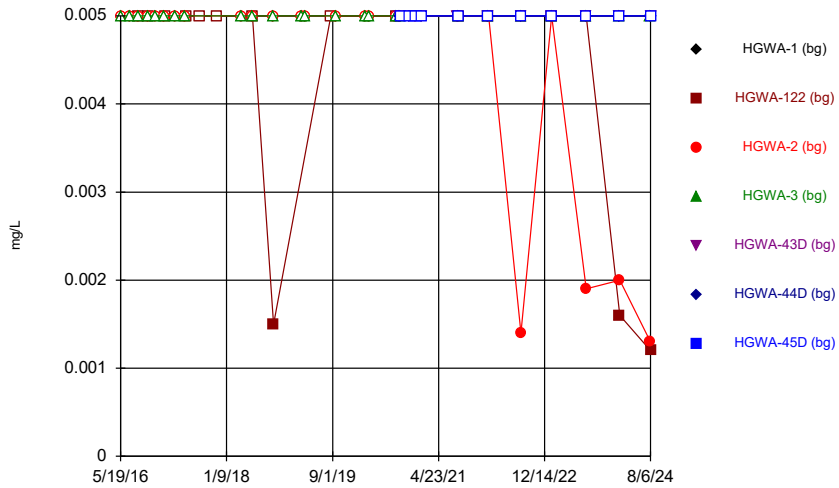
Time Series



Constituent: Molybdenum Analysis Run 10/23/2024 3:21 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

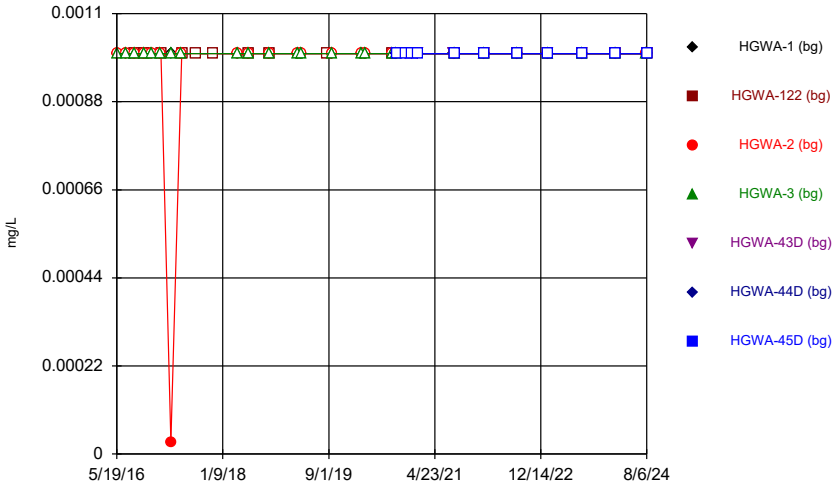
Time Series



Constituent: Selenium Analysis Run 10/23/2024 3:21 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

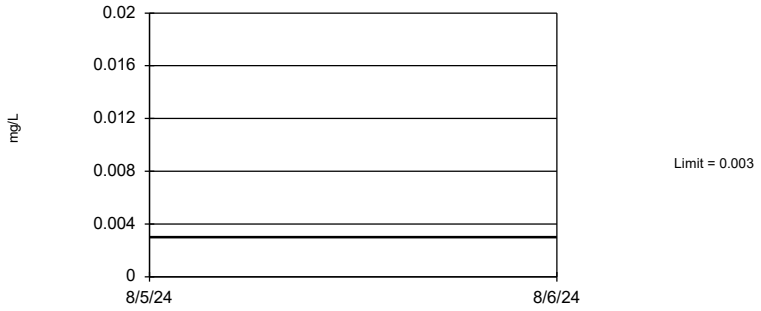
Time Series



Constituent: Thallium Analysis Run 10/23/2024 3:21 PM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 127 background values. 88.19% NDs. 96.29% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.001482.

Constituent: Antimony Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



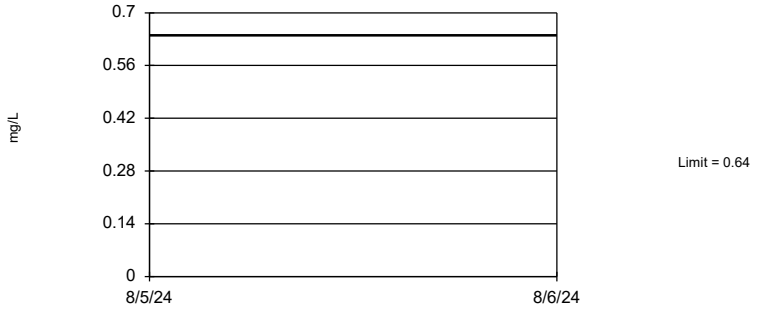
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 125 background values. 74.4% NDs. 96.29% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.001642.

Constituent: Arsenic Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



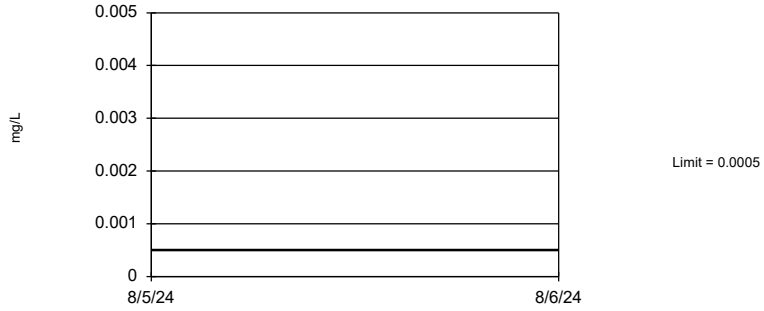
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 135 background values. 0.7407% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0009833.

Constituent: Barium Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric

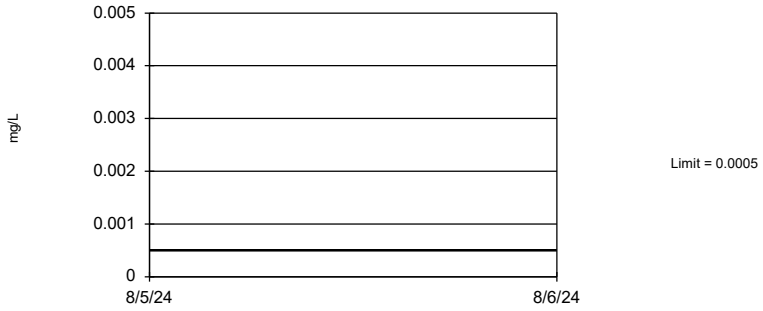


Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 127 background values. 83.46% NDs. 96.29% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.001482.

Constituent: Beryllium Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 125 background values. 88% NDs. 96.29% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.001642.

Constituent: Cadmium Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



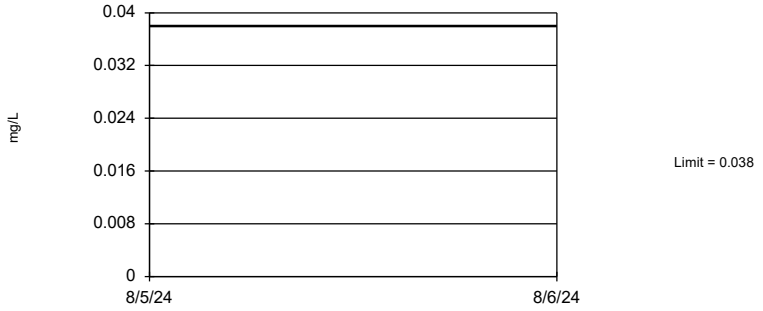
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 129 background values. 82.95% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.001338.

Constituent: Chromium Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



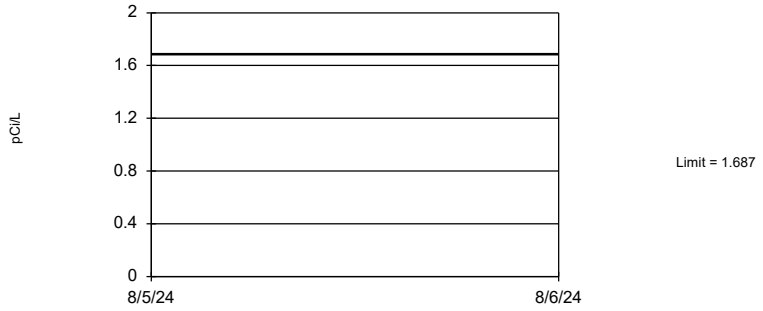
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 135 background values. 77.78% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0009833.

Constituent: Cobalt Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Parametric

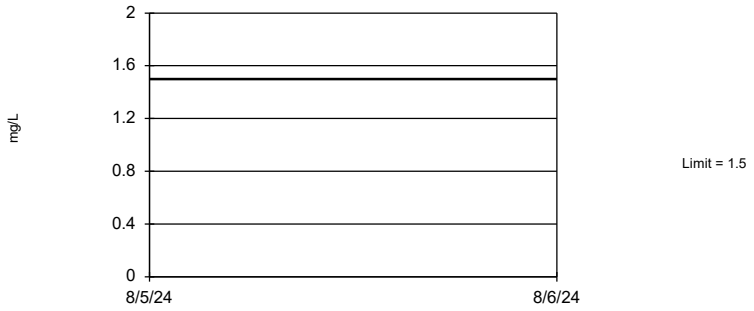


95% coverage. Background Data Summary (based on square root transformation): Mean=0.7903, Std. Dev.=0.2693, n=128. Normality test: Chi Squared @alpha = 0.01, calculated = 11.38, critical = 14.07. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 142 background values. 20.42% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0006867.

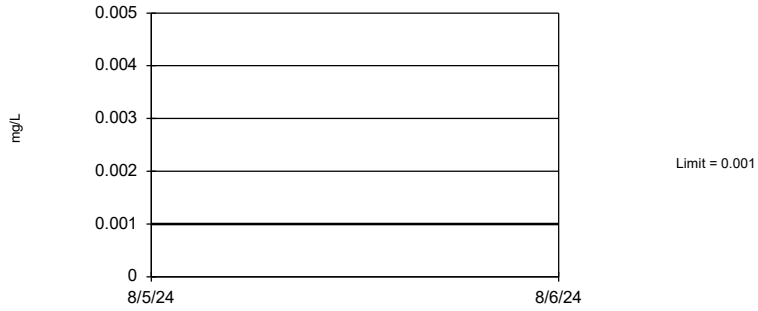
Constituent: Fluoride Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 129 background values. 73.64% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.001338.

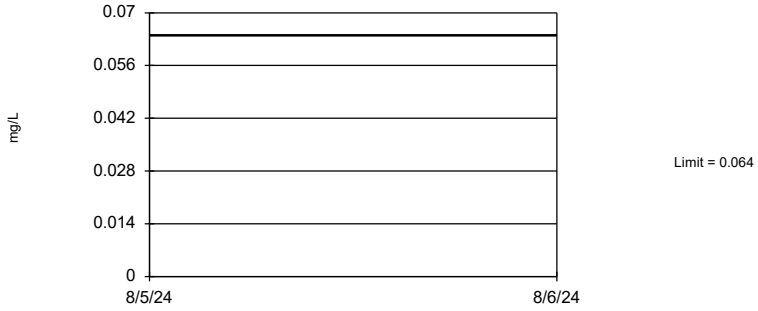
Constituent: Lead Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 132 background values. 31.82% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.001147.

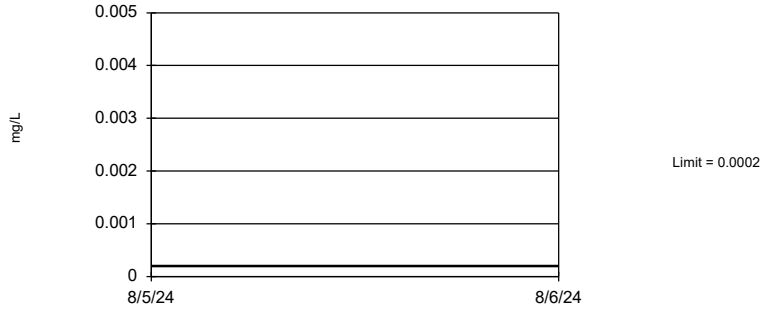
Constituent: Lithium Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs

Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 107 background values. 95.33% NDs. 95.9% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.004135.

Constituent: Mercury Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs

Plant Hammond Client: Southern Company Data: Hammond AP-3

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 137 background values. 64.96% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0008874.

Constituent: Molybdenum Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



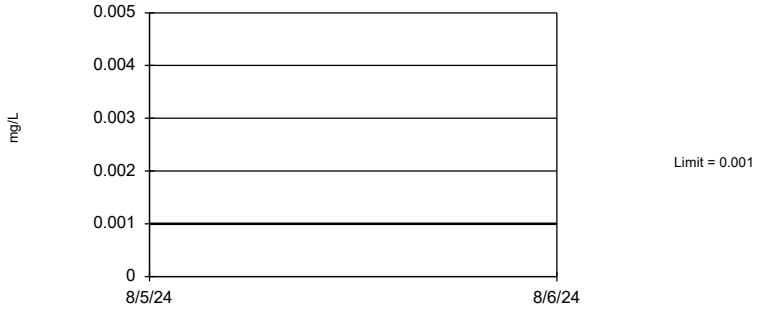
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 125 background values. 94.4% NDs. 96.29% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.001642.

Constituent: Selenium Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 125 background values. 99.2% NDs. 96.29% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.001642.

Constituent: Thallium Analysis Run 10/22/2024 11:46 AM View: Appendix IV - UTLs
Plant Hammond Client: Southern Company Data: Hammond AP-3

FIGURE G.

PLANT HAMMOND AP-3 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		0.64	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.0079	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		1.69	5
Fluoride, Total (mg/L)	4		1.5	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.040	0.064	0.064
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Grey cell indidcates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Statard*

FIGURE H.

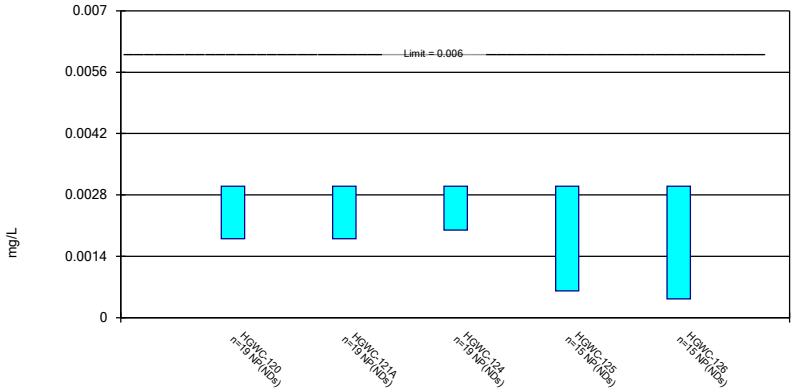
Appendix IV - Confidence Intervals - All Results (No Significant)

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/22/2024, 11:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-120	0.003	0.0018	0.006	No	19	0.002937	0.0002753	94.74	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-121A	0.003	0.0018	0.006	No	19	0.002863	0.0004112	89.47	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-124	0.003	0.002	0.006	No	19	0.002884	0.0003484	89.47	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-125	0.003	0.00061	0.006	No	15	0.002672	0.000866	86.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-126	0.003	0.00043	0.006	No	15	0.002655	0.0009096	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-120	0.005	0.001	0.01	No	17	0.003639	0.001909	64.71	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-121A	0.005	0.0014	0.01	No	17	0.004341	0.001469	82.35	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-124	0.005	0.0006	0.01	No	17	0.004741	0.001067	94.12	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-125	0.005	0.0014	0.01	No	14	0.004022	0.001691	71.43	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-126	0.005	0.0026	0.01	No	14	0.00423	0.001583	78.57	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-120	0.05111	0.04679	2	No	21	0.04895	0.00392	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-121A	0.07618	0.05996	2	No	21	0.06807	0.0147	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-124	0.07161	0.06538	2	No	21	0.06849	0.005646	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-125	0.04478	0.03935	2	No	15	0.04207	0.004008	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-126	0.2495	0.2278	2	No	15	0.2387	0.01598	0	None	No	0.01	Param.
Chromium (mg/L)	HGWC-120	0.005	0.0015	0.1	No	21	0.004422	0.001457	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-121A	0.005	0.0005	0.1	No	21	0.004786	0.000982	95.24	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-124	0.005	0.00051	0.1	No	21	0.00457	0.001358	90.48	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-125	0.005	0.00081	0.1	No	15	0.004127	0.001808	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-126	0.005	0.0014	0.1	No	15	0.004491	0.001347	86.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-120	0.004816	0.003336	0.038	No	21	0.004076	0.001342	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-121A	0.005	0.0005	0.038	No	21	0.004338	0.001662	85.71	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-125	0.01206	0.007876	0.038	No	15	0.009967	0.003086	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-120	1.02	0.6588	5	No	20	0.8396	0.3184	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-121A	1.086	0.5125	5	No	20	0.7994	0.5051	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-124	0.8213	0.5294	5	No	20	0.6754	0.2571	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-125	1.249	0.6323	5	No	14	0.9408	0.4356	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-126	1.602	1.008	5	No	14	1.305	0.4191	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-120	0.65	0.36	4	No	24	0.5875	0.3473	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-121A	0.19	0.15	4	No	22	0.2334	0.2364	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-124	0.11	0.078	4	No	22	0.1123	0.06373	45.45	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-125	0.1686	0.1247	4	No	15	0.1467	0.03244	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-126	0.5053	0.4521	4	No	15	0.4787	0.03925	0	None	No	0.01	Param.
Lead (mg/L)	HGWC-120	0.001	0.0002	0.015	No	21	0.0008748	0.000315	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-121A	0.001	0.00036	0.015	No	21	0.0008848	0.0002931	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-124	0.001	0.000094	0.015	No	21	0.0007784	0.0004062	76.19	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-125	0.001	0.000092	0.015	No	15	0.0006969	0.0004444	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-126	0.001	0.000046	0.015	No	15	0.0008089	0.0003957	80	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-120	0.03055	0.02454	0.064	No	21	0.02755	0.005449	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-121A	0.00863	0.007266	0.064	No	21	0.007948	0.001236	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-124	0.03	0.0011	0.064	No	21	0.01073	0.01396	33.33	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-125	0.005627	0.003956	0.064	No	15	0.00488	0.00141	0	None	ln(x)	0.01	Param.
Lithium (mg/L)	HGWC-126	0.004184	0.003469	0.064	No	15	0.003827	0.0005271	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-120	0.0002	0.00007	0.002	No	17	0.0001829	0.00004845	88.24	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-124	0.0002	0.000051	0.002	No	17	0.0001912	0.00003614	94.12	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-120	0.03664	0.02792	0.1	No	21	0.03228	0.007905	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-124	0.01	0.00091	0.1	No	21	0.00446	0.004456	38.1	None	No	0.01	NP (normality)
Molybdenum (mg/L)	HGWC-125	0.009185	0.001729	0.1	No	15	0.007759	0.007619	20	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	HGWC-120	0.005	0.002	0.05	No	17	0.004824	0.0007276	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-121A	0.005	0.0011	0.05	No	17	0.004771	0.0009459	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-124	0.005	0.0014	0.05	No	17	0.004788	0.0008731	94.12	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

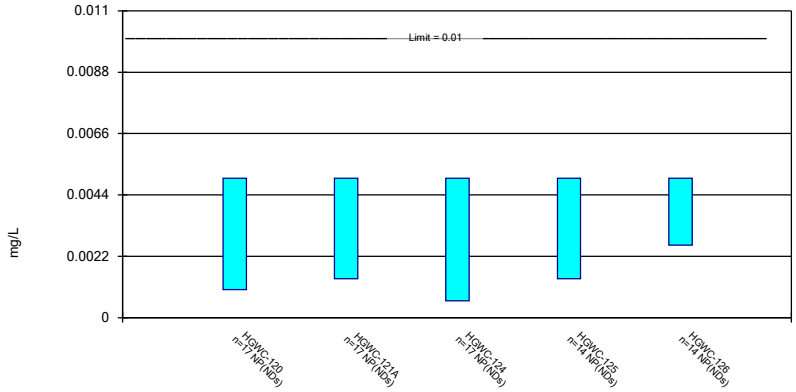


Constituent: Antimony Analysis Run 10/22/2024 11:49 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

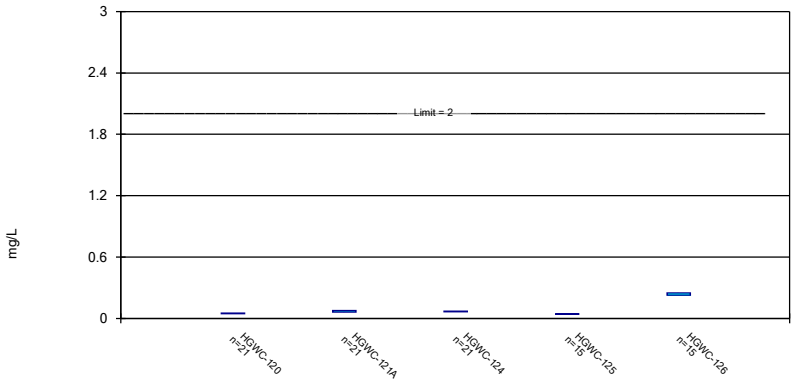


Constituent: Arsenic Analysis Run 10/22/2024 11:49 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

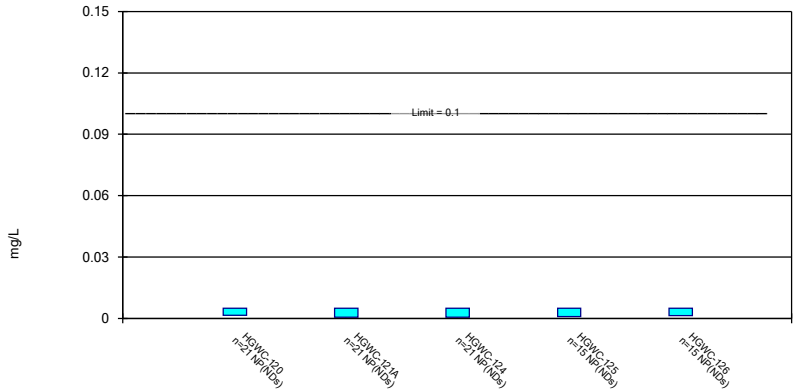


Constituent: Barium Analysis Run 10/22/2024 11:49 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

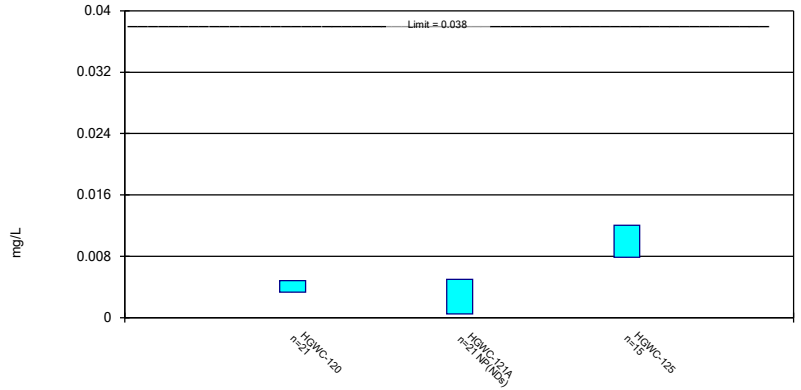
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 10/22/2024 11:49 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Parametric and Non-Parametric (NP) Confidence Interval

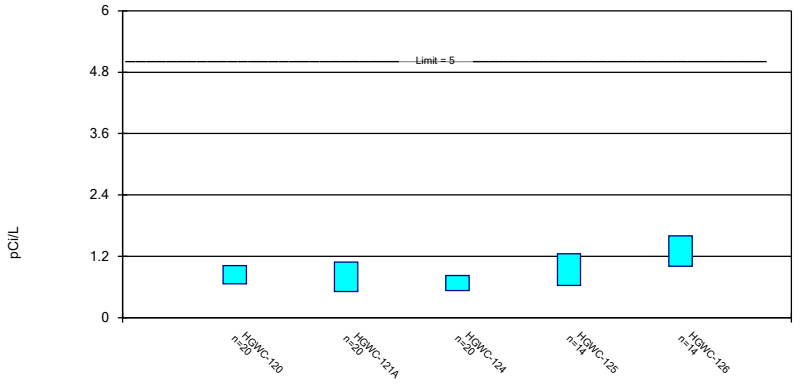
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 10/22/2024 11:49 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Parametric Confidence Interval

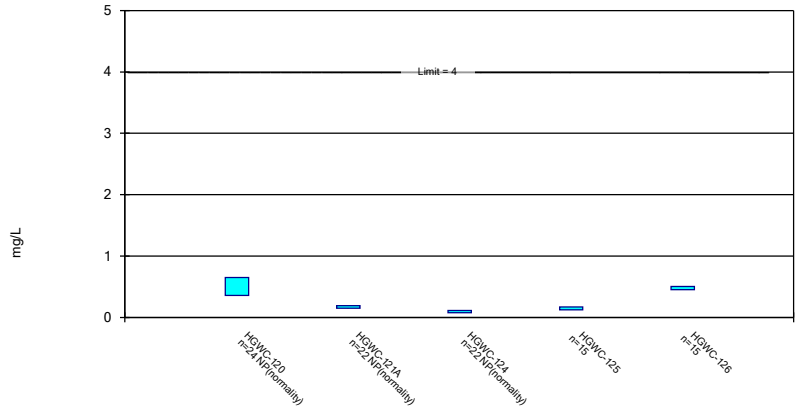
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 10/22/2024 11:49 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Parametric and Non-Parametric (NP) Confidence Interval

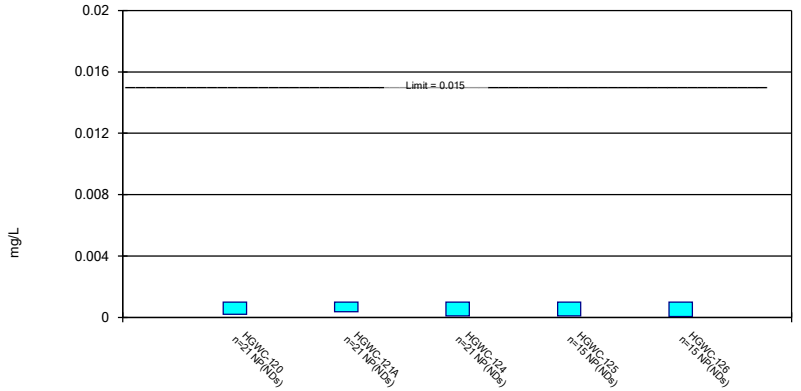
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 10/22/2024 11:49 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Non-Parametric Confidence Interval

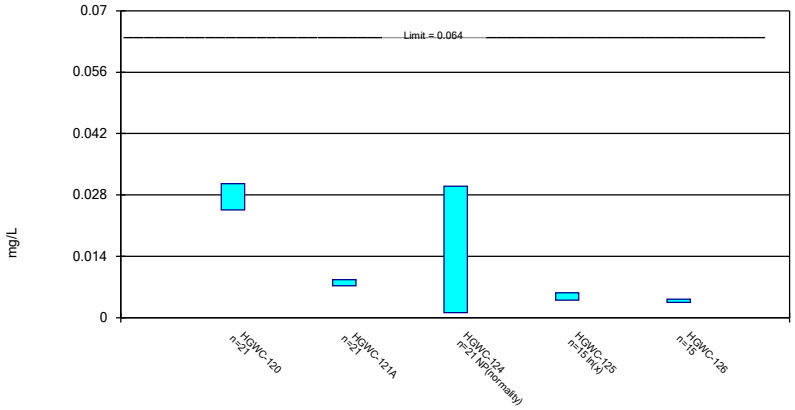
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 10/22/2024 11:50 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

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.

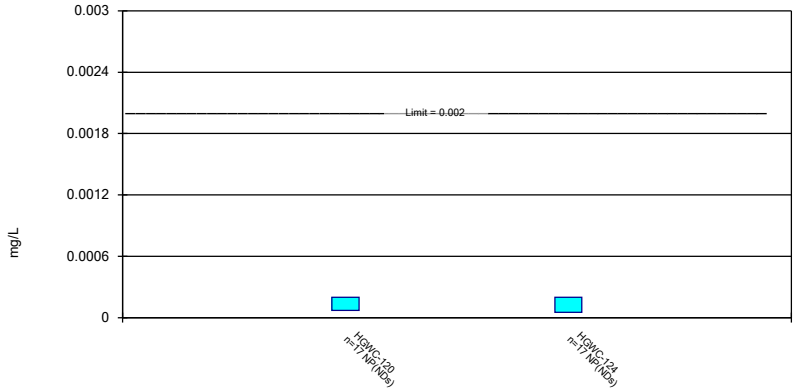


Constituent: Lithium Analysis Run 10/22/2024 11:50 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

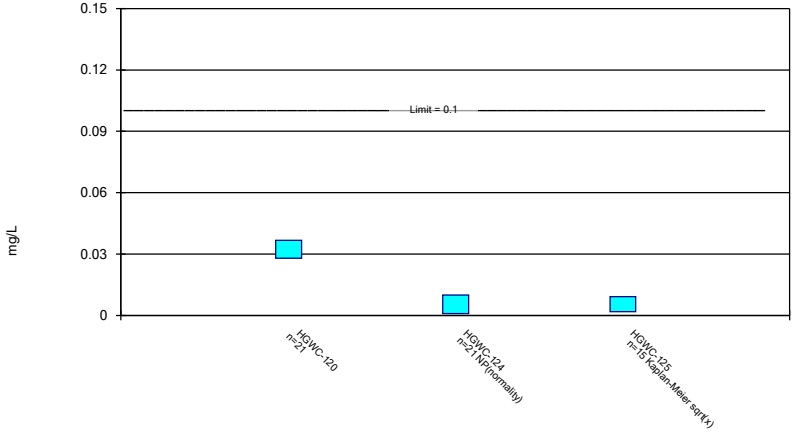


Constituent: Mercury Analysis Run 10/22/2024 11:50 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

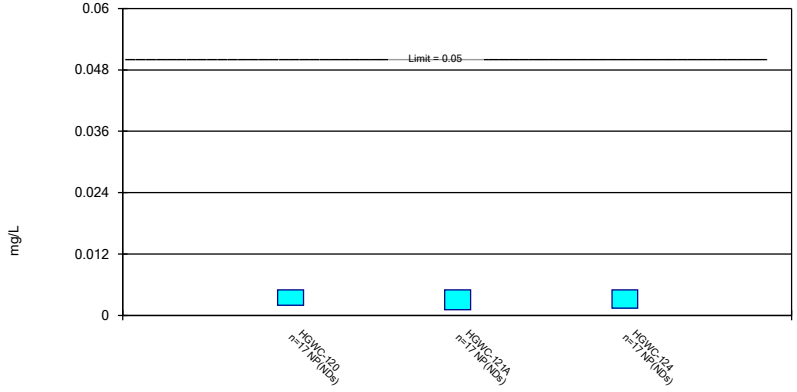


Constituent: Molybdenum Analysis Run 10/22/2024 11:50 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.10.0.23 Sanitas software utilized by Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 10/22/2024 11:50 AM View: Confidence Interval
Plant Hammond Client: Southern Company Data: Hammond AP-3

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.003	<0.003	<0.003		
10/26/2016	<0.003		<0.003		
11/7/2016		<0.003			
1/13/2017		<0.003			
1/27/2017	<0.003		<0.003		
5/25/2017	<0.003		<0.003		
6/3/2017		<0.003			
8/11/2017			<0.003		
10/2/2017	<0.003	<0.003			
11/15/2017	<0.003	<0.003	<0.003		
6/5/2018	<0.003	<0.003	<0.003		
10/2/2018	<0.003		<0.003		
10/5/2018		<0.003			
8/22/2019	<0.003	<0.003			
8/23/2019			<0.003		
5/22/2020				0.00047 (J)	<0.003
6/16/2020				<0.003	<0.003
8/25/2020				<0.003	<0.003
8/26/2020	<0.003	<0.003			
8/27/2020			<0.003		
9/18/2020					<0.003
9/21/2020	<0.003			<0.003	
9/28/2020		<0.003	<0.003		
11/11/2020					0.0004 (J)
11/12/2020				<0.003	
12/16/2020				<0.003	<0.003
1/20/2021				<0.003	<0.003
3/12/2021	0.0018 (J)			0.00061 (J)	0.00043 (J)
3/15/2021		<0.003	<0.003		
8/16/2021	<0.003	<0.003	<0.003		
8/19/2021				<0.003	<0.003
2/2/2022	<0.003	<0.003	<0.003		
2/3/2022				<0.003	<0.003
8/4/2022	<0.003	0.0016 (J)	<0.003	<0.003	<0.003
1/24/2023		<0.003	0.0018 (J)		
1/25/2023	<0.003			<0.003	<0.003
8/10/2023	<0.003	<0.003		<0.003	
8/11/2023			<0.003		<0.003
2/14/2024				<0.003	<0.003
2/15/2024	<0.003	<0.003			
2/16/2024			<0.003		
8/6/2024		0.0018 (J)			
8/7/2024	<0.003		0.002 (J)	<0.003	<0.003
Mean	0.002937	0.002863	0.002884	0.002672	0.002655
Std. Dev.	0.0002753	0.0004112	0.0003484	0.000866	0.0009096
Upper Lim.	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.0018	0.0018	0.002	0.00061	0.00043

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005	<0.005		
10/26/2016	<0.005		<0.005		
11/7/2016		<0.005			
1/13/2017		<0.005			
1/27/2017	<0.005		<0.005		
5/25/2017	0.0014 (J)		0.0006 (J)		
6/3/2017		0.001 (J)			
8/11/2017			<0.005		
10/2/2017	0.0007 (J)	<0.005			
11/15/2017	<0.005	<0.005	<0.005		
6/5/2018	0.001 (J)	0.0014 (J)	<0.005		
10/2/2018	<0.005		<0.005		
10/5/2018		<0.005			
8/22/2019	<0.005	<0.005			
8/23/2019			<0.005		
5/22/2020				0.00081 (J)	0.00071 (J)
6/16/2020				0.0014 (J)	0.00091 (J)
8/25/2020				<0.005	<0.005
8/26/2020	<0.005	<0.005			
8/27/2020			<0.005		
9/18/2020					<0.005
9/21/2020				<0.005	
11/11/2020					<0.005
11/12/2020				<0.005	
12/16/2020				<0.005	<0.005
1/20/2021				<0.005	<0.005
8/16/2021	0.0015 (J)	0.0014 (J)	<0.005		
8/19/2021				<0.005	<0.005
2/2/2022	0.0014 (J)	<0.005	<0.005		
2/3/2022				0.0032 (J)	0.0026 (J)
8/4/2022	<0.005	<0.005	<0.005	<0.005	<0.005
1/24/2023		<0.005	<0.005		
1/25/2023	<0.005			<0.005	<0.005
8/10/2023	<0.005	<0.005		<0.005	
8/11/2023			<0.005		<0.005
2/14/2024				<0.005	<0.005
2/15/2024	0.00086 (J)	<0.005			
2/16/2024			<0.005		
8/6/2024		<0.005			
8/7/2024	<0.005		<0.005	0.0009 (J)	<0.005
Mean	0.003639	0.004341	0.004741	0.004022	0.00423
Std. Dev.	0.001909	0.001469	0.001067	0.001691	0.001583
Upper Lim.	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.001	0.0014	0.0006	0.0014	0.0026

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.045	0.0782	0.0744		
10/26/2016	0.0462		0.0735		
11/7/2016		0.0764			
1/13/2017		0.0744			
1/27/2017	0.0451		0.0632		
5/25/2017	0.0488		0.0773		
6/3/2017		0.0933			
8/11/2017			0.0672		
10/2/2017	0.0479	0.0815			
11/15/2017	0.051	0.0807	0.0707		
6/5/2018	0.051	0.078	0.07		
10/2/2018	0.059		0.067		
10/5/2018		0.074			
8/22/2019	0.05	0.066			
8/23/2019			0.066		
10/21/2019		0.074	0.075		
10/22/2019	0.051				
3/24/2020			0.075		
3/25/2020	0.052	0.099			
5/22/2020				0.048	0.24
6/16/2020				0.049	0.24
8/25/2020				0.045	0.23
8/26/2020	0.041	0.057			
8/27/2020			0.062		
9/18/2020					0.21
9/21/2020	0.046			0.042	
9/28/2020		0.056	0.071		
11/11/2020					0.23
11/12/2020				0.042	
12/16/2020				0.041	0.24
1/20/2021				0.045	0.25
3/12/2021	0.047			0.043	0.27
3/15/2021		0.059	0.071		
8/16/2021	0.052	0.06	0.069		
8/19/2021				0.044	0.27
2/2/2022	0.054	0.064	0.072		
2/3/2022				0.043	0.24
8/4/2022	0.048	0.06	0.068	0.037	0.24
1/24/2023		0.059	0.068		
1/25/2023	0.051			0.042	0.24
8/10/2023	0.045	0.048		0.038	
8/11/2023			0.06		0.22
2/14/2024				0.037	0.23
2/15/2024	0.046	0.047			
2/16/2024			0.054		
8/6/2024		0.044			
8/7/2024	0.051		0.064	0.035	0.23
Mean	0.04895	0.06807	0.06849	0.04207	0.2387
Std. Dev.	0.00392	0.0147	0.005646	0.004008	0.01598
Upper Lim.	0.05111	0.07618	0.07161	0.04478	0.2495
Lower Lim.	0.04679	0.05996	0.06538	0.03935	0.2278

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005	<0.005		
10/26/2016	<0.005		<0.005		
11/7/2016		<0.005			
1/13/2017		<0.005			
1/27/2017	<0.005		<0.005		
5/25/2017	<0.005		<0.005		
6/3/2017		<0.005			
8/11/2017			<0.005		
10/2/2017	<0.005	<0.005			
11/15/2017	<0.005	<0.005	<0.005		
6/5/2018	<0.005	<0.005	<0.005		
10/2/2018	<0.005		<0.005		
10/5/2018		<0.005			
8/22/2019	0.00072 (J)	<0.005			
8/23/2019			<0.005		
10/21/2019		<0.005	0.00046 (J)		
10/22/2019	<0.005				
3/24/2020			0.00051 (J)		
3/25/2020	0.0015 (J)	0.0005 (J)			
5/22/2020				0.00058 (J)	<0.005
6/16/2020				0.00052 (J)	<0.005
8/25/2020				<0.005	0.00096 (J)
8/26/2020	<0.005	<0.005			
8/27/2020			<0.005		
9/18/2020					<0.005
9/21/2020	0.00065 (J)			<0.005	
9/28/2020		<0.005	<0.005		
11/11/2020					<0.005
11/12/2020				<0.005	
12/16/2020				<0.005	<0.005
1/20/2021				0.00081 (J)	<0.005
3/12/2021	<0.005			<0.005	<0.005
3/15/2021		<0.005	<0.005		
8/16/2021	<0.005	<0.005	<0.005		
8/19/2021				<0.005	<0.005
2/2/2022	<0.005	<0.005	<0.005		
2/3/2022				<0.005	<0.005
8/4/2022	<0.005	<0.005	<0.005	<0.005	<0.005
1/24/2023		<0.005	<0.005		
1/25/2023	<0.005			<0.005	0.0014 (J)
8/10/2023	<0.005	<0.005		<0.005	
8/11/2023			<0.005		<0.005
2/14/2024				<0.005	<0.005
2/15/2024	<0.005	<0.005			
2/16/2024			<0.005		
8/6/2024		<0.005			
8/7/2024	<0.005		<0.005	<0.005	<0.005
Mean	0.004422	0.004786	0.00457	0.004127	0.004491
Std. Dev.	0.001457	0.000982	0.001358	0.001808	0.001347
Upper Lim.	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0015	0.0005	0.00051	0.00081	0.0014

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-125
8/31/2016	0.0052 (J)	<0.005	
10/26/2016	0.0041 (J)		
11/7/2016		<0.005	
1/13/2017		<0.005	
1/27/2017	0.0034 (J)		
5/25/2017	0.0035 (J)		
6/3/2017		0.0005 (J)	
10/2/2017	0.0036 (J)	0.0003 (J)	
11/15/2017	0.0032 (J)	0.0003 (J)	
6/5/2018	0.0031 (J)	<0.005	
10/2/2018	0.0025 (J)		
10/5/2018		<0.005	
8/22/2019	0.0028 (J)	<0.005	
10/21/2019		<0.005	
10/22/2019	0.0031 (J)		
3/25/2020	0.0036 (J)	<0.005	
5/22/2020			0.01
6/16/2020			0.0096
8/25/2020			0.0087
8/26/2020	0.0023 (J)	<0.005	
9/21/2020	0.0041 (J)		0.012
9/28/2020		<0.005	
11/12/2020			0.012
12/16/2020			0.0055
1/20/2021			0.012
3/12/2021	0.0027 (J)		0.014
3/15/2021		<0.005	
8/16/2021	0.0037 (J)	<0.005	
8/19/2021			0.0054
2/2/2022	0.0072	<0.005	
2/3/2022			0.0086
8/4/2022	0.0058	<0.005	0.014
1/24/2023		<0.005	
1/25/2023	0.0055		0.0097
8/10/2023	0.0048 (J)	<0.005	0.012
2/14/2024			0.004 (J)
2/15/2024	0.005 (J)	<0.005	
8/6/2024		<0.005	
8/7/2024	0.0064		0.012
Mean	0.004076	0.004338	0.009967
Std. Dev.	0.001342	0.001662	0.003086
Upper Lim.	0.004816	0.005	0.01206
Lower Lim.	0.003336	0.0005	0.007876

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	1.47	1.57	1.22		
10/26/2016	0.864 (U)		0.637 (U)		
11/7/2016		0.739 (U)			
1/13/2017		0.744 (U)			
1/27/2017	0.521 (U)		0.795 (U)		
5/25/2017	0.681 (U)		0.896 (U)		
6/3/2017		0 (U)			
8/11/2017			0.828 (U)		
10/2/2017	0.632 (U)	0.68 (U)			
11/15/2017	1.3	0.911 (U)	0.478 (U)		
6/5/2018	1.26 (U)	0.948 (U)	0.947 (U)		
10/2/2018	0.572 (U)		0.617 (U)		
10/5/2018		1.17 (U)			
8/22/2019	1.35	1.3			
8/23/2019			0.834		
10/21/2019		0.393 (U)	1.11 (U)		
10/22/2019	0.76 (U)				
3/24/2020			0.796 (U)		
3/25/2020	0.696 (U)	0.505 (U)			
5/22/2020				1.1 (U)	1.82
6/16/2020				1.62	1.82
8/25/2020				1.65	1.82
8/26/2020	0.357 (U)	1.96			
8/27/2020			0.494 (U)		
9/18/2020					0.841 (U)
9/21/2020	0.553 (U)			1.45	
9/28/2020		0.761 (U)	0.477 (U)		
11/11/2020					0.837 (U)
11/12/2020				0.633 (U)	
12/16/2020				0.818 (U)	1.26 (U)
1/20/2021				1.01 (U)	0.985 (U)
8/16/2021	1.25	0.192 (U)	0.734 (U)		
8/19/2021				0.721 (U)	1.11
2/2/2022	0.816 (U)	0.254 (U)	0.564 (U)		
2/3/2022				0.257 (U)	1.51
8/4/2022	0.687 (U)	1.16 (U)	0.16 (U)	0.971 (U)	1.34 (U)
1/24/2023		0.757 (U)	0.601 (U)		
1/25/2023	0.992			1.11	1.91
8/10/2023	0.682 (U)	0.585 (U)		0.953 (U)	
8/11/2023			0.449 (U)		1.34
2/14/2024				0.275 (U)	1.01 (U)
2/15/2024	0.669 (U)	0.0885 (U)			
2/16/2024			0.448 (U)		
8/6/2024		1.27			
8/7/2024	0.679 (U)		0.422 (U)	0.603 (U)	0.662 (U)
Mean	0.8396	0.7994	0.6754	0.9408	1.305
Std. Dev.	0.3184	0.5051	0.2571	0.4356	0.4191
Upper Lim.	1.02	1.086	0.8213	1.249	1.602
Lower Lim.	0.6588	0.5125	0.5294	0.6323	1.008

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.65	0.14 (J)	0.15 (J)		
10/26/2016	0.6		0.3		
11/7/2016		0.18 (J)			
1/13/2017		0.14 (J)			
1/27/2017	1.2		0.3		
5/25/2017	1.4		0.05 (J)		
6/3/2017		0.15 (J)			
8/11/2017			0.1 (J)		
10/2/2017	1	1.2			
11/15/2017	1.3	0.6	<0.1		
6/5/2018	0.48	0.19 (J)	0.078 (J)		
10/2/2018	0.34		0.078 (J)		
10/5/2018		0.23 (J)			
4/2/2019	0.47				
4/3/2019		0.14 (J)	0.089 (J)		
6/17/2019	1.2				
8/22/2019	0.3 (J)	0.2 (J)			
8/23/2019			0.11 (J)		
10/21/2019		0.18 (J)	0.073 (J)		
10/22/2019	0.53				
3/24/2020			<0.1		
3/25/2020	0.43	0.095 (J)			
5/22/2020				0.1 (J)	0.46
6/15/2020	0.37				
6/16/2020				0.12	0.44
8/25/2020				0.16	0.52
8/26/2020	0.48	0.16			
8/27/2020			<0.1		
9/18/2020					0.43
9/21/2020	0.33			0.11	
9/28/2020		0.15	<0.1		
11/11/2020					0.45
11/12/2020				0.12	
12/16/2020				0.2	0.49
1/20/2021				0.13	0.44
3/12/2021	0.42			0.12	0.46
3/15/2021		0.16	<0.1		
8/16/2021	0.39	0.15	<0.1		
8/19/2021				0.17	0.43
2/2/2022	0.36	0.15	<0.1		
2/3/2022				0.18	0.51
8/4/2022	0.38	0.18	0.074 (J)	0.15	0.5
1/24/2023		0.18	0.068 (J)		
1/25/2023	0.42			0.17	0.57
8/10/2023	0.36	0.18		0.15	
8/11/2023			<0.1		0.49
2/14/2024				0.2	0.49
2/15/2024	0.35	0.18			
2/16/2024			<0.1		
8/6/2024		0.2			
8/7/2024	0.34		<0.1	0.12	0.5
Mean	0.5875	0.2334	0.1123	0.1467	0.4787

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
Std. Dev.	0.3473	0.2364	0.06373	0.03244	0.03925
Upper Lim.	0.65	0.19	0.11	0.1686	0.5053
Lower Lim.	0.36	0.15	0.078	0.1247	0.4521

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.001	<0.001	<0.001		
10/26/2016	0.0002 (J)		<0.001		
11/7/2016		<0.001			
1/13/2017		<0.001			
1/27/2017	<0.001		<0.001		
5/25/2017	9E-05 (J)		<0.001		
6/3/2017		7E-05 (J)			
8/11/2017			8E-05 (J)		
10/2/2017	8E-05 (J)	<0.001			
11/15/2017	<0.001	<0.001	<0.001		
6/5/2018	<0.001	0.00036 (J)	<0.001		
10/2/2018	<0.001		<0.001		
10/5/2018		<0.001			
8/22/2019	<0.001	<0.001			
8/23/2019			4.9E-05 (J)		
10/21/2019		<0.001	4.9E-05 (J)		
10/22/2019	<0.001				
3/24/2020			9.4E-05 (J)		
3/25/2020	<0.001	<0.001			
5/22/2020				0.00014 (J)	<0.001
6/16/2020				0.00013 (J)	<0.001
8/25/2020				<0.001	4.5E-05 (J)
8/26/2020	<0.001	<0.001			
8/27/2020			<0.001		
9/18/2020					<0.001
9/21/2020	<0.001			<0.001	
9/28/2020		<0.001	7.5E-05 (J)		
11/11/2020					4.2E-05 (J)
11/12/2020				4.7E-05 (J)	
12/16/2020				<0.001	<0.001
1/20/2021				9.2E-05 (J)	<0.001
3/12/2021	<0.001			4.4E-05 (J)	4.6E-05 (J)
3/15/2021		0.00015 (J)	<0.001		
8/16/2021	<0.001	<0.001	<0.001		
8/19/2021				<0.001	<0.001
2/2/2022	<0.001	<0.001	<0.001		
2/3/2022				<0.001	<0.001
8/4/2022	<0.001	<0.001	<0.001	<0.001	<0.001
1/24/2023		<0.001	<0.001		
1/25/2023	<0.001			<0.001	<0.001
8/10/2023	<0.001	<0.001		<0.001	
8/11/2023			<0.001		<0.001
2/14/2024				<0.001	<0.001
2/15/2024	<0.001	<0.001			
2/16/2024			<0.001		
8/6/2024		<0.001			
8/7/2024	<0.001		<0.001	<0.001	<0.001
Mean	0.0008748	0.0008848	0.0007784	0.0006969	0.0008089
Std. Dev.	0.000315	0.0002931	0.0004062	0.0004444	0.0003957
Upper Lim.	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.0002	0.00036	9.4E-05	9.2E-05	4.6E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.0333 (J)	0.0077 (J)	<0.03		
10/26/2016	0.0352 (J)		<0.03		
11/7/2016		0.0089 (J)			
1/13/2017		0.0091 (J)			
1/27/2017	0.0329 (J)		<0.03		
5/25/2017	0.0347 (J)		0.0011 (J)		
6/3/2017		0.0104 (J)			
8/11/2017			<0.03		
10/2/2017	0.0337 (J)	0.0095 (J)			
11/15/2017	0.0347 (J)	0.0086 (J)	<0.03		
6/5/2018	0.033 (J)	0.0092 (J)	0.0012 (J)		
10/2/2018	0.031 (J)		0.0012 (J)		
10/5/2018		0.0091 (J)			
8/22/2019	0.029 (J)	0.0084 (J)			
8/23/2019			0.0011 (J)		
10/21/2019		0.009 (J)	0.0011 (J)		
10/22/2019	0.03 (J)				
3/24/2020			0.0012 (J)		
3/25/2020	0.024 (J)	0.0066 (J)			
5/22/2020				0.0052 (J)	0.0046 (J)
6/16/2020				0.0053 (J)	0.0045 (J)
8/25/2020				0.0037 (J)	0.0037 (J)
8/26/2020	0.023 (J)	0.0071 (J)			
8/27/2020			0.00091 (J)		
9/18/2020					0.0035 (J)
9/21/2020	0.023 (J)			0.0038 (J)	
9/28/2020		0.0076 (J)	0.0011 (J)		
11/11/2020					0.0032 (J)
11/12/2020				0.0038 (J)	
12/16/2020				0.0055 (J)	0.0029 (J)
1/20/2021				0.0046 (J)	0.0038 (J)
3/12/2021	0.023 (J)			0.0039 (J)	0.0038 (J)
3/15/2021		0.0077 (J)	0.001 (J)		
8/16/2021	0.025 (J)	0.0075 (J)	0.0011 (J)		
8/19/2021				0.0074 (J)	0.0032 (J)
2/2/2022	0.025 (J)	0.0082 (J)	0.0012 (J)		
2/3/2022				0.0057 (J)	0.0038 (J)
8/4/2022	0.023 (J)	0.0069 (J)	0.0011 (J)	0.0035 (J)	0.0034 (J)
1/24/2023		0.0066 (J)	0.0011 (J)		
1/25/2023	0.018 (J)			0.0045 (J)	0.0046 (J)
8/10/2023	0.023 (J)	0.0069 (J)		0.0042 (J)	
8/11/2023			0.00097 (J)		0.0041 (J)
2/14/2024				0.0083 (J)	0.0041 (J)
2/15/2024	0.021 (J)	0.0056 (J)			
2/16/2024			<0.03		
8/6/2024		0.0063 (J)			
8/7/2024	0.023 (J)		<0.03	0.0038 (J)	0.0042 (J)
Mean	0.02755	0.007948	0.01073	0.00488	0.003827
Std. Dev.	0.005449	0.001236	0.01396	0.00141	0.0005271
Upper Lim.	0.03055	0.00863	0.03	0.005627	0.004184
Lower Lim.	0.02454	0.007266	0.0011	0.003956	0.003469

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-124
8/31/2016	4E-05 (J)	<0.0002
10/26/2016	<0.0002	<0.0002
1/27/2017	<0.0002	<0.0002
5/25/2017	7E-05 (J)	5.1E-05 (J)
8/11/2017		<0.0002
10/2/2017	<0.0002	
11/15/2017	<0.0002	<0.0002
6/5/2018	<0.0002	<0.0002
10/2/2018	<0.0002	<0.0002
8/22/2019	<0.0002	
8/23/2019		<0.0002
8/26/2020	<0.0002	
8/27/2020		<0.0002
8/16/2021	<0.0002	<0.0002
2/2/2022	<0.0002	<0.0002
8/4/2022	<0.0002	<0.0002
1/24/2023		<0.0002
1/25/2023	<0.0002	
8/10/2023	<0.0002	
8/11/2023		<0.0002
2/15/2024	<0.0002	
2/16/2024		<0.0002
8/7/2024	<0.0002	<0.0002
Mean	0.0001829	0.0001912
Std. Dev.	4.845E-05	3.614E-05
Upper Lim.	0.0002	0.0002
Lower Lim.	7E-05	5.1E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-124	HGWC-125
8/31/2016	0.0176	<0.01	
10/26/2016	0.0187	<0.01	
1/27/2017	0.0214	<0.01	
5/25/2017	0.0231	0.0009 (J)	
8/11/2017		0.0013 (J)	
10/2/2017	0.0259		
11/15/2017	0.0281	0.0012 (J)	
6/5/2018	0.033	<0.01	
10/2/2018	0.036	<0.01	
8/22/2019	0.039		
8/23/2019		0.0014 (J)	
10/21/2019		0.0013 (J)	
10/22/2019	0.04		
3/24/2020		0.001 (J)	
3/25/2020	0.034		
5/22/2020			<0.01
6/16/2020			<0.01
8/25/2020			0.00099 (J)
8/26/2020	0.05		
8/27/2020		0.00091 (J)	
9/21/2020	0.043		<0.01
9/28/2020		0.0009 (J)	
11/12/2020			0.0017 (J)
12/16/2020			0.014
1/20/2021			0.0013 (J)
3/12/2021	0.033		0.0012 (J)
3/15/2021		0.00092 (J)	
8/16/2021	0.035	0.00091 (J)	
8/19/2021			0.021
2/2/2022	0.034	0.001 (J)	
2/3/2022			0.0067 (J)
8/4/2022	0.032	<0.01	0.0023 (J)
1/24/2023		<0.01	
1/25/2023	0.03		0.0053 (J)
8/10/2023	0.035		0.0031 (J)
8/11/2023		<0.01	
2/14/2024			0.026
2/15/2024	0.033		
2/16/2024		0.00072 (J)	
8/7/2024	0.036	0.0012 (J)	0.0028 (J)
Mean	0.03228	0.00446	0.007759
Std. Dev.	0.007905	0.004456	0.007619
Upper Lim.	0.03664	0.01	0.009185
Lower Lim.	0.02792	0.00091	0.001729

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 10/22/2024 11:50 AM View: Confidence Interval

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124
8/31/2016	<0.005	<0.005	<0.005
10/26/2016	<0.005		<0.005
11/7/2016		<0.005	
1/13/2017		0.0011 (J)	
1/27/2017	<0.005		<0.005
5/25/2017	<0.005		<0.005
6/3/2017		<0.005	
8/11/2017			<0.005
10/2/2017	0.002 (J)	<0.005	
11/15/2017	<0.005	<0.005	<0.005
6/5/2018	<0.005	<0.005	<0.005
10/2/2018	<0.005		0.0014 (J)
10/5/2018		<0.005	
8/22/2019	<0.005	<0.005	
8/23/2019			<0.005
8/26/2020	<0.005	<0.005	
8/27/2020			<0.005
8/16/2021	<0.005	<0.005	<0.005
2/2/2022	<0.005	<0.005	<0.005
8/4/2022	<0.005	<0.005	<0.005
1/24/2023		<0.005	<0.005
1/25/2023	<0.005		
8/10/2023	<0.005	<0.005	
8/11/2023			<0.005
2/15/2024	<0.005	<0.005	
2/16/2024			<0.005
8/6/2024		<0.005	
8/7/2024	<0.005		<0.005
Mean	0.004824	0.004771	0.004788
Std. Dev.	0.0007276	0.0009459	0.0008731
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.002	0.0011	0.0014

ND substitution: RL or RL/2 if <15% NDs.

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 3 (AP-3)
February 2025 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 analysis of groundwater data for Georgia Power Company's Plant Hammond AP-3. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the Coal Combustion Residuals (CCR) program in 2016, and at least 8 background samples have been collected at each of the groundwater monitoring wells, except for those discussed below. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** HGWA-1, HGWA-2, HGWA-3, HGWA-43D, HGWA-44D, HGWA-45D, and HGWA-122
- **Downgradient wells:** HGWC-120, HGWC-121A, HGWC-124, HGWC-125, and HGWC-126

Upgradient wells HGWA-43D, HGWA-44D, and HGWA-45D were first sampled in September 2020 and all available data are included in construction of interwell prediction limits. As requested by Southern Company Services, upgradient wells with 2 or more

samples are incorporated into the statistical analyses. Sampling began at downgradient wells HGWC-125 and HGWC-126 in May 2020 and also have at least 8 rounds of background sampling; therefore, these wells are statistically analyzed in this report with prediction limits and confidence intervals.

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 EQuIS Database Management Program (EQuIS). Data were then exported from EQuIS 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 EQuIS. Based on the results of the audit and statistical analysis results from GSC, EQuIS 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 EQuIS's data management and reporting tools and capabilities.

The 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

When no detections are present in downgradient wells for a given constituent, statistical analyses are not required. A summary of downgradient Appendix IV well/constituent pairs containing 100% non-detects follows this letter. These well/constituent pairs were included in the time series and box plots, but no formal statistics were required.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. In the case of lithium, historical reporting limits vary among the wells. Therefore, the reporting limit of 0.030 mg/L was substituted across all wells, which is the most recent reporting limit provided by the laboratory.

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 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 (for data sets containing <15% non-detects as described above) are 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.

Summary of Background Screening Conducted in March 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. Those findings were submitted with the screening report.

While this was not the case during the background screening, when the most recent value is identified as an outlier, values are not flagged in the database 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 existed in the data sets and appeared on the graphs as possible low outliers relative to the laboratory's Practical

Quantitation Limit. However, these values were observed trace values (i.e., measurements reported between the Method Detection Limit and the Practical Quantitation Limit) by the laboratory and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, only one outlier was flagged for TDS in upgradient well HGWA-112. All other values are similar to remaining measurements within a given well or neighboring wells or were reported non-detects. The outlier summary follows this report (Figure C).

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.

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 Test Evaluation

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 showed a statistically significant decreasing trend among the Appendix III parameters. Because the noted trend was relatively low in magnitude when compared to average concentrations and the background time period was short, no adjustment was made to the dataset.

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 for each Appendix III parameter using all historical upgradient well data through February 2025 (Figure D). Interwell prediction limits use all available 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 the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no further action is necessary. If no resample is collected, the initial exceedance is automatically confirmed. For Appendix III parameters, several prediction limit exceedances were identified. A summary table of the interwell prediction limits follows this letter. Exceedances were identified for the following well/constituent pairs:

- Boron: HGWC-120, HGWC-121A, and HGWC-125
- Calcium: HGWC-120, HGWC-125, and HGWC-126
- Sulfate: HGWC-120 and HGWC-125

- TDS: HGWC-125

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 well data are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. When trends are present in upgradient wells it is an indication of variability in groundwater quality unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

Increasing trends:
- Boron: HGWA-2 and HGWA-44D (both upgradient)
- Calcium: HGWA-2 and HGWA-3 (both upgradient)
- Sulfate: HGWA-2 (upgradient)

Decreasing trends:
- Boron: HGWA-43D, HGWA-122 (both upgradient), and HGWC-121A
- Calcium: HGWA-44D (upgradient)
- Sulfate: HGWA-43D, HGWA-122 (both upgradient), HGWC-120, and HGWC-125

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 GWPS, and GWPS were developed as

described below. Well/constituent pairs containing 100% non-detects do not require analyses.

Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis. More recent concentrations have continued to increase for lithium at upgradient well HGWA-44D; therefore, the record was truncated to use observations between September 2020 and January 2023 in order to maintain conservative limits from a regulatory perspective. If further studies indicate the flagged measurements represent variation in groundwater quality, the values will be re-evaluated for construction of interwell upper tolerance limits. A list of any well/constituent pairs using a truncated portion of their record follows this letter.

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 used. As mentioned above, a reporting limit of 0.030 mg/L was substituted for lithium.

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 of downgradient well data to GWPS, confidence intervals were constructed for the Appendix IV constituents in each downgradient well with detections (Figure H). Note that a GWPS is established for each Appendix IV constituent. However, since there are 100% non-detects for beryllium, cadmium, and thallium in downgradient wells, no confidence intervals were required for these constituents.

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 and 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-3. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Andrew T. Collins
Project Manager



Kristina L. Rayner
Senior Statistician

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Summary Tables

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Date Ranges

Date: 4/23/2025 1:35 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

Lithium (mg/L)

HGWA-44D overall:9/16/2020-1/24/2023

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

100% Non-Detects: Appendix IV Downgradient

Analysis Run 4/23/2025 2:32 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

Beryllium (mg/L)
HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126

Cadmium (mg/L)
HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126

Cobalt (mg/L)
HGWC-124, HGWC-126

Mercury (mg/L)
HGWC-121A, HGWC-125, HGWC-126

Molybdenum (mg/L)
HGWC-121A, HGWC-126

Selenium (mg/L)
HGWC-125

Thallium (mg/L)
HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126

Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:33 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**HGWC-120**	**0.55**	**n/a**	**2/15/2025**	**1.2**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-121A**	**0.55**	**n/a**	**2/15/2025**	**0.85**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-125**	**0.55**	**n/a**	**2/15/2025**	**1.5**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-120**	**138**	**n/a**	**2/15/2025**	**162**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-125**	**138**	**n/a**	**2/15/2025**	**169**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-126**	**138**	**n/a**	**2/15/2025**	**143**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-120**	**94.5**	**n/a**	**2/15/2025**	**175**	**Yes**	**135**	**n/a**	**n/a**	**0.7407**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-125**	**94.5**	**n/a**	**2/15/2025**	**201**	**Yes**	**135**	**n/a**	**n/a**	**0.7407**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**HGWC-125**	**632**	**n/a**	**2/15/2025**	**640**	**Yes**	**134**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001103**	**NP Inter (normality) 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:33 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**HGWC-120**	**0.55**	**n/a**	**2/15/2025**	**1.2**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-121A**	**0.55**	**n/a**	**2/15/2025**	**0.85**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	HGWC-124	0.55	n/a	2/14/2025	0.33J	No	135	n/a	n/a	4.444	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Boron (mg/L)	**HGWC-125**	**0.55**	**n/a**	**2/15/2025**	**1.5**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	HGWC-126	0.55	n/a	2/15/2025	0.016J	No	135	n/a	n/a	4.444	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-120**	**138**	**n/a**	**2/15/2025**	**162**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-121A	138	n/a	2/15/2025	125	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-124	138	n/a	2/14/2025	95.1	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-125**	**138**	**n/a**	**2/15/2025**	**169**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-126**	**138**	**n/a**	**2/15/2025**	**143**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	HGWC-120	44.8	n/a	2/15/2025	2.7	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-121A	44.8	n/a	2/15/2025	5.6	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-124	44.8	n/a	2/14/2025	2.1	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-125	44.8	n/a	2/15/2025	3.6	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-126	44.8	n/a	2/15/2025	8.8	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-120	1.5	n/a	2/15/2025	0.34	No	154	n/a	n/a	19.48	n/a	n/a	0.00008349	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-121A	1.5	n/a	2/15/2025	0.18	No	154	n/a	n/a	19.48	n/a	n/a	0.00008349	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-124	1.5	n/a	2/14/2025	0.1ND	No	154	n/a	n/a	19.48	n/a	n/a	0.00008349	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-125	1.5	n/a	2/15/2025	0.19	No	154	n/a	n/a	19.48	n/a	n/a	0.00008349	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-126	1.5	n/a	2/15/2025	0.49	No	154	n/a	n/a	19.48	n/a	n/a	0.00008349	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-120	8.49	4.57	2/15/2025	7.06	No	159	n/a	n/a	0	n/a	n/a	0.0001554	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-121A	8.49	4.57	2/15/2025	7.12	No	159	n/a	n/a	0	n/a	n/a	0.0001554	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-124	8.49	4.57	2/14/2025	7.31	No	159	n/a	n/a	0	n/a	n/a	0.0001554	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-125	8.49	4.57	2/15/2025	6.88	No	159	n/a	n/a	0	n/a	n/a	0.0001554	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-126	8.49	4.57	2/15/2025	7.13	No	159	n/a	n/a	0	n/a	n/a	0.0001554	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-120**	**94.5**	**n/a**	**2/15/2025**	**175**	**Yes**	**135**	**n/a**	**n/a**	**0.7407**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	HGWC-121A	94.5	n/a	2/15/2025	73.1	No	135	n/a	n/a	0.7407	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-124	94.5	n/a	2/14/2025	61.4	No	135	n/a	n/a	0.7407	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-125**	**94.5**	**n/a**	**2/15/2025**	**201**	**Yes**	**135**	**n/a**	**n/a**	**0.7407**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	HGWC-126	94.5	n/a	2/15/2025	64.8	No	135	n/a	n/a	0.7407	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-120	632	n/a	2/15/2025	626	No	134	n/a	n/a	0	n/a	n/a	0.0001103	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-121A	632	n/a	2/15/2025	457	No	134	n/a	n/a	0	n/a	n/a	0.0001103	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-124	632	n/a	2/14/2025	317	No	134	n/a	n/a	0	n/a	n/a	0.0001103	NP Inter (normality) 1 of 2
TDS (mg/L)	**HGWC-125**	**632**	**n/a**	**2/15/2025**	**640**	**Yes**	**134**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001103**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	HGWC-126	632	n/a	2/15/2025	525	No	134	n/a	n/a	0	n/a	n/a	0.0001103	NP Inter (normality) 1 of 2

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**HGWA-2 (bg)**	**0.002553**	**192**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-43D (bg)**	**-0.00484**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-44D (bg)**	**0.06008**	**56**	**43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-122 (bg)**	**-0.01946**	**-159**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-121A**	**-0.2456**	**-181**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-2 (bg)**	**1.743**	**142**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**1.808**	**153**	**111**	**Yes**	**25**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-44D (bg)**	**-6.278**	**-58**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-2 (bg)**	**4.631**	**200**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-43D (bg)**	**-3.467**	**-66**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-122 (bg)**	**-1.832**	**-153**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-120**	**-13.99**	**-181**	**-98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-125**	**-19.76**	**-71**	**-58**	**Yes**	**16**	**0**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	0	-3	-111	No	25	0	n/a	0.01	NP
Boron (mg/L)	**HGWA-2 (bg)**	**0.002553**	**192**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-3 (bg)	0.0004291	70	111	No	25	24	n/a	0.01	NP
Boron (mg/L)	**HGWA-43D (bg)**	**-0.00484**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-44D (bg)**	**0.06008**	**56**	**43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-45D (bg)	-0.001229	-10	-43	No	13	0	n/a	0.01	NP
Boron (mg/L)	**HGWA-122 (bg)**	**-0.01946**	**-159**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-120	-0.0298	-90	-98	No	23	0	n/a	0.01	NP
Boron (mg/L)	**HGWC-121A**	**-0.2456**	**-181**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-125	0	12	58	No	16	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.026	100	111	No	25	0	n/a	0.01	NP
Calcium (mg/L)	**HGWA-2 (bg)**	**1.743**	**142**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**1.808**	**153**	**111**	**Yes**	**25**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWA-43D (bg)	-1.38	-24	-43	No	13	0	n/a	0.01	NP
Calcium (mg/L)	**HGWA-44D (bg)**	**-6.278**	**-58**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWA-45D (bg)	-1.215	-30	-43	No	13	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-122 (bg)	-1.424	-69	-92	No	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-120	0.2519	12	98	No	23	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-125	-0.1971	-1	-58	No	16	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-126	2.924	58	58	No	16	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-1 (bg)	0.3291	19	111	No	25	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-2 (bg)**	**4.631**	**200**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-3 (bg)	-0.7966	-54	-111	No	25	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-43D (bg)**	**-3.467**	**-66**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-44D (bg)	-1.791	-24	-43	No	13	7.692	n/a	0.01	NP
Sulfate (mg/L)	HGWA-45D (bg)	-1.548	-24	-43	No	13	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-122 (bg)**	**-1.832**	**-153**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-120**	**-13.99**	**-181**	**-98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-125**	**-19.76**	**-71**	**-58**	**Yes**	**16**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	HGWA-1 (bg)	4.4	56	111	No	25	0	n/a	0.01	NP
TDS (mg/L)	HGWA-2 (bg)	8.099	101	105	No	24	0	n/a	0.01	NP
TDS (mg/L)	HGWA-3 (bg)	0.8767	34	111	No	25	0	n/a	0.01	NP
TDS (mg/L)	HGWA-43D (bg)	-0.688	-4	-43	No	13	0	n/a	0.01	NP
TDS (mg/L)	HGWA-44D (bg)	24.11	41	43	No	13	0	n/a	0.01	NP
TDS (mg/L)	HGWA-45D (bg)	-2.428	-15	-43	No	13	0	n/a	0.01	NP
TDS (mg/L)	HGWA-122 (bg)	-6.293	-71	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	HGWC-125	-16.65	-35	-58	No	16	0	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:39 PM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	139	n/a	n/a	85.61	n/a	n/a	0.0008009	NP Inter(NDs)
Arsenic (mg/L)	0.005	142	n/a	n/a	74.65	n/a	n/a	0.0006867	NP Inter(NDs)
Barium (mg/L)	0.64	147	n/a	n/a	0	n/a	n/a	0.0005313	NP Inter(normality)
Beryllium (mg/L)	0.0005	139	n/a	n/a	83.45	n/a	n/a	0.0008009	NP Inter(NDs)
Cadmium (mg/L)	0.0005	142	n/a	n/a	88.03	n/a	n/a	0.0006867	NP Inter(NDs)
Chromium (mg/L)	0.0079	141	n/a	n/a	82.27	n/a	n/a	0.0007228	NP Inter(NDs)
Cobalt (mg/L)	0.038	147	n/a	n/a	78.23	n/a	n/a	0.0005313	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.672	147	0.7856	0.2712	0	None	sqrt(x)	0.05	Inter
Fluoride (mg/L)	1.5	154	n/a	n/a	19.48	n/a	n/a	0.0003711	NP Inter(normality)
Lead (mg/L)	0.001	141	n/a	n/a	72.34	n/a	n/a	0.0007228	NP Inter(NDs)
Lithium (mg/L)	0.064	143	n/a	n/a	29.37	n/a	n/a	0.0006523	NP Inter(normality)
Mercury (mg/L)	0.0002	119	n/a	n/a	95.8	n/a	n/a	0.002234	NP Inter(NDs)
Molybdenum (mg/L)	0.01	149	n/a	n/a	65.1	n/a	n/a	0.0004795	NP Inter(NDs)
Selenium (mg/L)	0.005	142	n/a	n/a	92.96	n/a	n/a	0.0006867	NP Inter(NDs)
Thallium (mg/L)	0.001	142	n/a	n/a	99.3	n/a	n/a	0.0006867	NP Inter(NDs)

PLANT HAMMOND AP-3 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		0.64	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.0079	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		1.67	5
Fluoride, Total (mg/L)	4		1.5	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.040	0.064	0.064
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Grey cell indidcates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Statard*

Appendix IV Confidence Intervals - All Results (No Significant)

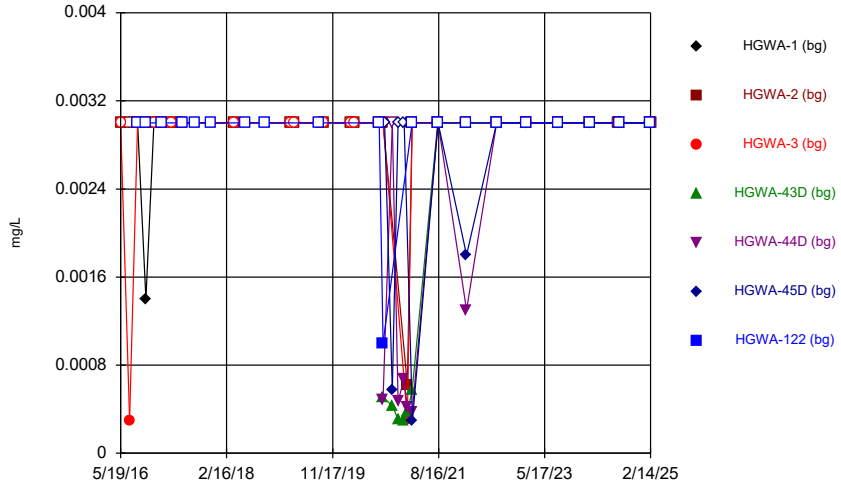
Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 7:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-120	0.003	0.0018	0.006	No	20	0.00294	0.0002683	95	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-121A	0.003	0.0018	0.006	No	20	0.00287	0.0004014	90	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-124	0.003	0.002	0.006	No	20	0.00289	0.0003401	90	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-125	0.003	0.00061	0.006	No	16	0.002693	0.0008406	87.5	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-126	0.003	0.00043	0.006	No	16	0.002677	0.000883	87.5	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-120	0.005	0.0014	0.01	No	18	0.003714	0.001879	66.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-121A	0.005	0.0014	0.01	No	18	0.004378	0.001434	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-124	0.005	0.0006	0.01	No	18	0.004756	0.001037	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-125	0.005	0.0014	0.01	No	15	0.004087	0.001649	73.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-126	0.005	0.0026	0.01	No	15	0.004281	0.001539	80	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-120	0.05106	0.04694	2	No	22	0.049	0.003832	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-121A	0.07516	0.0588	2	No	22	0.06698	0.01524	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-124	0.07122	0.06499	2	No	22	0.0681	0.0058	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-125	0.04442	0.03921	2	No	16	0.04181	0.004004	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-126	0.2486	0.2287	2	No	16	0.2388	0.01544	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	HGWC-120	0.005	0.0015	0.1	No	22	0.004449	0.001428	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-121A	0.005	0.0005	0.1	No	22	0.004795	0.0009594	95.45	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-124	0.005	0.00051	0.1	No	22	0.00459	0.001329	90.91	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-125	0.005	0.00081	0.1	No	16	0.004182	0.00176	81.25	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-126	0.005	0.0014	0.1	No	16	0.004522	0.001307	87.5	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-120	0.004806	0.003394	0.038	No	22	0.0041	0.001314	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-121A	0.005	0.0005	0.038	No	22	0.004368	0.001628	86.36	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-125	0.01178	0.007285	0.038	No	16	0.009531	0.003452	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-120	0.986	0.6511	5	No	22	0.8185	0.312	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-121A	1.07	0.5523	5	No	22	0.8112	0.4823	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-124	0.7993	0.5052	5	No	22	0.6522	0.274	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-125	1.226	0.6848	5	No	16	0.9556	0.4161	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-126	1.604	1.063	5	No	16	1.333	0.4153	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-120	0.6	0.35	4	No	25	0.5776	0.3436	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-121A	0.19	0.15	4	No	23	0.2311	0.2313	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-124	0.11	0.078	4	No	23	0.1117	0.06232	47.83	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-125	0.1709	0.1278	4	No	16	0.1494	0.03316	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-126	0.5041	0.4546	4	No	16	0.4794	0.03803	0	None	No	0.01	Param.
Lead (mg/L)	HGWC-120	0.001	0.0002	0.015	No	22	0.0008805	0.0003086	86.36	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-121A	0.001	0.00036	0.015	No	22	0.00089	0.0002871	86.36	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-124	0.001	0.000094	0.015	No	22	0.0007885	0.0003993	77.27	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-125	0.001	0.000092	0.015	No	16	0.0007158	0.000436	68.75	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-126	0.001	0.000046	0.015	No	16	0.0008208	0.0003852	81.25	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-120	0.03019	0.02422	0.064	No	22	0.0272	0.005556	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-121A	0.008549	0.007031	0.064	No	22	0.00779	0.001414	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-124	0.03	0.00104	0.064	No	22	0.01029	0.01378	31.82	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-125	0.0074	0.0038	0.064	No	16	0.005089	0.001599	0	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-126	0.004171	0.003505	0.064	No	16	0.003838	0.0005113	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-120	0.0002	0.00007	0.002	No	18	0.0001839	0.00004717	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-124	0.0002	0.000051	0.002	No	18	0.0001917	0.00003512	94.44	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-120	0.03645	0.02817	0.1	No	22	0.03231	0.007716	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-124	0.01	0.00092	0.1	No	22	0.004712	0.004506	40.91	None	No	0.01	NP (normality)
Molybdenum (mg/L)	HGWC-125	0.01092	0.002048	0.1	No	16	0.009024	0.008932	18.75	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	HGWC-120	0.005	0.002	0.05	No	18	0.004833	0.0007071	94.44	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-121A	0.005	0.0011	0.05	No	18	0.004783	0.0009192	94.44	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-124	0.005	0.0014	0.05	No	18	0.0048	0.0008485	94.44	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-126	0.005	0.0013	0.05	No	15	0.004753	0.0009553	93.33	None	No	0.01	NP (NDs)

FIGURE A.

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

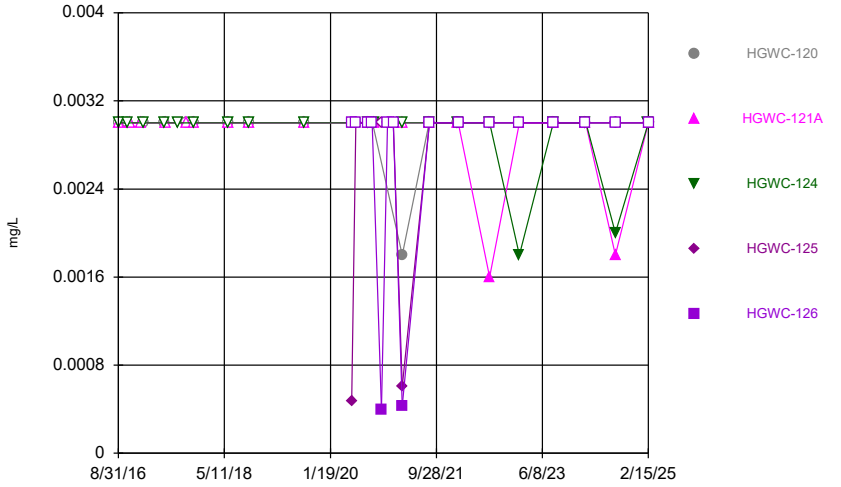
Time Series



Constituent: Antimony Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

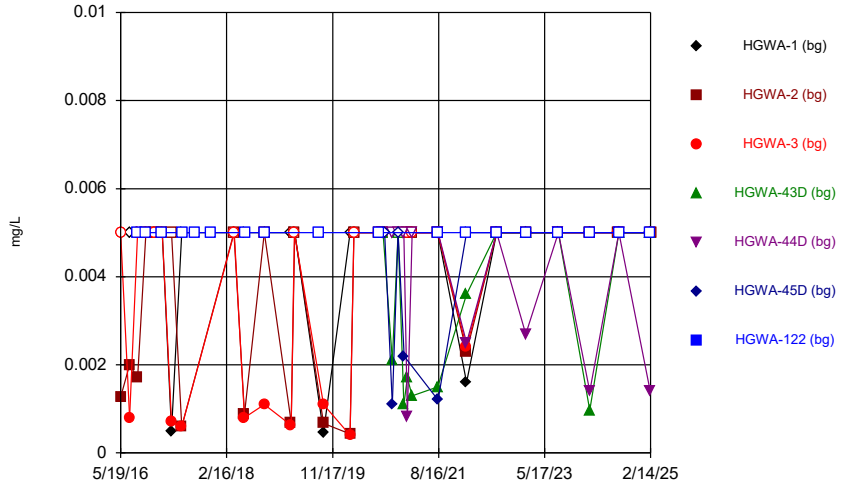
Time Series



Constituent: Antimony Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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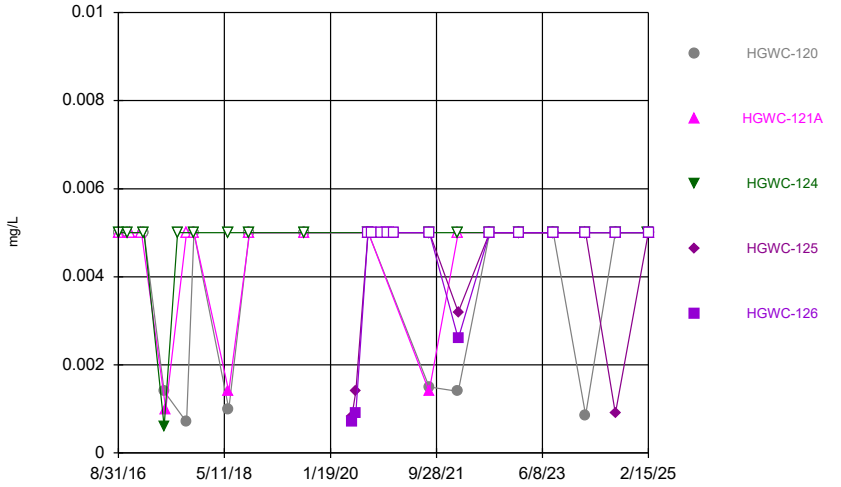
Time Series



Constituent: Arsenic Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

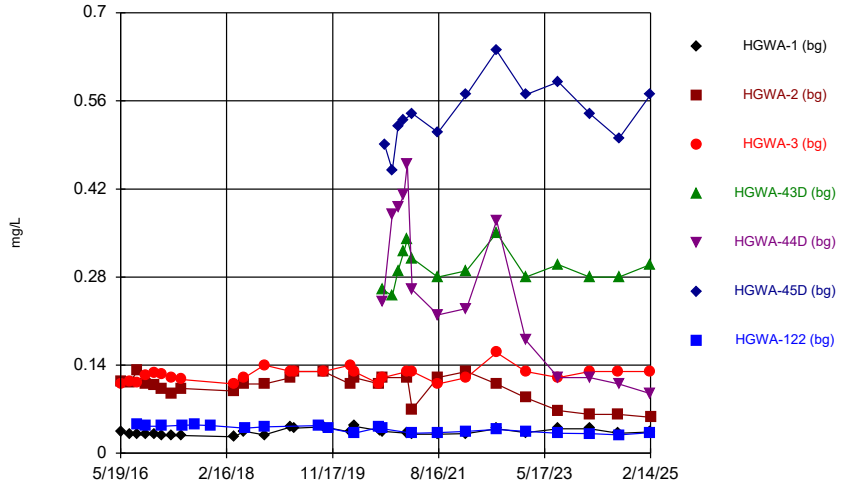
Time Series



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Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Time Series

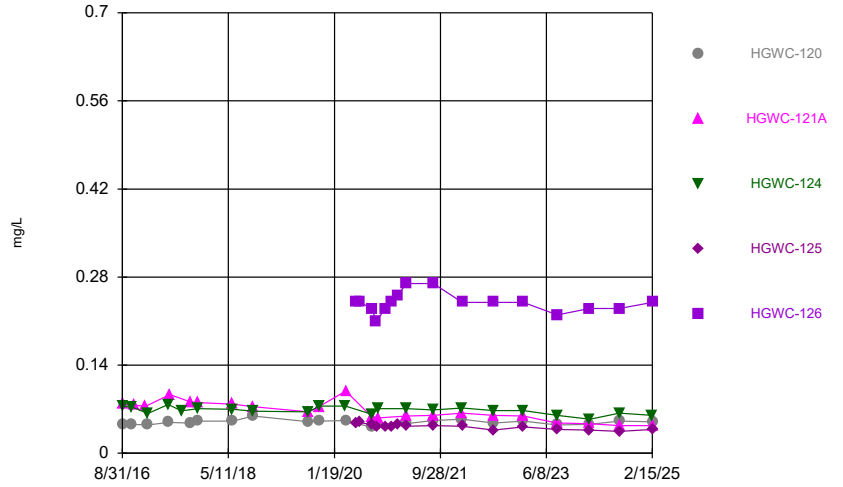


Constituent: Barium Analysis Run 4/22/2025 5:27 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Time Series



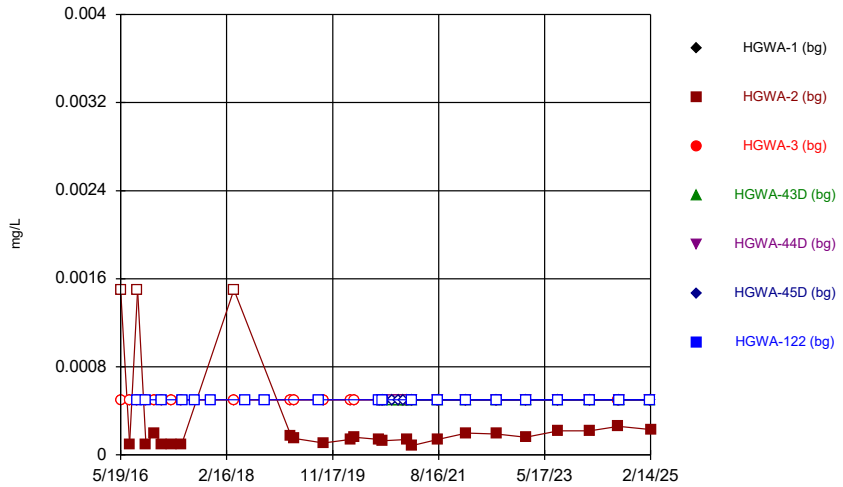
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Plant Hammond Client: Southern Company Data: Hammond AP3

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Hollow symbols indicate censored values.

Time Series



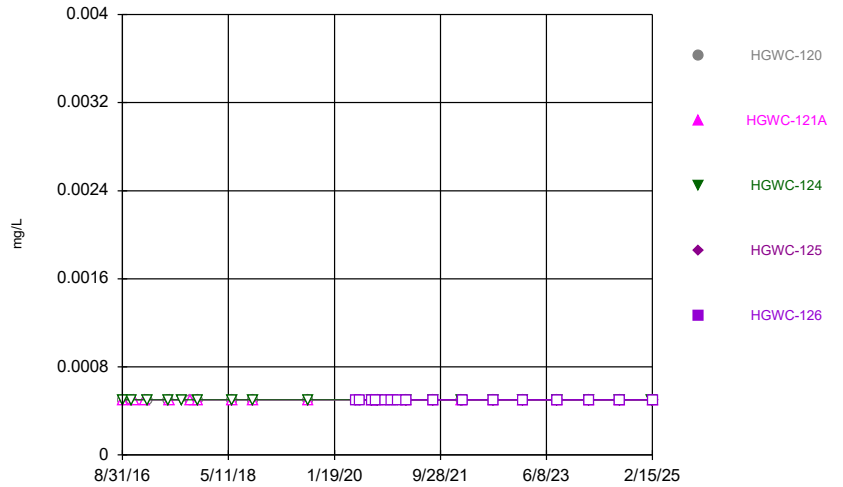
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Plant Hammond Client: Southern Company Data: Hammond AP3

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Hollow symbols indicate censored values.

Time Series

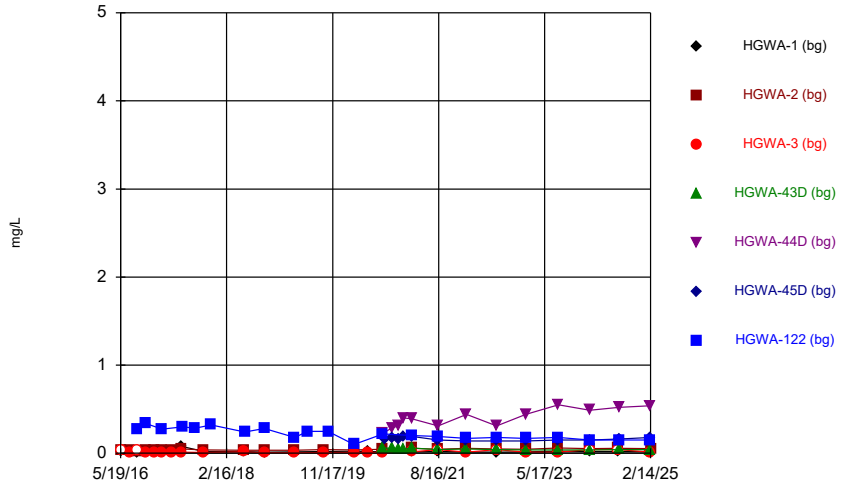


Constituent: Beryllium Analysis Run 4/22/2025 5:27 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
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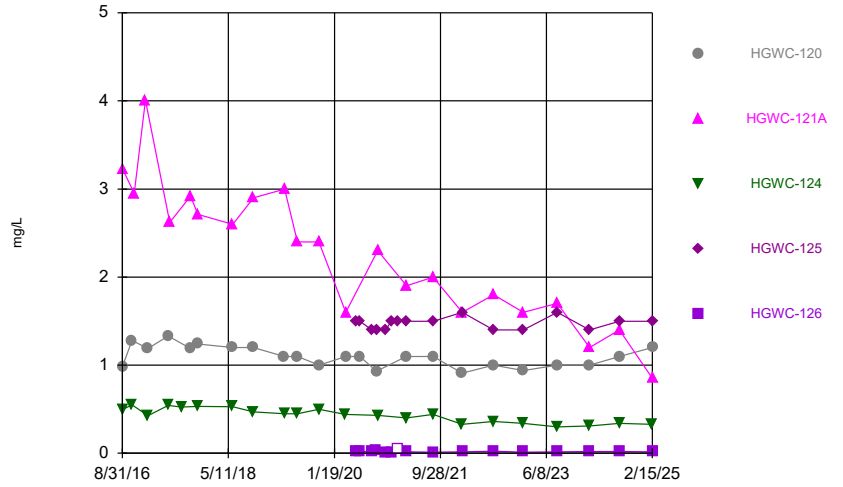
Time Series



Constituent: Boron Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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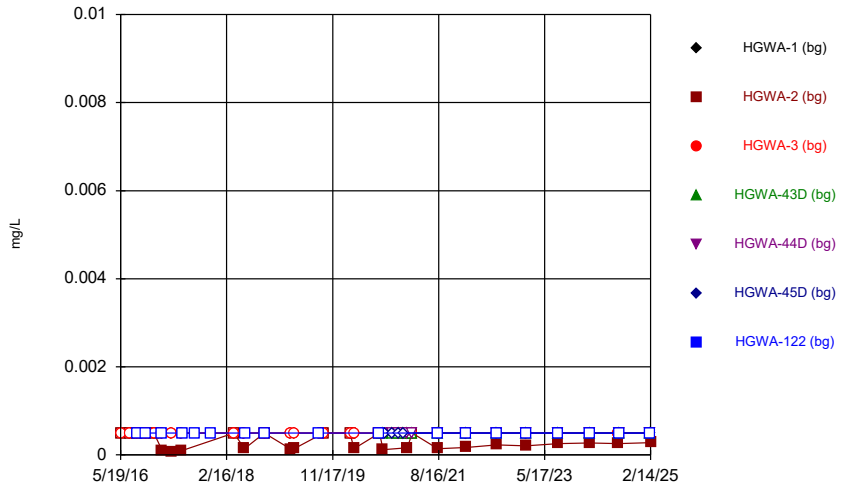
Time Series



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Plant Hammond Client: Southern Company Data: Hammond AP3

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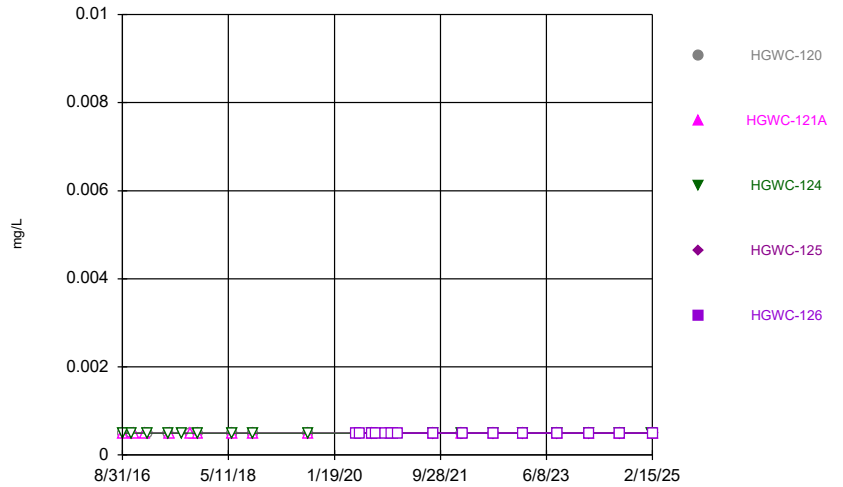
Time Series



Constituent: Cadmium Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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Hollow symbols indicate censored values.

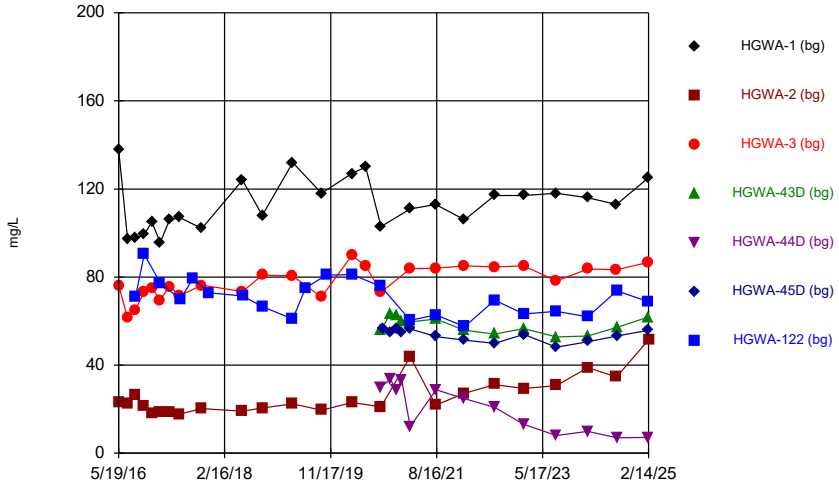
Time Series



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Plant Hammond Client: Southern Company Data: Hammond AP3

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Time Series

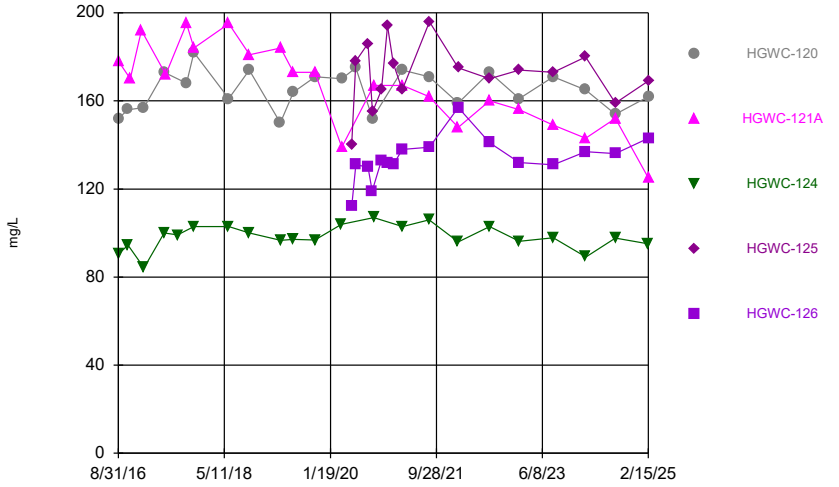


Constituent: Calcium Analysis Run 4/22/2025 5:27 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Time Series

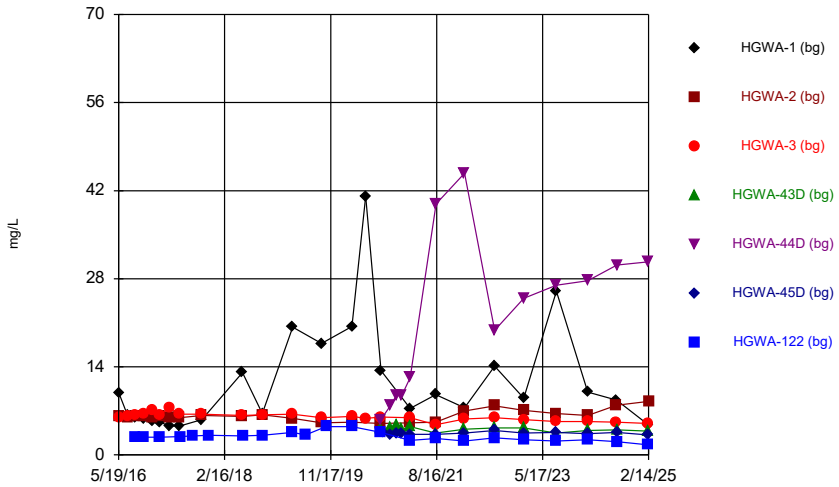


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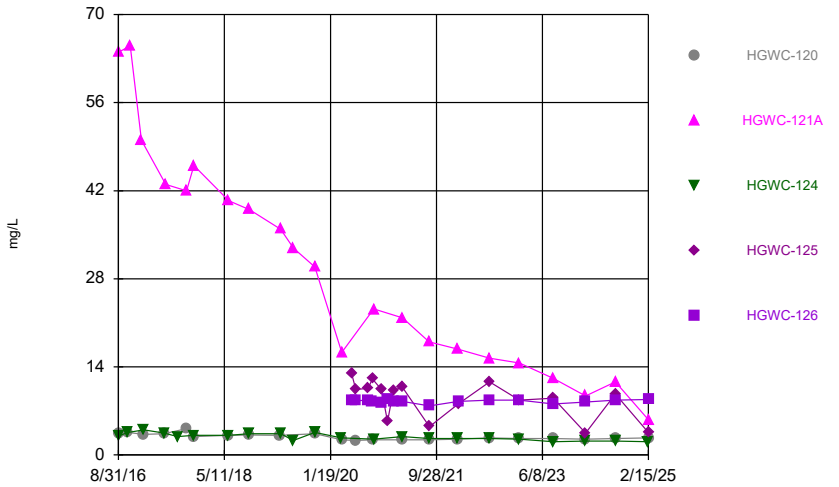


Constituent: Chloride Analysis Run 4/22/2025 5:27 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Time Series

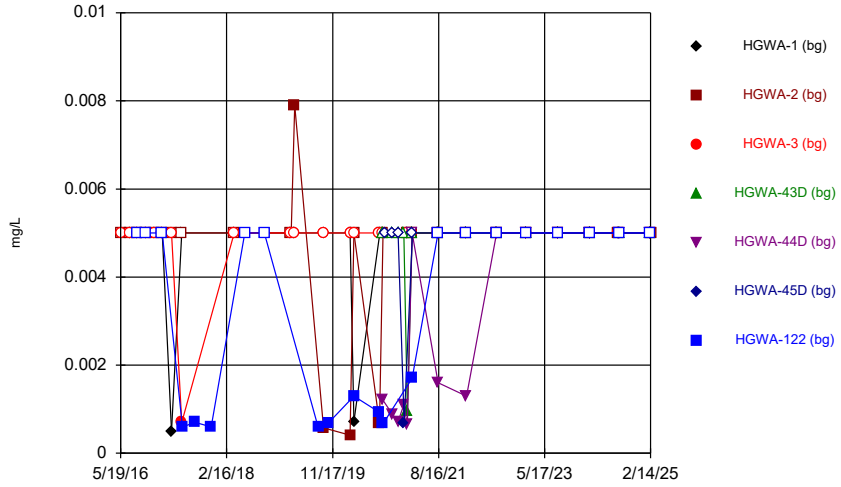


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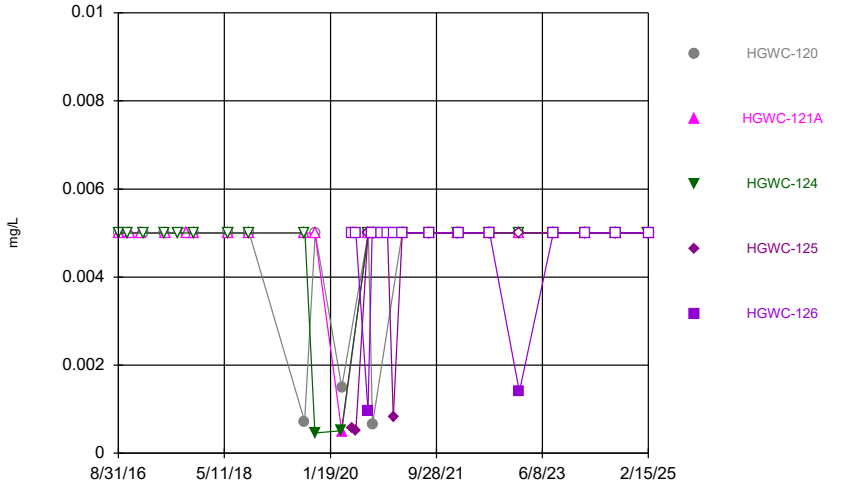
Time Series



Constituent: Chromium Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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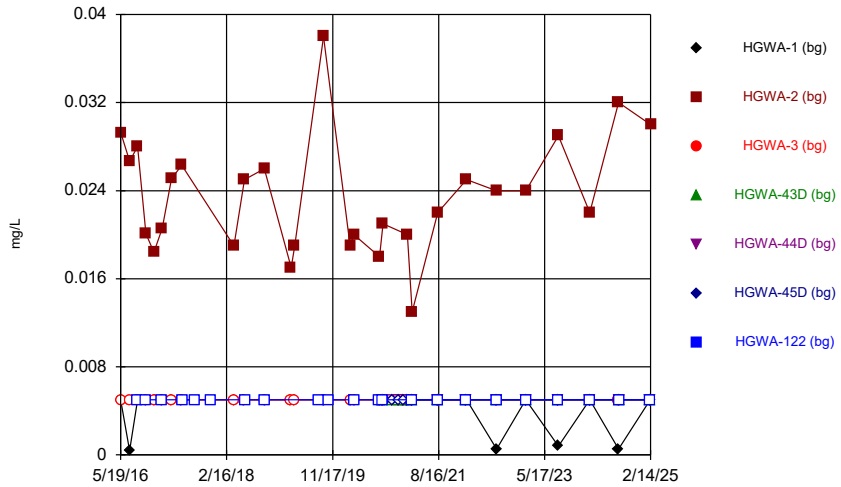
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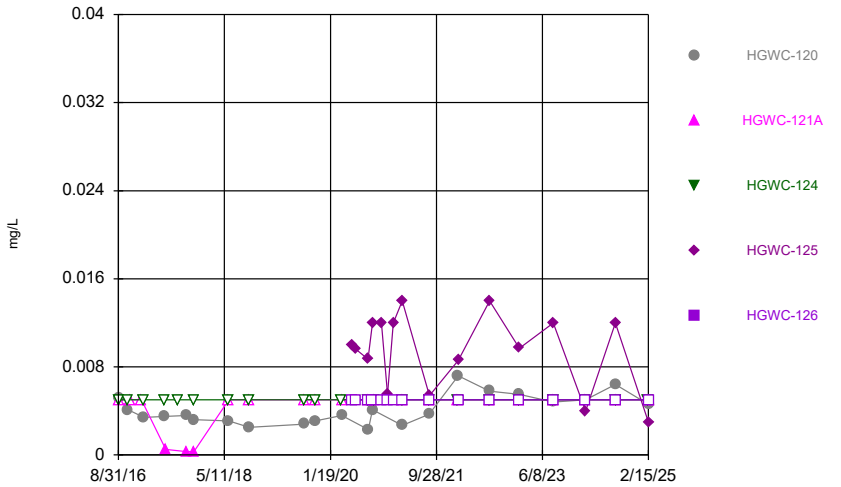
Time Series



Constituent: Cobalt Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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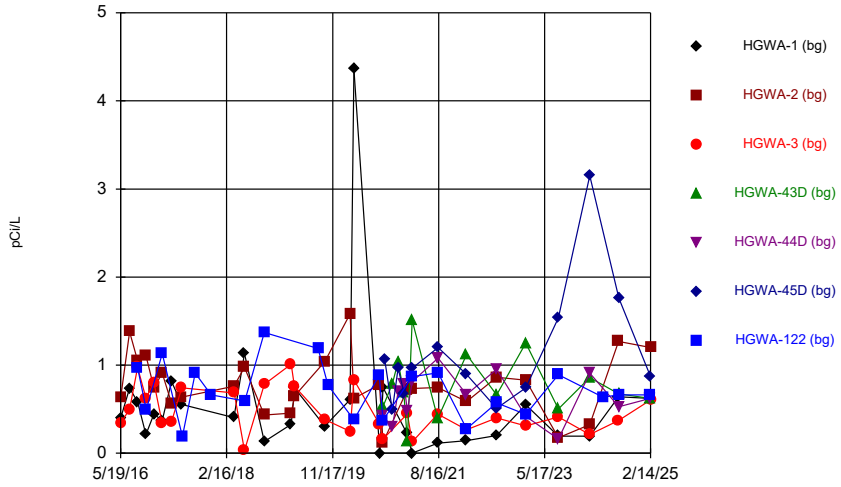
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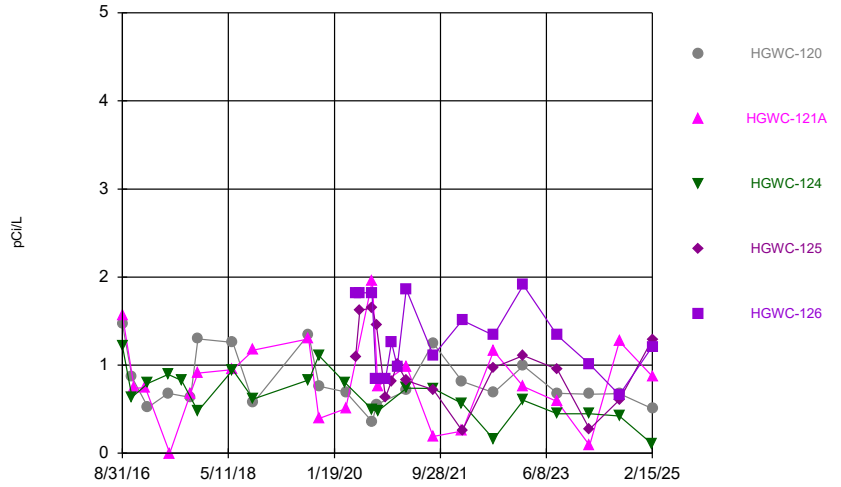
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

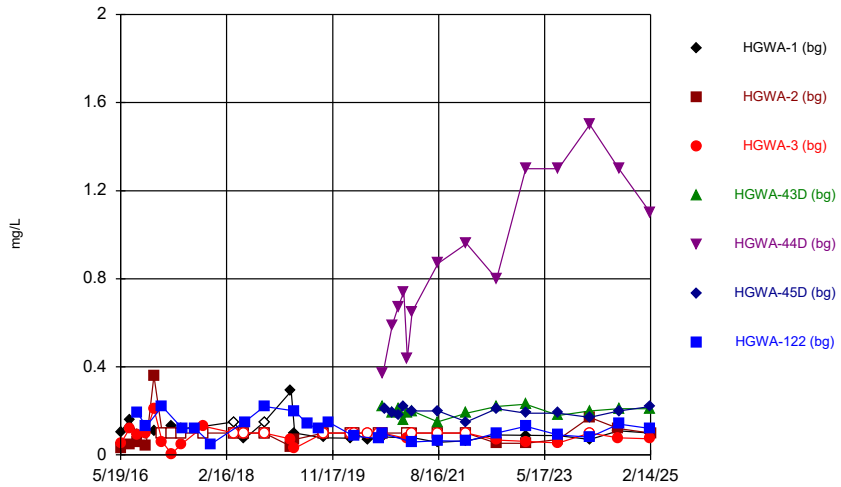
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
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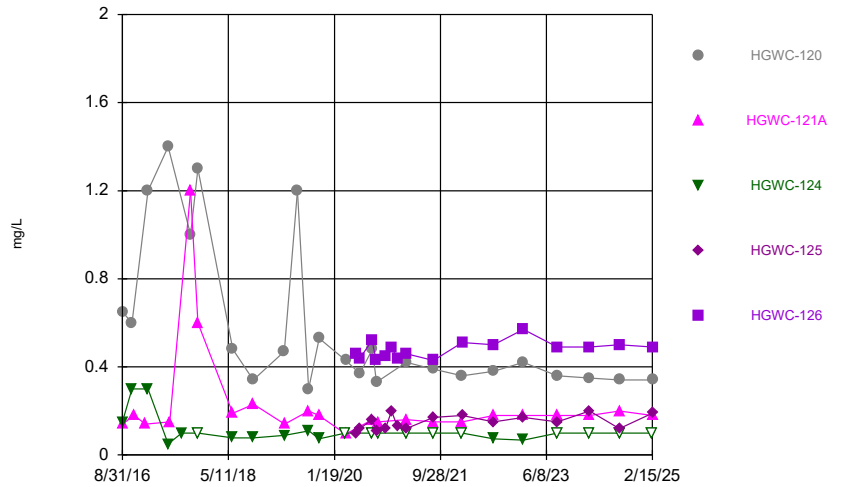
Time Series



Constituent: Fluoride Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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Hollow symbols indicate censored values.

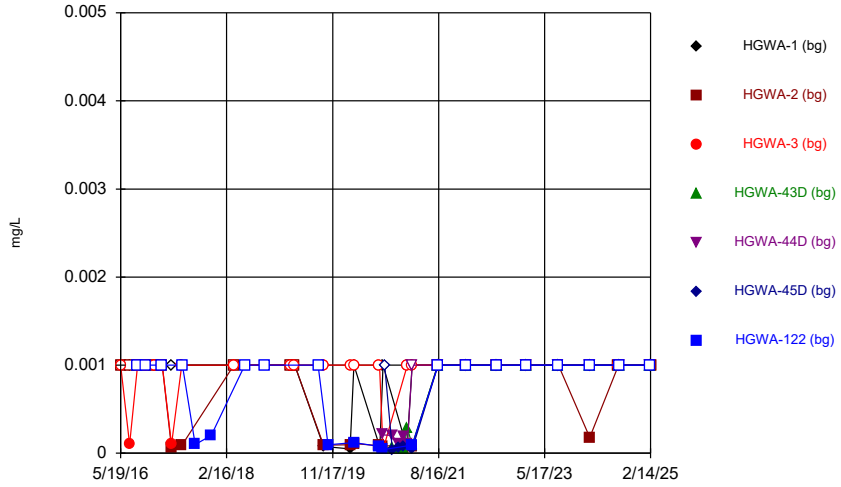
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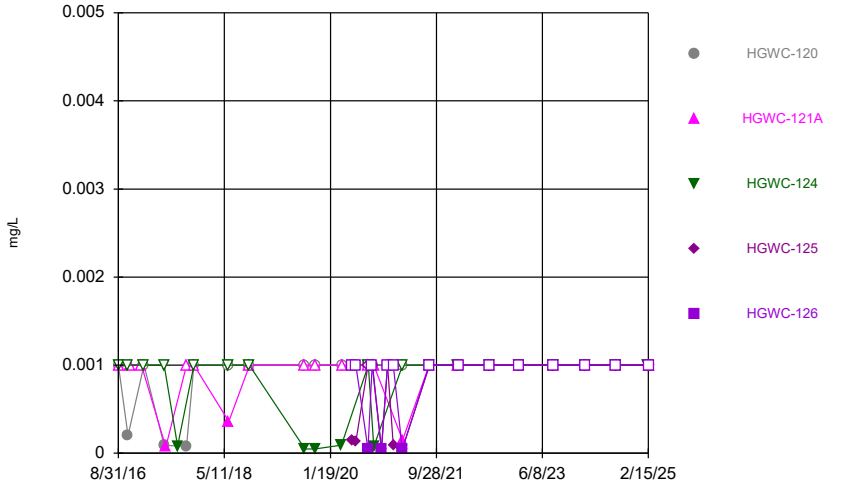
Time Series



Constituent: Lead Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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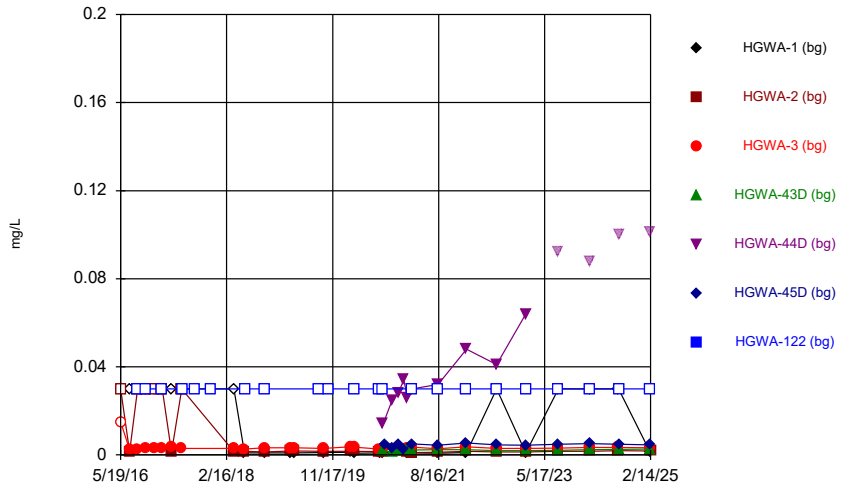
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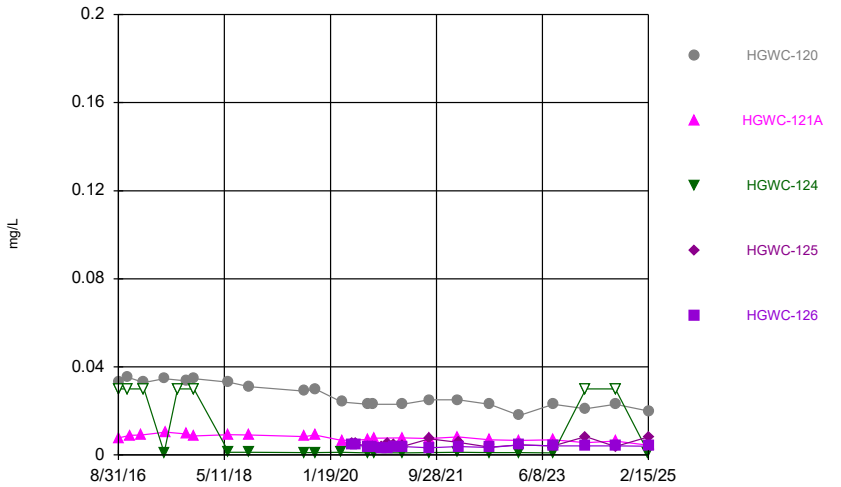
Time Series



Constituent: Lithium Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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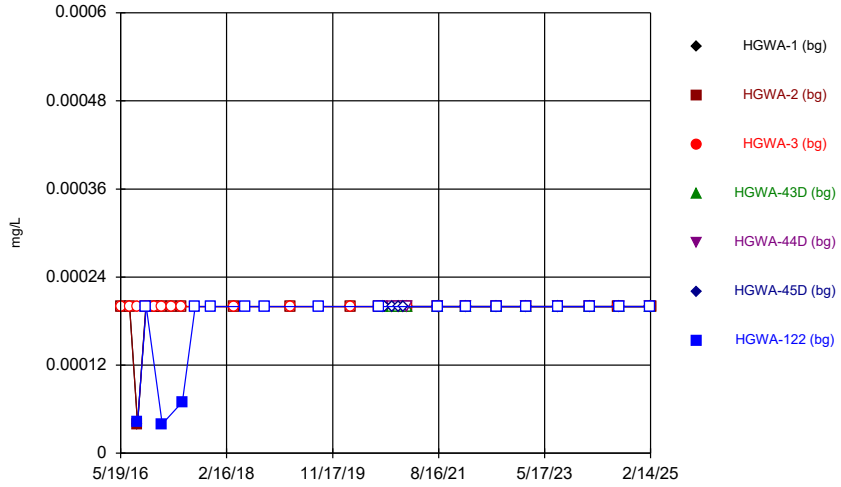
Time Series



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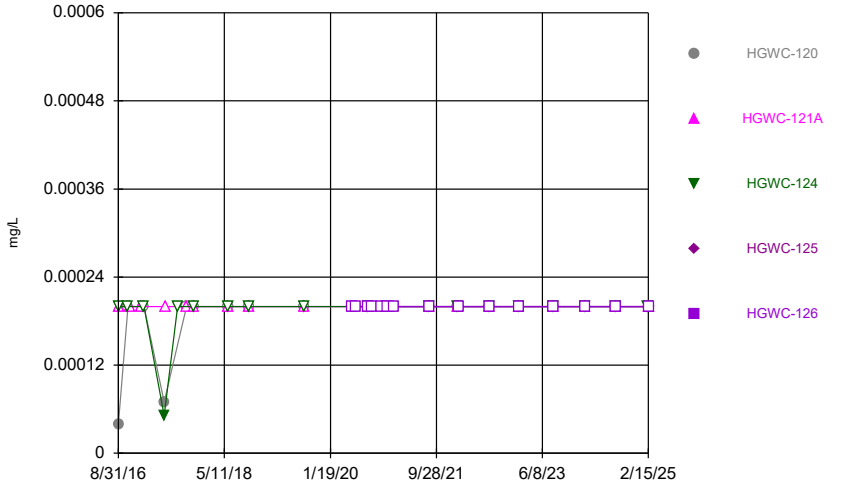
Time Series



Constituent: Mercury Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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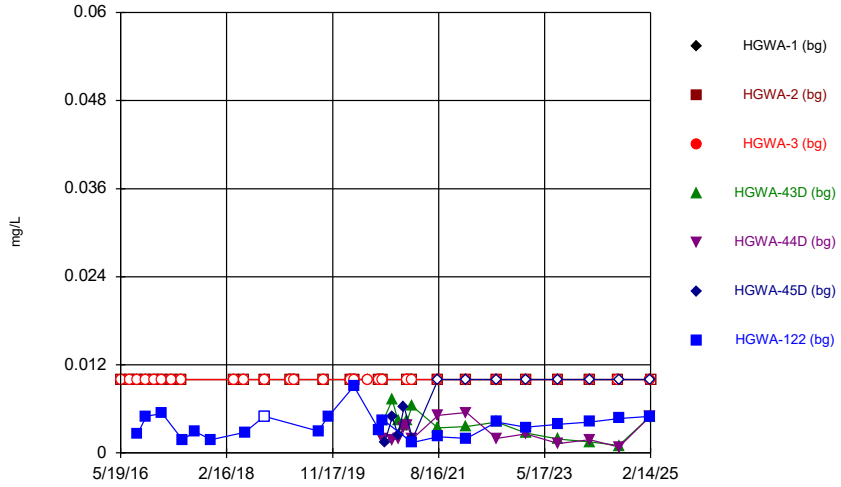
Time Series



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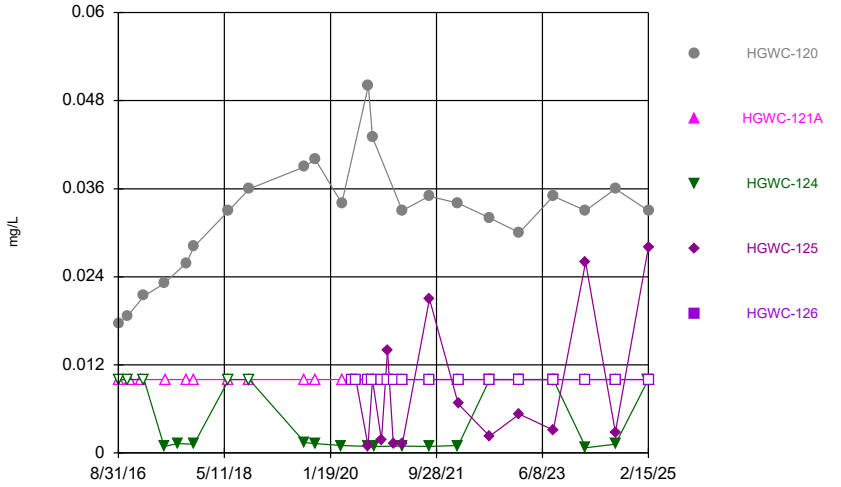
Time Series



Constituent: Molybdenum Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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Hollow symbols indicate censored values.

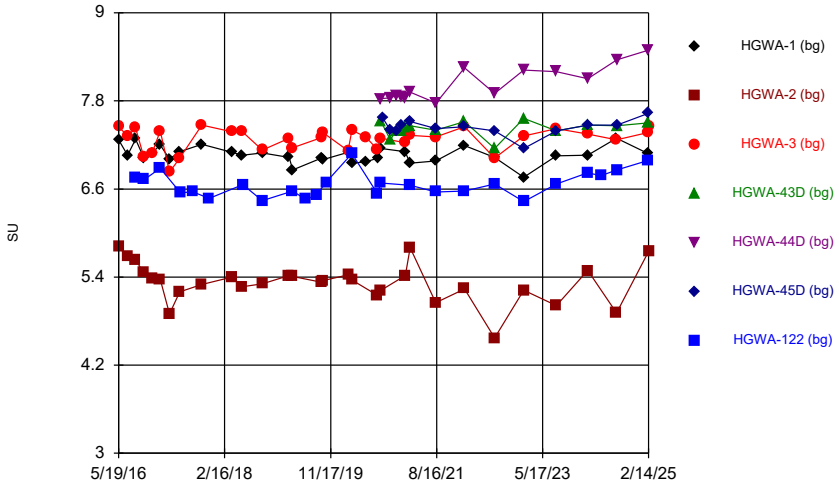
Time Series



Constituent: Molybdenum Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Time Series

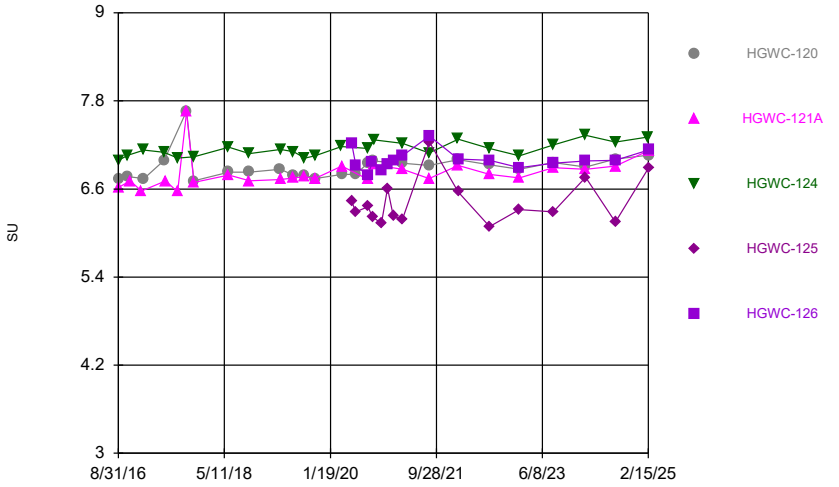


Constituent: pH, Field Analysis Run 4/22/2025 5:27 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Time Series

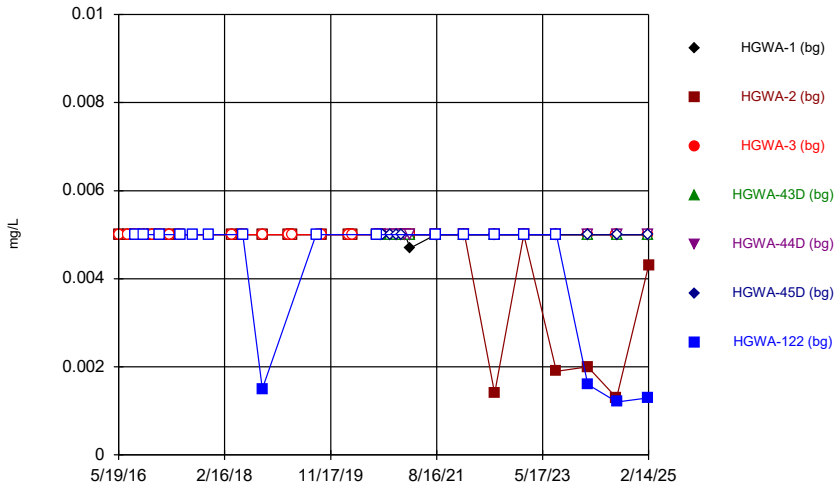


Constituent: pH, Field Analysis Run 4/22/2025 5:27 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

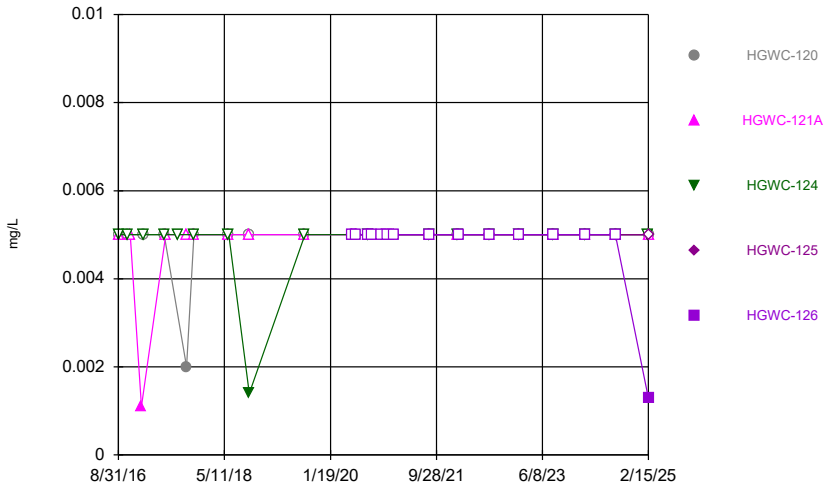


Constituent: Selenium Analysis Run 4/22/2025 5:27 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

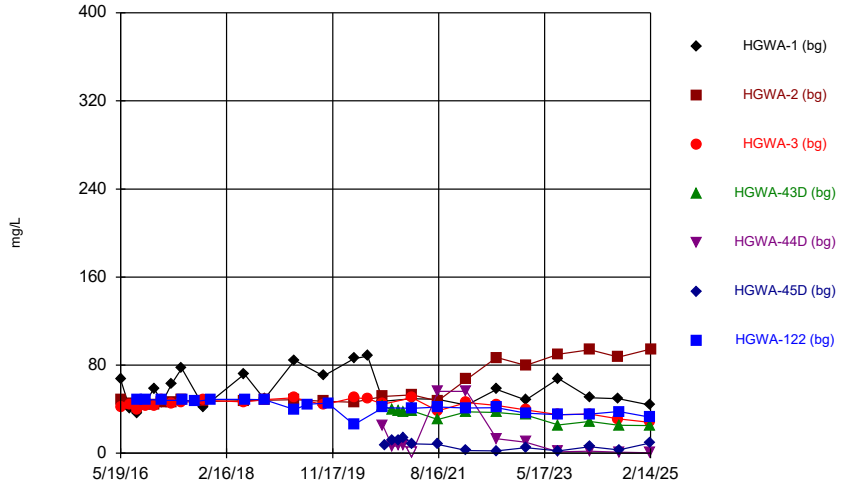


Constituent: Selenium Analysis Run 4/22/2025 5:27 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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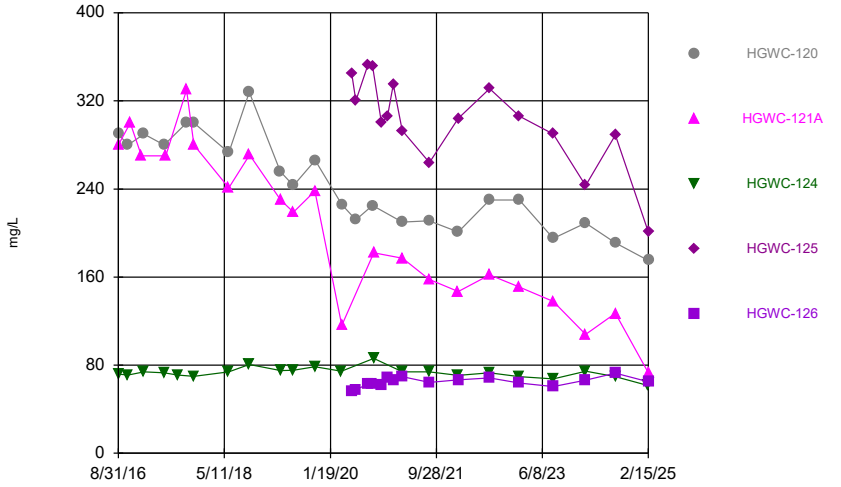
Time Series



Constituent: Sulfate Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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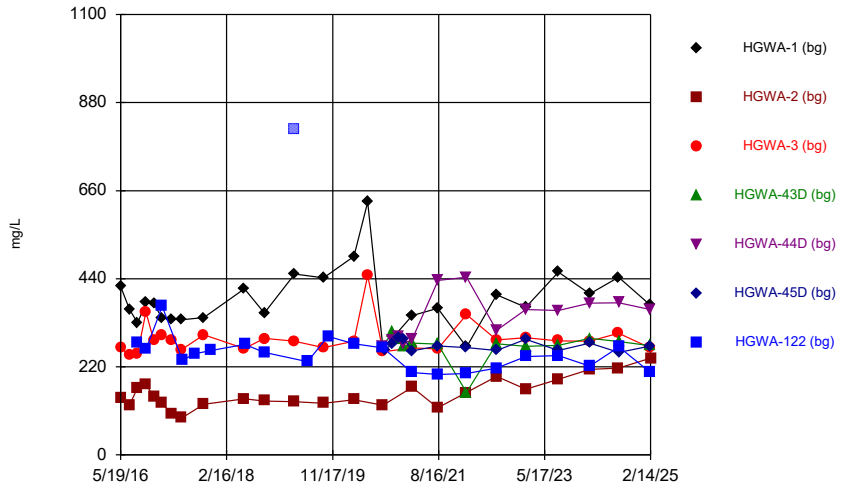
Time Series



Constituent: Sulfate Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

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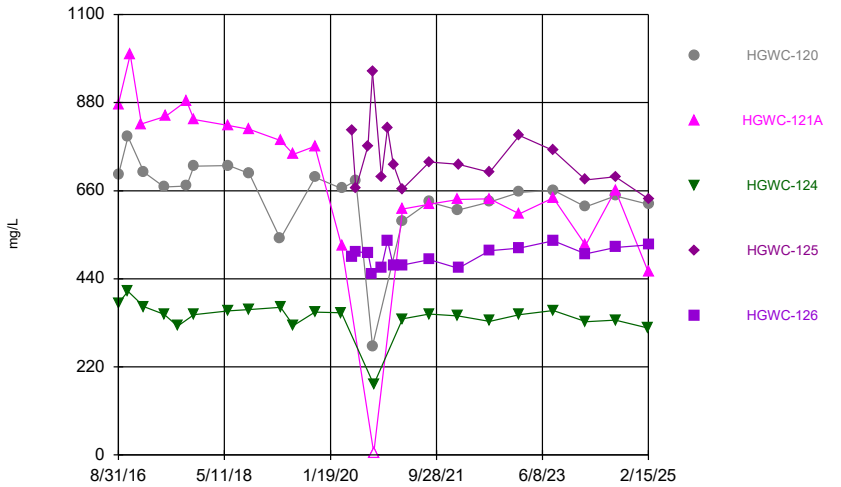
Time Series



Constituent: TDS Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

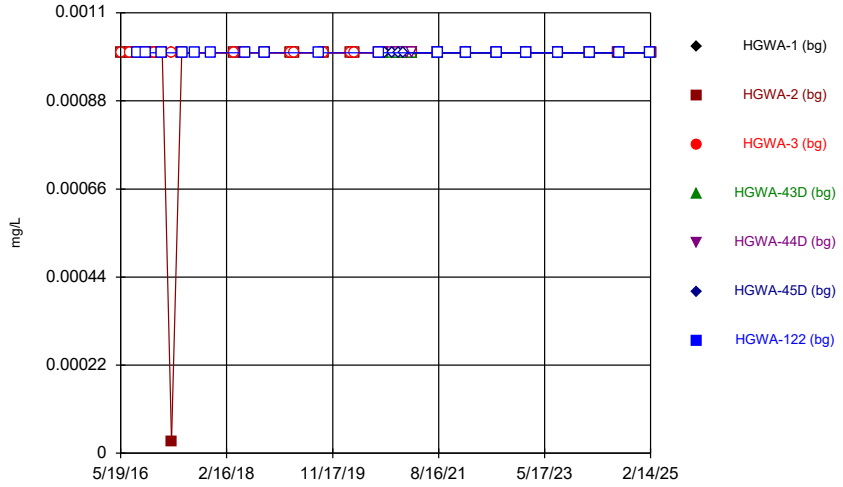
Time Series



Constituent: TDS Analysis Run 4/22/2025 5:27 PM
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

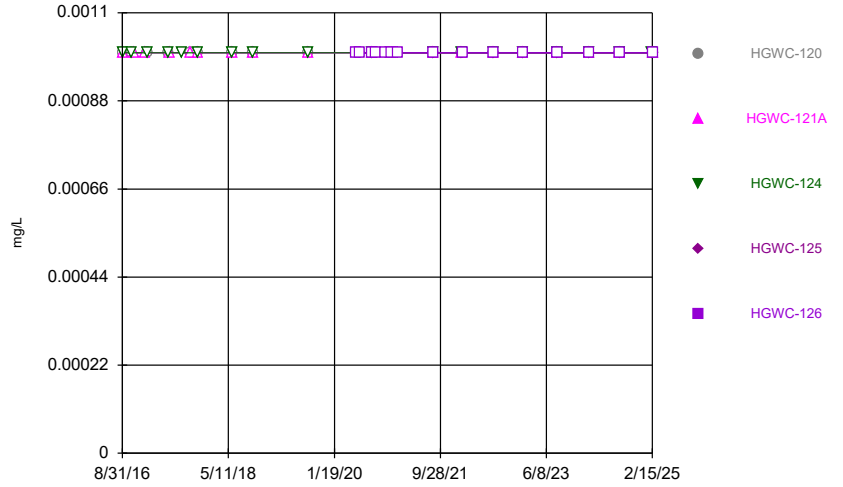


Constituent: Thallium Analysis Run 4/22/2025 5:27 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 4/22/2025 5:27 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.003	<0.003	<0.003				
7/11/2016	<0.003	<0.003					
7/12/2016			0.0003 (J)				
8/30/2016	<0.003	<0.003	<0.003				<0.003
10/19/2016	0.0014 (J)	<0.003	<0.003				
10/20/2016							<0.003
12/6/2016	<0.003	<0.003	<0.003				
1/24/2017	<0.003	<0.003	<0.003				
1/25/2017							<0.003
3/21/2017	<0.003	<0.003	<0.003				
5/22/2017	<0.003	<0.003	<0.003				
5/25/2017							<0.003
8/11/2017							<0.003
11/15/2017							<0.003
4/2/2018	<0.003	<0.003					
4/3/2018			<0.003				
6/5/2018							<0.003
10/2/2018							<0.003
3/12/2019	<0.003	<0.003	<0.003				
4/1/2019			<0.003				
4/2/2019	<0.003	<0.003					
8/22/2019							<0.003
9/23/2019	<0.003	<0.003	<0.003				
3/2/2020	<0.003	<0.003	<0.003				
3/25/2020	<0.003	<0.003	<0.003				
8/24/2020							<0.003
8/25/2020		<0.003	<0.003				
8/28/2020	<0.003						
9/15/2020	<0.003	<0.003	<0.003				0.001 (J)
9/16/2020				0.00051 (J)	0.00049 (J)		
9/25/2020						<0.003	
11/10/2020				0.00043 (J)	<0.003		
11/11/2020						0.00057 (J)	
12/15/2020				0.00031 (J)	0.00047 (J)		
12/16/2020						<0.003	
1/19/2021				0.00029 (J)	0.00067 (J)		
1/20/2021						<0.003	
2/8/2021	<0.003						
2/9/2021		0.00062 (J)	0.00031 (J)	0.00037 (J)	0.00042 (J)		
3/10/2021	<0.003				0.00037 (J)		
3/11/2021		<0.003	<0.003	0.00057 (J)			<0.003
3/12/2021						0.0003 (J)	
8/11/2021	<0.003			<0.003			
8/12/2021		<0.003	<0.003				
8/13/2021					<0.003	<0.003	<0.003
2/1/2022	<0.003	<0.003	<0.003	<0.003	0.0013 (J)	0.0018 (J)	<0.003
8/2/2022	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1/23/2023			<0.003				
1/24/2023	<0.003	<0.003		<0.003	<0.003	<0.003	<0.003
8/8/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
2/13/2024	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/5/2024	<0.003	<0.003	<0.003				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
8/6/2024				<0.003	<0.003	<0.003	<0.003
2/12/2025	<0.003		<0.003	<0.003	<0.003		
2/13/2025						<0.003	<0.003
2/14/2025		<0.003					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.003	<0.003	<0.003		
10/26/2016	<0.003		<0.003		
11/7/2016		<0.003			
1/13/2017		<0.003			
1/27/2017	<0.003		<0.003		
5/25/2017	<0.003		<0.003		
6/3/2017		<0.003			
8/11/2017			<0.003		
10/2/2017	<0.003	<0.003			
11/15/2017	<0.003	<0.003	<0.003		
6/5/2018	<0.003	<0.003	<0.003		
10/2/2018	<0.003		<0.003		
10/5/2018		<0.003			
8/22/2019	<0.003	<0.003			
8/23/2019			<0.003		
5/22/2020				0.00047 (J)	<0.003
6/16/2020				<0.003	<0.003
8/25/2020				<0.003	<0.003
8/26/2020	<0.003	<0.003			
8/27/2020			<0.003		
9/18/2020					<0.003
9/21/2020	<0.003			<0.003	
9/28/2020		<0.003	<0.003		
11/11/2020					0.0004 (J)
11/12/2020				<0.003	
12/16/2020				<0.003	<0.003
1/20/2021				<0.003	<0.003
3/12/2021	0.0018 (J)			0.00061 (J)	0.00043 (J)
3/15/2021		<0.003	<0.003		
8/16/2021	<0.003	<0.003	<0.003		
8/19/2021				<0.003	<0.003
2/2/2022	<0.003	<0.003	<0.003		
2/3/2022				<0.003	<0.003
8/4/2022	<0.003	0.0016 (J)	<0.003	<0.003	<0.003
1/24/2023		<0.003	0.0018 (J)		
1/25/2023	<0.003			<0.003	<0.003
8/10/2023	<0.003	<0.003		<0.003	
8/11/2023			<0.003		<0.003
2/14/2024				<0.003	<0.003
2/15/2024	<0.003	<0.003			
2/16/2024			<0.003		
8/6/2024		0.0018 (J)			
8/7/2024	<0.003		0.002 (J)	<0.003	<0.003
2/14/2025			<0.003		
2/15/2025	<0.003	<0.003		<0.003	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.005	0.00127 (J)	<0.005				
7/11/2016	<0.005	0.002 (J)					
7/12/2016			0.0008 (J)				
8/30/2016	<0.005	0.0017 (J)	<0.005				<0.005
10/19/2016	<0.005	<0.005	<0.005				
10/20/2016							<0.005
12/6/2016	<0.005	<0.005	<0.005				
1/24/2017	<0.005	<0.005	<0.005				
1/25/2017							<0.005
3/21/2017	0.0005 (J)	<0.005	0.0007 (J)				
5/22/2017	<0.005	0.0006 (J)	0.0006 (J)				
5/25/2017							<0.005
8/11/2017							<0.005
11/15/2017							<0.005
4/2/2018	<0.005	<0.005					
4/3/2018			<0.005				
6/4/2018	<0.005	0.00088 (J)	0.0008 (J)				
6/5/2018							<0.005
10/1/2018	<0.005	<0.005	0.0011 (J)				
10/2/2018							<0.005
3/12/2019	<0.005	0.00069 (J)	0.00063 (J)				
4/1/2019			<0.005				
4/2/2019	<0.005	<0.005					
8/22/2019							<0.005
9/23/2019	0.00046 (J)	0.00067 (J)	0.0011 (J)				
3/2/2020	<0.005	0.00043 (J)	0.0004 (J)				
3/25/2020	<0.005	<0.005	<0.005				
8/24/2020							<0.005
8/25/2020		<0.005	<0.005				
8/28/2020	<0.005						
9/15/2020	<0.005	<0.005	<0.005				
9/16/2020				<0.005	<0.005		
9/25/2020						<0.005	
11/10/2020				0.0021 (J)	<0.005		
11/11/2020						0.0011 (J)	
12/15/2020				<0.005	<0.005		
12/16/2020						<0.005	
1/19/2021				0.0011 (J)	<0.005		
1/20/2021						0.0022 (J)	
2/8/2021	<0.005						
2/9/2021		<0.005	<0.005	0.0017 (J)	0.00083 (J)		
3/10/2021	<0.005				<0.005		
3/11/2021		<0.005	<0.005	0.0013 (J)			
8/11/2021	<0.005			0.0015 (J)			
8/12/2021		<0.005	<0.005				
8/13/2021					<0.005	0.0012 (J)	<0.005
2/1/2022	0.0016 (J)	0.0023 (J)	0.0024 (J)	0.0036 (J)	0.0025 (J)	<0.005	<0.005
8/2/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/23/2023			<0.005				
1/24/2023	<0.005	<0.005		<0.005	0.0027 (J)	<0.005	<0.005
8/8/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/13/2024	<0.005	<0.005	<0.005	0.00097 (J)	0.0014 (J)	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
8/5/2024	<0.005	<0.005	<0.005				
8/6/2024				<0.005	<0.005	<0.005	<0.005
2/12/2025	<0.005		<0.005	<0.005	0.0014 (J)		
2/13/2025						<0.005	<0.005
2/14/2025		<0.005					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005	<0.005		
10/26/2016	<0.005		<0.005		
11/7/2016		<0.005			
1/13/2017		<0.005			
1/27/2017	<0.005		<0.005		
5/25/2017	0.0014 (J)		0.0006 (J)		
6/3/2017		0.001 (J)			
8/11/2017			<0.005		
10/2/2017	0.0007 (J)	<0.005			
11/15/2017	<0.005	<0.005	<0.005		
6/5/2018	0.001 (J)	0.0014 (J)	<0.005		
10/2/2018	<0.005		<0.005		
10/5/2018		<0.005			
8/22/2019	<0.005	<0.005			
8/23/2019			<0.005		
5/22/2020				0.00081 (J)	0.00071 (J)
6/16/2020				0.0014 (J)	0.00091 (J)
8/25/2020				<0.005	<0.005
8/26/2020	<0.005	<0.005			
8/27/2020			<0.005		
9/18/2020					<0.005
9/21/2020				<0.005	
11/11/2020					<0.005
11/12/2020				<0.005	
12/16/2020				<0.005	<0.005
1/20/2021				<0.005	<0.005
8/16/2021	0.0015 (J)	0.0014 (J)	<0.005		
8/19/2021				<0.005	<0.005
2/2/2022	0.0014 (J)	<0.005	<0.005		
2/3/2022				0.0032 (J)	0.0026 (J)
8/4/2022	<0.005	<0.005	<0.005	<0.005	<0.005
1/24/2023		<0.005	<0.005		
1/25/2023	<0.005			<0.005	<0.005
8/10/2023	<0.005	<0.005		<0.005	
8/11/2023			<0.005		<0.005
2/14/2024				<0.005	<0.005
2/15/2024	0.00086 (J)	<0.005			
2/16/2024			<0.005		
8/6/2024		<0.005			
8/7/2024	<0.005		<0.005	0.0009 (J)	<0.005
2/14/2025			<0.005		
2/15/2025	<0.005	<0.005		<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	0.0346	0.114	0.111				
7/11/2016	0.0311	0.112					
7/12/2016			0.115				
8/30/2016	0.0293	0.131	0.113				0.0463
10/19/2016	0.0293	0.111	0.123				
10/20/2016							0.0431
12/6/2016	0.0304	0.108	0.127				
1/24/2017	0.028	0.102	0.126				
1/25/2017							0.0429
3/21/2017	0.0275	0.095	0.12				
5/22/2017	0.0281	0.103	0.117				
5/25/2017							0.0447
8/11/2017							0.0451
11/15/2017							0.0439
4/2/2018	0.026	0.099					
4/3/2018			0.11				
6/4/2018	0.035	0.11	0.12				
6/5/2018							0.04
10/1/2018	0.029	0.11	0.14				
10/2/2018							0.042
3/12/2019	0.042	0.12	0.13				
4/1/2019			0.13				
4/2/2019	0.04	0.13					
8/22/2019							0.044
9/23/2019	0.042	0.13	0.13				
10/21/2019							0.04
3/2/2020	0.034	0.11	0.14				
3/24/2020							0.032
3/25/2020	0.043	0.12	0.13				
8/24/2020							0.041
8/25/2020		0.11	0.11				
8/28/2020	0.036						
9/15/2020	0.035	0.12	0.12				0.039
9/16/2020				0.26	0.24		
9/25/2020						0.49	
11/10/2020				0.25	0.38		
11/11/2020						0.45	
12/15/2020				0.29	0.39		
12/16/2020						0.52	
1/19/2021				0.32	0.41		
1/20/2021						0.53	
2/8/2021	0.032						
2/9/2021		0.12	0.13	0.34	0.46		
3/10/2021	0.03				0.26		
3/11/2021		0.07	0.13	0.31 (D)			0.032
3/12/2021						0.54	
8/11/2021	0.03			0.28			
8/12/2021		0.12	0.11				
8/13/2021					0.22	0.51	0.033
2/1/2022	0.031	0.13	0.12	0.29	0.23	0.57	0.035
8/2/2022	0.039	0.11	0.16	0.35	0.37	0.64	0.038
1/23/2023			0.13				

Time Series

Constituent: Barium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
1/24/2023	0.033	0.088		0.28	0.18	0.57	0.035
8/8/2023	0.039	0.068	0.12	0.3	0.12	0.59	0.032
2/13/2024	0.039	0.062	0.13	0.28	0.12	0.54	0.031
8/5/2024	0.032	0.062	0.13				
8/6/2024				0.28	0.11	0.5	0.029
2/12/2025	0.034		0.13	0.3	0.095		
2/13/2025						0.57	0.033
2/14/2025		0.057					

Time Series

Constituent: Barium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.045	0.0782	0.0744		
10/26/2016	0.0462		0.0735		
11/7/2016		0.0764			
1/13/2017		0.0744			
1/27/2017	0.0451		0.0632		
5/25/2017	0.0488		0.0773		
6/3/2017		0.0933			
8/11/2017			0.0672		
10/2/2017	0.0479	0.0815			
11/15/2017	0.051	0.0807	0.0707		
6/5/2018	0.051	0.078	0.07		
10/2/2018	0.059		0.067		
10/5/2018		0.074			
8/22/2019	0.05	0.066			
8/23/2019			0.066		
10/21/2019		0.074	0.075		
10/22/2019	0.051				
3/24/2020			0.075		
3/25/2020	0.052	0.099			
5/22/2020				0.048	0.24
6/16/2020				0.049	0.24
8/25/2020				0.045	0.23
8/26/2020	0.041	0.057			
8/27/2020			0.062		
9/18/2020					0.21
9/21/2020	0.046			0.042	
9/28/2020		0.056	0.071		
11/11/2020					0.23
11/12/2020				0.042	
12/16/2020				0.041	0.24
1/20/2021				0.045	0.25
3/12/2021	0.047			0.043	0.27
3/15/2021		0.059	0.071		
8/16/2021	0.052	0.06	0.069		
8/19/2021				0.044	0.27
2/2/2022	0.054	0.064	0.072		
2/3/2022				0.043	0.24
8/4/2022	0.048	0.06	0.068	0.037	0.24
1/24/2023		0.059	0.068		
1/25/2023	0.051			0.042	0.24
8/10/2023	0.045	0.048		0.038	
8/11/2023			0.06		0.22
2/14/2024				0.037	0.23
2/15/2024	0.046	0.047			
2/16/2024			0.054		
8/6/2024		0.044			
8/7/2024	0.051		0.064	0.035	0.23
2/14/2025			0.06		
2/15/2025	0.05	0.044		0.038	0.24

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.0005	<0.003	<0.0005				
7/11/2016	<0.0005	0.0001 (J)					
7/12/2016			<0.0005				
8/30/2016	<0.0005	<0.003	<0.0005				<0.0005
10/19/2016	<0.0005	0.0001 (J)	<0.0005				
10/20/2016							<0.0005
12/6/2016	<0.0005	0.0002 (J)	<0.0005				
1/24/2017	<0.0005	0.0001 (J)	<0.0005				
1/25/2017							<0.0005
3/21/2017	<0.0005	0.0001 (J)	<0.0005				
5/22/2017	<0.0005	0.0001 (J)	<0.0005				
5/25/2017							<0.0005
8/11/2017							<0.0005
11/15/2017							<0.0005
4/2/2018	<0.0005	<0.003					
4/3/2018			<0.0005				
6/5/2018							<0.0005
10/2/2018							<0.0005
3/12/2019	<0.0005	0.00017 (J)	<0.0005				
4/1/2019			<0.0005				
4/2/2019	<0.0005	0.00015 (J)					
8/22/2019							<0.0005
9/23/2019	<0.0005	0.00011 (J)	<0.0005				
3/2/2020	<0.0005	0.00014 (J)	<0.0005				
3/25/2020	<0.0005	0.00016 (J)	<0.0005				
8/24/2020							<0.0005
8/25/2020		0.00014 (J)	<0.0005				
8/28/2020	<0.0005						
9/15/2020	<0.0005	0.00013 (J)	<0.0005				<0.0005
9/16/2020				<0.0005	<0.0005		
9/25/2020						<0.0005	
11/10/2020				<0.0005	<0.0005		
11/11/2020						<0.0005	
12/15/2020				<0.0005	<0.0005		
12/16/2020						<0.0005	
1/19/2021				<0.0005	<0.0005		
1/20/2021						<0.0005	
2/8/2021	<0.0005						
2/9/2021		0.00014 (J)	<0.0005	<0.0005	<0.0005		
3/10/2021	<0.0005				<0.0005		
3/11/2021		8.6E-05 (J)	<0.0005	<0.0005			<0.0005
3/12/2021						<0.0005	
8/11/2021	<0.0005			<0.0005			
8/12/2021		0.00014 (J)	<0.0005				
8/13/2021					<0.0005	<0.0005	<0.0005
2/1/2022	<0.0005	0.0002 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/2/2022	<0.0005	0.00019 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/23/2023			<0.0005				
1/24/2023	<0.0005	0.00016 (J)		<0.0005	<0.0005	<0.0005	<0.0005
8/8/2023	<0.0005	0.00022 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/13/2024	<0.0005	0.00022 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/5/2024	<0.0005	0.00026 (J)	<0.0005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
8/6/2024				<0.0005	<0.0005	<0.0005	<0.0005
2/12/2025	<0.0005		<0.0005	<0.0005	<0.0005		
2/13/2025						<0.0005	<0.0005
2/14/2025		0.00023 (J)					

Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.0005	<0.0005	<0.0005		
10/26/2016	<0.0005		<0.0005		
11/7/2016		<0.0005			
1/13/2017		<0.0005			
1/27/2017	<0.0005		<0.0005		
5/25/2017	<0.0005		<0.0005		
6/3/2017		<0.0005			
8/11/2017			<0.0005		
10/2/2017	<0.0005	<0.0005			
11/15/2017	<0.0005	<0.0005	<0.0005		
6/5/2018	<0.0005	<0.0005	<0.0005		
10/2/2018	<0.0005		<0.0005		
10/5/2018		<0.0005			
8/22/2019	<0.0005	<0.0005			
8/23/2019			<0.0005		
5/22/2020				<0.0005	<0.0005
6/16/2020				<0.0005	<0.0005
8/25/2020				<0.0005	<0.0005
8/26/2020	<0.0005	<0.0005			
8/27/2020			<0.0005		
9/18/2020					<0.0005
9/21/2020	<0.0005			<0.0005	
9/28/2020		<0.0005	<0.0005		
11/11/2020					<0.0005
11/12/2020				<0.0005	
12/16/2020				<0.0005	<0.0005
1/20/2021				<0.0005	<0.0005
3/12/2021	<0.0005			<0.0005	<0.0005
3/15/2021		<0.0005	<0.0005		
8/16/2021	<0.0005	<0.0005	<0.0005		
8/19/2021				<0.0005	<0.0005
2/2/2022	<0.0005	<0.0005	<0.0005		
2/3/2022				<0.0005	<0.0005
8/4/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/24/2023		<0.0005	<0.0005		
1/25/2023	<0.0005			<0.0005	<0.0005
8/10/2023	<0.0005	<0.0005		<0.0005	
8/11/2023			<0.0005		<0.0005
2/14/2024				<0.0005	<0.0005
2/15/2024	<0.0005	<0.0005			
2/16/2024			<0.0005		
8/6/2024		<0.0005			
8/7/2024	<0.0005		<0.0005	<0.0005	<0.0005
2/14/2025			<0.0005		
2/15/2025	<0.0005	<0.0005		<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	0.0214 (J)	0.0321 (J)	<0.04				
7/11/2016	0.0142 (J)	0.0337 (J)					
7/12/2016			0.0074 (J)				
8/30/2016	0.0074 (J)	0.0173 (J)	<0.04				0.277
10/19/2016	0.0224 (J)	0.0341 (J)	0.0085 (J)				
10/20/2016							0.336
12/6/2016	0.0211 (J)	0.0326 (J)	0.0085 (J)				
1/24/2017	0.0165 (J)	0.0365 (J)	0.01 (J)				
1/25/2017							0.274
3/21/2017	0.0187 (J)	0.0349 (J)	0.0079 (J)				
5/22/2017	0.0782	0.0475	0.0131 (J)				
5/25/2017							0.298
8/11/2017							0.285
10/3/2017	0.0198 (J)	0.0386 (J)	0.0097 (J)				
11/15/2017							0.322
6/4/2018	0.02 (J)	0.036 (J)	0.017 (J)				
6/5/2018							0.24
10/1/2018	0.013 (J)	0.035 (J)	0.0061 (J)				
10/2/2018							0.28
4/1/2019			0.0066 (J)				
4/2/2019	0.016 (J)	0.034 (J)					0.18
6/18/2019							0.25
9/23/2019	0.021 (J)	0.04 (J)	0.0081 (J)				
10/21/2019							0.25
3/24/2020							0.1
3/25/2020	0.025 (J)	0.039 (J)	0.0096 (J)				
6/16/2020	0.021 (J)		0.01 (J)				
9/15/2020	0.017 (J)	0.044 (J)	0.0071 (J)				0.22
9/16/2020				0.061 (J)	0.23		
9/25/2020						0.16	
11/10/2020				0.057 (J)	0.29		
11/11/2020						0.17	
12/15/2020				0.052 (J)	0.31		
12/16/2020						0.16	
1/19/2021				0.049 (J)	0.4		
1/20/2021						0.19	
3/10/2021	0.015 (J)				0.39		
3/11/2021		0.056	0.015 (J)	0.06			0.2
3/12/2021						0.19	
8/11/2021	0.02 (J)			0.042			
8/12/2021		0.044	<0.04				
8/13/2021					0.31	0.15	0.19
2/1/2022	0.016 (J)	0.056	0.011 (J)	0.05	0.44	0.14	0.17
8/2/2022	0.012 (J)	0.047	<0.04	0.043	0.31	0.14	0.18
1/23/2023			0.012 (J)				
1/24/2023	0.015 (J)	0.046		0.037 (J)	0.44	0.14	0.17
8/8/2023	0.023 (J)	0.06	0.011 (J)	0.038 (J)	0.55	0.15	0.18
2/13/2024	0.02 (J)	0.051	<0.04	0.037 (J)	0.49	0.15	0.15
8/5/2024	0.02 (J)	0.057	<0.04				
8/6/2024				0.043	0.52	0.16	0.15
2/12/2025	0.021 (J)		0.011 (J)	0.04 (J)	0.54		
2/13/2025						0.18	0.15

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
2/14/2025		0.053					

Time Series

Constituent: Boron (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.981	3.23	0.494		
10/26/2016	1.28		0.55		
11/7/2016		2.95			
1/13/2017		4.01			
1/27/2017	1.19		0.428		
5/25/2017	1.33		0.544		
6/3/2017		2.62			
8/11/2017			0.524		
10/2/2017	1.19	2.92			
11/15/2017	1.24	2.71	0.531		
6/5/2018	1.2	2.6	0.53		
10/2/2018	1.2		0.47		
10/5/2018		2.9			
4/2/2019	1.1				
4/3/2019		3	0.45		
6/17/2019	1.1	2.4			
6/18/2019			0.45		
10/21/2019		2.4	0.5		
10/22/2019	1				
3/24/2020			0.44		
3/25/2020	1.1	1.6			
5/22/2020				1.5	0.026 (J)
6/15/2020	1.1				
6/16/2020				1.5	0.023 (J)
8/25/2020				1.4	0.016 (J)
9/18/2020					0.041 (J)
9/21/2020	0.93			1.4	
9/28/2020		2.3	0.43		
11/11/2020					0.009 (J)
11/12/2020				1.4	
12/16/2020				1.5	0.011 (J)
1/20/2021				1.5	<0.1
3/12/2021	1.1			1.5	0.016 (J)
3/15/2021		1.9	0.4		
8/16/2021	1.1	2	0.44		
8/19/2021				1.5	0.011 (J)
2/2/2022	0.91	1.6	0.33		
2/3/2022				1.6	0.016 (J)
8/4/2022	1	1.8	0.36	1.4	0.023 (J)
1/24/2023		1.6	0.34		
1/25/2023	0.94			1.4	0.014 (J)
8/10/2023	1	1.7		1.6	
8/11/2023			0.3		0.016 (J)
2/14/2024				1.4	0.019 (J)
2/15/2024	1	1.2			
2/16/2024			0.31		
8/6/2024		1.4			
8/7/2024	1.1		0.34	1.5	0.021 (J)
2/14/2025			0.33 (J)		
2/15/2025	1.2	0.85		1.5	0.016 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.0005	<0.0005	<0.0005				
7/11/2016	<0.0005	<0.0005					
7/12/2016			<0.0005				
8/30/2016	<0.0005	<0.0005	<0.0005				<0.0005
10/19/2016	<0.0005	<0.0005	<0.0005				
10/20/2016							<0.0005
12/6/2016	<0.0005	<0.0005	<0.0005				
1/24/2017	<0.0005	0.0001 (J)	<0.0005				
1/25/2017							<0.0005
3/21/2017	<0.0005	7E-05 (J)	<0.0005				
5/22/2017	<0.0005	0.0001 (J)	<0.0005				
5/25/2017							<0.0005
8/11/2017							<0.0005
11/15/2017							<0.0005
4/2/2018	<0.0005	<0.0005					
4/3/2018			<0.0005				
6/4/2018	<0.0005	0.00014 (J)	<0.0005				
6/5/2018							<0.0005
10/1/2018	<0.0005	<0.0005	<0.0005				
10/2/2018							<0.0005
3/12/2019	<0.0005	0.00013 (J)	<0.0005				
4/1/2019			<0.0005				
4/2/2019	<0.0005	0.00015 (J)					
8/22/2019							<0.0005
9/23/2019	<0.0005	<0.0005 (D)	<0.0005				
3/2/2020	<0.0005	<0.0005	<0.0005				
3/25/2020	<0.0005	0.00014 (J)	<0.0005				
8/24/2020							<0.0005
8/25/2020		<0.0005	<0.0005				
8/28/2020	<0.0005						
9/15/2020	<0.0005	0.00012 (J)	<0.0005				
9/16/2020				<0.0005	<0.0005		
9/25/2020						<0.0005	
11/10/2020				<0.0005	<0.0005		
11/11/2020						<0.0005	
12/15/2020				<0.0005	<0.0005		
12/16/2020						<0.0005	
1/19/2021				<0.0005	<0.0005		
1/20/2021						<0.0005	
2/8/2021	<0.0005						
2/9/2021		0.00016 (J)	<0.0005	<0.0005	<0.0005		
3/10/2021	<0.0005				<0.0005		
3/11/2021		<0.0005	<0.0005	<0.0005			
8/11/2021	<0.0005			<0.0005			
8/12/2021		0.00014 (J)	<0.0005				
8/13/2021					<0.0005	<0.0005	<0.0005
2/1/2022	<0.0005	0.00017 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/2/2022	<0.0005	0.00023 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/23/2023			<0.0005				
1/24/2023	<0.0005	0.00021 (J)		<0.0005	<0.0005	<0.0005	<0.0005
8/8/2023	<0.0005	0.00026 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/13/2024	<0.0005	0.00027 (J)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
8/5/2024	<0.0005	0.00026 (J)	<0.0005				
8/6/2024				<0.0005	<0.0005	<0.0005	<0.0005
2/12/2025	<0.0005		<0.0005	<0.0005	<0.0005		
2/13/2025						<0.0005	<0.0005
2/14/2025		0.00028 (J)					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.0005	<0.0005	<0.0005		
10/26/2016	<0.0005		<0.0005		
11/7/2016		<0.0005			
1/13/2017		<0.0005			
1/27/2017	<0.0005		<0.0005		
5/25/2017	<0.0005		<0.0005		
6/3/2017		<0.0005			
8/11/2017			<0.0005		
10/2/2017	<0.0005	<0.0005			
11/15/2017	<0.0005	<0.0005	<0.0005		
6/5/2018	<0.0005	<0.0005	<0.0005		
10/2/2018	<0.0005		<0.0005		
10/5/2018		<0.0005			
8/22/2019	<0.0005	<0.0005			
8/23/2019			<0.0005		
5/22/2020				<0.0005	<0.0005
6/16/2020				<0.0005	<0.0005
8/25/2020				<0.0005	<0.0005
8/26/2020	<0.0005	<0.0005			
8/27/2020			<0.0005		
9/18/2020					<0.0005
9/21/2020				<0.0005	
11/11/2020					<0.0005
11/12/2020				<0.0005	
12/16/2020				<0.0005	<0.0005
1/20/2021				<0.0005	<0.0005
8/16/2021	<0.0005	<0.0005	<0.0005		
8/19/2021				<0.0005	<0.0005
2/2/2022	<0.0005	<0.0005	<0.0005		
2/3/2022				<0.0005	<0.0005
8/4/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/24/2023		<0.0005	<0.0005		
1/25/2023	<0.0005			<0.0005	<0.0005
8/10/2023	<0.0005	<0.0005		<0.0005	
8/11/2023			<0.0005		<0.0005
2/14/2024				<0.0005	<0.0005
2/15/2024	<0.0005	<0.0005			
2/16/2024			<0.0005		
8/6/2024		<0.0005			
8/7/2024	<0.0005		<0.0005	<0.0005	<0.0005
2/14/2025			<0.0005		
2/15/2025	<0.0005	<0.0005		<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	138	22.9	76.2				
7/11/2016	97.2	22.3					
7/12/2016			61.5				
8/30/2016	97.5	26.4	65.1				71.3
10/19/2016	99.2	21.7	73.2				
10/20/2016							90.3
12/6/2016	105	18.2	74.9				
1/24/2017	95.7	18.5	69.6				
1/25/2017							77.3
3/21/2017	106	18.6	75.7				
5/22/2017	107	17.8	71.5				
5/25/2017							69.9
8/11/2017							79.5
10/3/2017	102	20.2	76.3				
11/15/2017							72.8
6/4/2018	124	19.1	73.4				
6/5/2018							71.4
10/1/2018	108	20.5 (J)	80.9				
10/2/2018							66.6
4/1/2019			80.5				
4/2/2019	132	22.5 (J)					60.9
6/18/2019							75
9/23/2019	118	19.5	71				
10/21/2019							80.8
3/24/2020							81.2
3/25/2020	127	23	89.8				
6/16/2020	130		85.1				
9/15/2020	103	21.1	73.1				75.8
9/16/2020				56	30		
9/25/2020						56.8	
11/10/2020				63.3	33.6		
11/11/2020						54.9	
12/15/2020				62.6	28.7		
12/16/2020						56.4	
1/19/2021				60.1	33		
1/20/2021						55	
3/10/2021	111				12.1 (D)		
3/11/2021		43.8	83.8	59.6			60.4
3/12/2021						56.5	
8/11/2021	113			61			
8/12/2021		21.9	84				
8/13/2021					28.9	53	62.9
2/1/2022	106	27.2	85.1	55.9	24.8	51.3	57.5
8/2/2022	117	31.2	84.6	54.1	20.9	49.9	69.5
1/23/2023			85				
1/24/2023	117	29.4		56.6	13.2	53.9	63.3
8/8/2023	118	30.7	78.3	52.8	8.1	48.1	64.4
2/13/2024	116	38.8	83.6	53.3	9.9	50.7	61.9
8/5/2024	113	34.7	83.3				
8/6/2024				57.2	7.1	53.3	73.7
2/12/2025	125		86.6	61.8	7.2		
2/13/2025						55.9	68.8

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
2/14/2025		51.5					

Time Series

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	152	178	90.4		
10/26/2016	156		94.5		
11/7/2016		170			
1/13/2017		192			
1/27/2017	157		84.2		
5/25/2017	173		100		
6/3/2017		172			
8/11/2017			99.1		
10/2/2017	168	195			
11/15/2017	182	184	103		
6/5/2018	161	195	103		
10/2/2018	174		100		
10/5/2018		181			
4/2/2019	150				
4/3/2019		184	96.7		
6/17/2019	164	173			
6/18/2019			97.1		
10/21/2019		173	96.9		
10/22/2019	171				
3/24/2020			104		
3/25/2020	170	139			
5/22/2020				140	112
6/15/2020	175				
6/16/2020				178	131
8/25/2020				186	130
9/18/2020					119
9/21/2020	152			155	
9/28/2020		167	107		
11/11/2020					133
11/12/2020				165	
12/16/2020				194	132
1/20/2021				177	131
3/12/2021	174			165	138
3/15/2021		167	103		
8/16/2021	171	162	106		
8/19/2021				196	139
2/2/2022	159	148	95.9		
2/3/2022				175	157
8/4/2022	173	160	103	170	141
1/24/2023		156	96.2		
1/25/2023	161			174	132
8/10/2023	171	149		173	
8/11/2023			97.8		131
2/14/2024				180	137
2/15/2024	165	143			
2/16/2024			89.2		
8/6/2024		152			
8/7/2024	154		97.7	159	136
2/14/2025			95.1		
2/15/2025	162	125		169	143

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	9.94	6.14	5.93				
7/11/2016	6.3	5.9					
7/12/2016			6.2				
8/30/2016	6	6.2	6.4				2.8
10/19/2016	5.8	6.1	6.5				
10/20/2016							2.8
12/6/2016	5.4	6	7.2				
1/24/2017	5.2	6.1	6.4				
1/25/2017							2.8
3/21/2017	4.6	5.9	7.5				
5/22/2017	4.6	5.9	6.5				
5/25/2017							2.9
8/11/2017							3
10/3/2017	5.6	6.3	6.5				
11/15/2017							3.1
6/4/2018	13.1	6.1	6.3				
6/5/2018							3
10/1/2018	6.6	6.4	6.4				
10/2/2018							3.1
4/1/2019			6.5				
4/2/2019	20.3	5.8					3.6
6/18/2019							3.2
9/23/2019	17.7	5.1	5.9				
10/21/2019							4.5
3/24/2020							4.5
3/25/2020	20.4	5.2	6.1				
6/16/2020	41.1		5.8				
9/15/2020	13.4	5	6				3.6
9/16/2020				4.1	5.65 (D)		
9/25/2020						3.6	
11/10/2020				4.4	7.8		
11/11/2020						3.3	
12/15/2020				4.7	9.4		
12/16/2020						3.4	
1/19/2021				4.1	9.5		
1/20/2021						3.5	
3/10/2021	7.4				12.3		
3/11/2021		5.1	5.9	4.5			2.3
3/12/2021						3.3	
8/11/2021	9.6			3.5			
8/12/2021		5.2	4.8				
8/13/2021					39.9	3.3	2.6
2/1/2022	7.5	7	5.7	4.1	44.8	3.5	2.2
8/2/2022	14.1	7.8	5.9	4.3	19.8	3.9	2.7
1/23/2023			5.6				
1/24/2023	9	7.1		4.3	24.9	3.5	2.4
8/8/2023	26	6.6	5.3	3.5	27	3.6	2.2
2/13/2024	10	6.3	5.3	3.9	27.7	3.4	2.4
8/5/2024	8.7	7.9	5.2				
8/6/2024				4	30.2	3.6	2.1
2/12/2025	4.8		5	3.8	30.7		
2/13/2025						3.2	1.6

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
2/14/2025		8.5					

Time Series

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	3.5	64	3		
10/26/2016	3.6		3.6		
11/7/2016		65			
1/13/2017		50			
1/27/2017	3.3		4		
5/25/2017	3.4		3.5		
6/3/2017		43			
8/11/2017			2.9		
10/2/2017	4.2	42			
11/15/2017	2.9	46	3.1		
6/5/2018	3.1	40.4	3.1		
10/2/2018	3.2		3.4		
10/5/2018		39			
4/2/2019	3.1				
4/3/2019		35.9	3.4		
6/17/2019		32.9			
6/18/2019			2.3 (J)		
10/21/2019		29.9	3.6		
10/22/2019	3.4				
3/24/2020			2.7		
3/25/2020	2.4	16.3			
5/22/2020				12.9	8.6
6/15/2020	2.3				
6/16/2020				10.4	8.6
8/25/2020				10.6	8.7
9/18/2020					8.4
9/21/2020	2.4			12.1	
9/28/2020		23.2	2.5		
11/11/2020					8.3
11/12/2020				10.4	
12/16/2020				5.3	8.9
1/20/2021				10.2	8.5
3/12/2021	2.4			10.8	8.5
3/15/2021		21.8	2.9		
8/16/2021	2.4	18	2.6		
8/19/2021				4.5	7.8
2/2/2022	2.5	16.8	2.6		
2/3/2022				8.1	8.5
8/4/2022	2.7	15.4	2.6	11.6	8.7
1/24/2023		14.6	2.5		
1/25/2023	2.6			8.7	8.7
8/10/2023	2.6	12.2		9	
8/11/2023			2.1		8.1
2/14/2024				3.5	8.4
2/15/2024	2.5	9.4			
2/16/2024			2.2		
8/6/2024		11.6			
8/7/2024	2.6		2.2	9.7	8.7
2/14/2025			2.1		
2/15/2025	2.7	5.6		3.6	8.8

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.005	<0.005	<0.005				
7/11/2016	<0.005	<0.005					
7/12/2016			<0.005				
8/30/2016	<0.005	<0.005	<0.005				<0.005
10/19/2016	<0.005	<0.005	<0.005				
10/20/2016							<0.005
12/6/2016	<0.005	<0.005	<0.005				
1/24/2017	<0.005	<0.005	<0.005				
1/25/2017							<0.005
3/21/2017	0.0005 (J)	<0.005	<0.005				
5/22/2017	<0.005	<0.005	0.0007 (J)				
5/25/2017							0.0006 (J)
8/11/2017							0.0007 (J)
11/15/2017							0.0006 (J)
4/2/2018	<0.005	<0.005					
4/3/2018			<0.005				
6/5/2018							<0.005
10/2/2018							<0.005
3/12/2019	<0.005	<0.005	<0.005				
4/1/2019			<0.005				
4/2/2019	<0.005	0.0079 (J)					
8/22/2019							0.0006 (J)
9/23/2019	<0.005	0.00058 (J)	<0.005				
10/21/2019							0.00068 (J)
3/2/2020	<0.005	0.00041 (J)	<0.005				
3/24/2020							0.0013 (J)
3/25/2020	0.00072 (J)	<0.005	<0.005				
8/24/2020							0.00093 (J)
8/25/2020		0.00067 (J)	<0.005				
8/28/2020	<0.005						
9/15/2020	<0.005	<0.005	<0.005				0.00067 (J)
9/16/2020				<0.005	0.0012 (J)		
9/25/2020						<0.005	
11/10/2020				<0.005	0.00089 (J)		
11/11/2020						<0.005	
12/15/2020				<0.005	0.00072 (J)		
12/16/2020						<0.005	
1/19/2021				<0.005	0.0011 (J)		
1/20/2021						0.00067 (J)	
2/8/2021	<0.005						
2/9/2021		<0.005	<0.005	0.00095 (J)	0.00066 (J)		
3/10/2021	<0.005				<0.005		
3/11/2021		<0.005	<0.005	<0.005			0.0017 (J)
3/12/2021						<0.005	
8/11/2021	<0.005			<0.005			
8/12/2021		<0.005	<0.005				
8/13/2021					0.0016 (J)	<0.005	<0.005
2/1/2022	<0.005	<0.005	<0.005	<0.005	0.0013 (J)	<0.005	<0.005
8/2/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1/23/2023			<0.005				
1/24/2023	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005
8/8/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
2/13/2024	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/5/2024	<0.005	<0.005	<0.005				
8/6/2024				<0.005	<0.005	<0.005	<0.005
2/12/2025	<0.005		<0.005	<0.005	<0.005		
2/13/2025						<0.005	<0.005
2/14/2025		<0.005					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005	<0.005		
10/26/2016	<0.005		<0.005		
11/7/2016		<0.005			
1/13/2017		<0.005			
1/27/2017	<0.005		<0.005		
5/25/2017	<0.005		<0.005		
6/3/2017		<0.005			
8/11/2017			<0.005		
10/2/2017	<0.005	<0.005			
11/15/2017	<0.005	<0.005	<0.005		
6/5/2018	<0.005	<0.005	<0.005		
10/2/2018	<0.005		<0.005		
10/5/2018		<0.005			
8/22/2019	0.00072 (J)	<0.005			
8/23/2019			<0.005		
10/21/2019		<0.005	0.00046 (J)		
10/22/2019	<0.005				
3/24/2020			0.00051 (J)		
3/25/2020	0.0015 (J)	0.0005 (J)			
5/22/2020				0.00058 (J)	<0.005
6/16/2020				0.00052 (J)	<0.005
8/25/2020				<0.005	0.00096 (J)
8/26/2020	<0.005	<0.005			
8/27/2020			<0.005		
9/18/2020					<0.005
9/21/2020	0.00065 (J)			<0.005	
9/28/2020		<0.005	<0.005		
11/11/2020					<0.005
11/12/2020				<0.005	
12/16/2020				<0.005	<0.005
1/20/2021				0.00081 (J)	<0.005
3/12/2021	<0.005			<0.005	<0.005
3/15/2021		<0.005	<0.005		
8/16/2021	<0.005	<0.005	<0.005		
8/19/2021				<0.005	<0.005
2/2/2022	<0.005	<0.005	<0.005		
2/3/2022				<0.005	<0.005
8/4/2022	<0.005	<0.005	<0.005	<0.005	<0.005
1/24/2023		<0.005	<0.005		
1/25/2023	<0.005			<0.005	0.0014 (J)
8/10/2023	<0.005	<0.005		<0.005	
8/11/2023			<0.005		<0.005
2/14/2024				<0.005	<0.005
2/15/2024	<0.005	<0.005			
2/16/2024			<0.005		
8/6/2024		<0.005			
8/7/2024	<0.005		<0.005	<0.005	<0.005
2/14/2025			<0.005		
2/15/2025	<0.005	<0.005		<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.005	0.0293	<0.005				
7/11/2016	0.0004 (J)	0.0267					
7/12/2016			<0.005				
8/30/2016	<0.005	0.028	<0.005				<0.005
10/19/2016	<0.005	0.0201	<0.005				
10/20/2016							<0.005
12/6/2016	<0.005	0.0184	<0.005				
1/24/2017	<0.005	0.0206	<0.005				
1/25/2017							<0.005
3/21/2017	<0.005	0.0251	<0.005				
5/22/2017	<0.005	0.0263	<0.005				
5/25/2017							<0.005
8/11/2017							<0.005
11/15/2017							<0.005
4/2/2018	<0.005	0.019					
4/3/2018			<0.005				
6/4/2018	<0.005	0.025	<0.005				
6/5/2018							<0.005
10/1/2018	<0.005	0.026	<0.005				
10/2/2018							<0.005
3/12/2019	<0.005	0.017	<0.005				
4/1/2019			<0.005				
4/2/2019	<0.005	0.019					
8/22/2019							<0.005
9/23/2019	<0.005	0.038	<0.005				
10/21/2019							<0.005
3/2/2020	<0.005	0.019	<0.005				
3/24/2020							<0.005
3/25/2020	<0.005	0.02	<0.005				
8/24/2020							<0.005
8/25/2020		0.018	<0.005				
8/28/2020	<0.005						
9/15/2020	<0.005	0.021	<0.005				<0.005
9/16/2020				<0.005	<0.005		
9/25/2020						<0.005	
11/10/2020				<0.005	<0.005		
11/11/2020						<0.005	
12/15/2020				<0.005	<0.005		
12/16/2020						<0.005	
1/19/2021				<0.005	<0.005		
1/20/2021						<0.005	
2/8/2021	<0.005						
2/9/2021		0.02	<0.005	<0.005	<0.005		
3/10/2021	<0.005				<0.005		
3/11/2021		0.013	<0.005	<0.005			<0.005
3/12/2021						<0.005	
8/11/2021	<0.005			<0.005			
8/12/2021		0.022	<0.005				
8/13/2021					<0.005	<0.005	<0.005
2/1/2022	<0.005	0.025	<0.005	<0.005	<0.005	<0.005	<0.005
8/2/2022	0.00054 (J)	0.024	<0.005	<0.005	<0.005	<0.005	<0.005
1/23/2023			<0.005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
1/24/2023	<0.005	0.024		<0.005	<0.005	<0.005	<0.005
8/8/2023	0.0008 (J)	0.029	<0.005	<0.005	<0.005	<0.005	<0.005
2/13/2024	<0.005	0.022	<0.005	<0.005	<0.005	<0.005	<0.005
8/5/2024	0.00055 (J)	0.032	<0.005				
8/6/2024				<0.005	<0.005	<0.005	<0.005
2/12/2025	<0.005		<0.005	<0.005	<0.005		
2/13/2025						<0.005	<0.005
2/14/2025		0.03					

Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.0052 (J)	<0.005	<0.005		
10/26/2016	0.0041 (J)		<0.005		
11/7/2016		<0.005			
1/13/2017		<0.005			
1/27/2017	0.0034 (J)		<0.005		
5/25/2017	0.0035 (J)		<0.005		
6/3/2017		0.0005 (J)			
8/11/2017			<0.005		
10/2/2017	0.0036 (J)	0.0003 (J)			
11/15/2017	0.0032 (J)	0.0003 (J)	<0.005		
6/5/2018	0.0031 (J)	<0.005	<0.005		
10/2/2018	0.0025 (J)		<0.005		
10/5/2018		<0.005			
8/22/2019	0.0028 (J)	<0.005			
8/23/2019			<0.005		
10/21/2019		<0.005	<0.005		
10/22/2019	0.0031 (J)				
3/24/2020			<0.005		
3/25/2020	0.0036 (J)	<0.005			
5/22/2020				0.01	<0.005
6/16/2020				0.0096	<0.005
8/25/2020				0.0087	<0.005
8/26/2020	0.0023 (J)	<0.005			
8/27/2020			<0.005		
9/18/2020					<0.005
9/21/2020	0.0041 (J)			0.012	
9/28/2020		<0.005	<0.005		
11/11/2020					<0.005
11/12/2020				0.012	
12/16/2020				0.0055	<0.005
1/20/2021				0.012	<0.005
3/12/2021	0.0027 (J)			0.014	<0.005
3/15/2021		<0.005	<0.005		
8/16/2021	0.0037 (J)	<0.005	<0.005		
8/19/2021				0.0054	<0.005
2/2/2022	0.0072	<0.005	<0.005		
2/3/2022				0.0086	<0.005
8/4/2022	0.0058	<0.005	<0.005	0.014	<0.005
1/24/2023		<0.005	<0.005		
1/25/2023	0.0055			0.0097	<0.005
8/10/2023	0.0048 (J)	<0.005		0.012	
8/11/2023			<0.005		<0.005
2/14/2024				0.004 (J)	<0.005
2/15/2024	0.005 (J)	<0.005			
2/16/2024			<0.005		
8/6/2024		<0.005			
8/7/2024	0.0064		<0.005	0.012	<0.005
2/14/2025			<0.005		
2/15/2025	0.0046 (J)	<0.005		0.003 (J)	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	0.397	0.627	0.342				
7/11/2016	0.738	1.38					
7/12/2016			0.499				
8/30/2016	0.581	1.05	0.976				0.972
10/19/2016	0.213	1.11	0.626				
10/20/2016							0.496 (U)
12/6/2016	0.444	0.741	0.805				
1/24/2017	0.373	0.908	0.336				
1/25/2017							1.13 (U)
3/21/2017	0.816	0.567	0.358				
5/22/2017	0.554 (U)	0.638 (U)	0.744 (U)				
5/25/2017							0.192
8/11/2017							0.908 (U)
11/15/2017							0.662 (U)
4/2/2018	0.405	0.761					
4/3/2018			0.684				
6/4/2018	1.13 (U)	0.975 (U)	0.0291 (U)				
6/5/2018							0.593 (U)
10/1/2018	0.132 (U)	0.434 (U)	0.781 (U)				
10/2/2018							1.37
3/12/2019	0.327 (U)	0.454 (U)	1.01 (U)				
4/1/2019			0.76 (U)				
4/2/2019	0.739 (U)	0.651 (U)					
8/22/2019							1.19 (U)
9/30/2019	0.306 (U)	1.04 (U)	0.384 (U)				
10/21/2019							0.772 (U)
3/2/2020	0.61 (U)	1.58	0.249 (U)				
3/24/2020							0.379 (U)
3/25/2020	4.36	0.621 (U)	0.833 (U)				
8/24/2020							0.883 (U)
8/25/2020		0.778 (U)	0.33 (U)				
8/28/2020	0 (U)						
9/15/2020	0.748 (U)	0.124 (U)	0.161 (U)				0.375 (U)
9/16/2020				0.531 (U)	0.422 (U)		
9/25/2020						1.07 (U)	
11/10/2020				0.788 (U)	0.293 (U)		
11/11/2020						0.49 (U)	
12/15/2020				1.04 (U)	0.7 (U)		
12/16/2020						0.963 (U)	
1/19/2021				0.685 (U)	0.79 (U)		
1/20/2021						0.682 (U)	
2/8/2021	0.223 (U)						
2/9/2021		0.721 (UD)	0.447 (U)	0.138 (UD)	0.486 (U)		
3/10/2021	0 (U)				0.811 (U)		
3/11/2021		0.737 (U)	0.128 (U)	1.51 (U)			0.87 (U)
3/12/2021						0.967 (U)	
8/11/2021	0.115 (U)			0.394 (U)			
8/12/2021		0.746 (U)	0.4435 (UD)				
8/13/2021					1.0795 (UD)	1.2	0.914 (U)
2/1/2022	0.143 (U)	0.588 (U)	0.266 (U)	1.12	0.665 (U)	0.895	0.276 (U)
8/2/2022	0.203 (U)	0.861 (U)	0.4 (U)	0.662 (U)	0.952 (U)	0.509 (U)	0.573 (U)
1/23/2023			0.311 (U)				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
1/24/2023	0.549 (U)	0.829 (U)		1.25	0.421 (U)	0.743 (U)	0.442 (U)
8/8/2023	0.195 (U)	0.175 (U)	0.411 (U)	0.503 (U)	0.163 (U)	1.54	0.892 (U)
2/13/2024	0.194 (U)	0.325 (U)	0.213 (U)	0.86 (U)	0.909	3.15	
5/3/2024							0.636 (U)
8/5/2024	0.64 (U)	1.27	0.371 (U)				
8/6/2024				0.674 (U)	0.529 (U)	1.76	0.661 (U)
2/12/2025	0.624 (U)			0.624 (U)	0.622 (U)		
2/13/2025						0.871 (U)	0.662 (U)
2/14/2025		1.2 (U)	0.606 (U)				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	1.47	1.57	1.22		
10/26/2016	0.864 (U)		0.637 (U)		
11/7/2016		0.739 (U)			
1/13/2017		0.744 (U)			
1/27/2017	0.521 (U)		0.795 (U)		
5/25/2017	0.681		0.896		
6/3/2017		0 (U)			
8/11/2017			0.828 (U)		
10/2/2017	0.632 (U)	0.68 (U)			
11/15/2017	1.3	0.911 (U)	0.478 (U)		
6/5/2018	1.26	0.948 (U)	0.947 (U)		
10/2/2018	0.572 (U)		0.617 (U)		
10/5/2018		1.17 (U)			
8/22/2019	1.35	1.3			
8/23/2019			0.834		
10/21/2019		0.393 (U)	1.11 (U)		
10/22/2019	0.76 (U)				
3/24/2020			0.796 (U)		
3/25/2020	0.696 (U)	0.505 (U)			
5/22/2020				1.1 (U)	1.82
6/16/2020				1.62	1.82
8/25/2020				1.65	1.82
8/26/2020	0.357 (U)	1.96			
8/27/2020			0.494 (U)		
9/18/2020					0.841 (U)
9/21/2020	0.553 (U)			1.45	
9/28/2020		0.761 (U)	0.477 (U)		
11/11/2020					0.837 (U)
11/12/2020				0.633 (U)	
12/16/2020				0.818 (U)	1.26 (U)
1/20/2021				1.01 (U)	0.985 (U)
3/12/2021	0.711 (U)			0.828 (U)	1.86
3/15/2021		0.985 (U)	0.74 (U)		
8/16/2021	1.25	0.192 (U)	0.734 (U)		
8/19/2021				0.721 (U)	1.11
2/2/2022	0.816 (U)	0.254 (U)	0.564 (U)		
2/3/2022				0.257 (U)	1.51
8/4/2022	0.687 (U)	1.16 (U)	0.16 (U)	0.971 (U)	1.34 (U)
1/24/2023		0.757 (U)	0.601 (U)		
1/25/2023	0.992			1.11	1.91
8/10/2023	0.682 (U)	0.585 (U)		0.953 (U)	
8/11/2023			0.449 (U)		1.34
2/14/2024				0.275 (U)	1.01 (U)
2/15/2024	0.669 (U)	0.0885 (U)			
2/16/2024			0.448 (U)		
8/6/2024		1.27			
8/7/2024	0.679 (U)		0.422 (U)	0.603 (U)	0.662 (U)
2/14/2025			0.102 (U)		
2/15/2025	0.506 (U)	0.874 (U)		1.29 (U)	1.21 (U)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	0.105 (J)	0.0303 (J)	0.0513 (J)				
7/11/2016	0.16 (J)	0.05 (J)					
7/12/2016			0.12 (J)				
8/30/2016	0.09 (J)	0.06 (J)	0.09 (J)				0.19 (J)
10/19/2016	0.1 (J)	0.04 (J)	0.1 (J)				
10/20/2016							0.13 (J)
12/6/2016	0.11 (J)	0.36	0.21 (J)				
1/24/2017	0.09 (J)	<0.1	0.06 (J)				
1/25/2017							0.22 (J)
3/21/2017	0.13 (J)	<0.1	0.005 (J)				
5/22/2017	0.12 (J)	<0.1	0.05 (J)				
5/25/2017							0.12 (J)
8/11/2017							0.12 (J)
10/3/2017	0.13 (J)	<0.1	0.13 (J)				
11/15/2017							0.05 (J)
4/2/2018	<0.3	<0.1					
4/3/2018			<0.1				
6/4/2018	0.074 (J)	<0.1	<0.1				
6/5/2018							0.15 (J)
10/1/2018	<0.3	<0.1	<0.1				
10/2/2018							0.22 (J)
3/12/2019	0.29 (J)	0.038 (J)	0.072 (J)				
4/1/2019			0.029 (J)				
4/2/2019	0.1 (J)	0.071 (J)					0.2 (J)
6/18/2019							0.14 (J)
8/22/2019							0.12 (J)
9/23/2019	0.078 (J)	<0.1	<0.1				
10/21/2019							0.15 (J)
3/2/2020	0.076 (J)	<0.1	<0.1				
3/24/2020							0.085 (J)
3/25/2020	0.098 (J)	<0.1	<0.1				
6/16/2020	0.071 (J)		<0.1				
8/24/2020							0.075 (J)
8/25/2020		<0.1	<0.1				
8/28/2020	0.08 (J)						
9/15/2020	0.082 (J)	<0.1	<0.1				0.096 (J)
9/16/2020				0.22	0.37 (D)		
9/25/2020						0.21	
11/10/2020				0.19	0.59		
11/11/2020						0.19	
12/15/2020				0.21	0.67		
12/16/2020						0.18	
1/19/2021				0.16	0.74		
1/20/2021						0.22	
2/8/2021	0.078 (J)						
2/9/2021		<0.1	0.074 (J)	0.19	0.44		
3/10/2021	0.079 (J)				0.65		
3/11/2021		0.1	<0.1	0.2			0.059 (J)
3/12/2021						0.2	
8/11/2021	0.058 (J)			0.15			
8/12/2021		<0.1	<0.1				
8/13/2021					0.87	0.2	0.065 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
2/1/2022	0.064 (J)	<0.1	<0.1	0.19	0.96	0.15	0.062 (J)
8/2/2022	0.09 (J)	0.053 (J)	0.067 (J)	0.22	0.8	0.21	0.1
1/23/2023			0.061 (J)				
1/24/2023	0.089 (J)	0.053 (J)		0.23	1.3	0.19	0.13
8/8/2023	0.088 (J)	0.07 (J)	0.055 (J)	0.18	1.3	0.19	0.091 (J)
2/13/2024	0.071 (J)	0.17	<0.1	0.2	1.5	0.17	0.081 (J)
8/5/2024	0.11	0.12	0.077 (J)				
8/6/2024				0.21	1.3	0.2	0.14
2/12/2025	0.1		0.073 (J)	0.21	1.1		
2/13/2025						0.22	0.12
2/14/2025		0.1					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.65	0.14 (J)	0.15 (J)		
10/26/2016	0.6		0.3		
11/7/2016		0.18 (J)			
1/13/2017		0.14 (J)			
1/27/2017	1.2		0.3		
5/25/2017	1.4		0.05 (J)		
6/3/2017		0.15 (J)			
8/11/2017			0.1 (J)		
10/2/2017	1	1.2			
11/15/2017	1.3	0.6	<0.1		
6/5/2018	0.48	0.19 (J)	0.078 (J)		
10/2/2018	0.34		0.078 (J)		
10/5/2018		0.23 (J)			
4/2/2019	0.47				
4/3/2019		0.14 (J)	0.089 (J)		
6/17/2019	1.2				
8/22/2019	0.3 (J)	0.2 (J)			
8/23/2019			0.11 (J)		
10/21/2019		0.18 (J)	0.073 (J)		
10/22/2019	0.53				
3/24/2020			<0.1		
3/25/2020	0.43	0.095 (J)			
5/22/2020				0.1 (J)	0.46
6/15/2020	0.37				
6/16/2020				0.12	0.44
8/25/2020				0.16	0.52
8/26/2020	0.48	0.16			
8/27/2020			<0.1		
9/18/2020					0.43
9/21/2020	0.33			0.11	
9/28/2020		0.15	<0.1		
11/11/2020					0.45
11/12/2020				0.12	
12/16/2020				0.2	0.49
1/20/2021				0.13	0.44
3/12/2021	0.42			0.12	0.46
3/15/2021		0.16	<0.1		
8/16/2021	0.39	0.15	<0.1		
8/19/2021				0.17	0.43
2/2/2022	0.36	0.15	<0.1		
2/3/2022				0.18	0.51
8/4/2022	0.38	0.18	0.074 (J)	0.15	0.5
1/24/2023		0.18	0.068 (J)		
1/25/2023	0.42			0.17	0.57
8/10/2023	0.36	0.18		0.15	
8/11/2023			<0.1		0.49
2/14/2024				0.2	0.49
2/15/2024	0.35	0.18			
2/16/2024			<0.1		
8/6/2024		0.2			
8/7/2024	0.34		<0.1	0.12	0.5
2/14/2025			<0.1		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
2/15/2025	0.34	0.18		0.19	0.49

Time Series

Constituent: Lead (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.001	<0.001	<0.001				
7/11/2016	<0.001	<0.001					
7/12/2016			0.0001 (J)				
8/30/2016	<0.001	<0.001	<0.001				<0.001
10/19/2016	<0.001	<0.001	<0.001				
10/20/2016							<0.001
12/6/2016	<0.001	<0.001	<0.001				
1/24/2017	<0.001	<0.001	<0.001				
1/25/2017							<0.001
3/21/2017	<0.001	6E-05 (J)	0.0001 (J)				
5/22/2017	<0.001	9E-05 (J)	<0.001				
5/25/2017							<0.001
8/11/2017							0.0001 (J)
11/15/2017							0.0002 (J)
4/2/2018	<0.001	<0.001					
4/3/2018			<0.001				
6/5/2018							<0.001
10/2/2018							<0.001
3/12/2019	<0.001	<0.001	<0.001				
4/1/2019			<0.001				
4/2/2019	<0.001	<0.001					
8/22/2019							<0.001
9/23/2019	7.8E-05 (J)	9.2E-05 (J)	<0.001				
10/21/2019							9.7E-05 (J)
3/2/2020	4.8E-05 (J)	9.5E-05 (J)	<0.001				
3/24/2020							0.00012 (J)
3/25/2020	<0.001	0.00011 (J)	<0.001				
8/24/2020							7.7E-05 (J)
8/25/2020		8.5E-05 (J)	<0.001				
8/28/2020	7E-05 (J)						
9/15/2020	<0.001	8E-05 (J)	4.2E-05 (J)				4.3E-05 (J)
9/16/2020				5E-05 (J)	0.00021 (J)		
9/25/2020						<0.001	
11/10/2020				6.9E-05 (J)	0.0002 (J)		
11/11/2020						4E-05 (J)	
12/15/2020				8.2E-05 (J)	0.00011 (J)		
12/16/2020						5.8E-05 (J)	
1/19/2021				4.4E-05 (J)	0.00019 (J)		
1/20/2021						8.2E-05 (J)	
2/8/2021	5.8E-05 (J)						
2/9/2021		9.4E-05 (J)	<0.001	0.00029 (J)	0.0001 (J)		
3/10/2021	<0.001				<0.001		
3/11/2021		7.6E-05 (J)	<0.001	9.4E-05 (J)			9.3E-05 (J)
3/12/2021						5.5E-05 (J)	
8/11/2021	<0.001			<0.001			
8/12/2021		<0.001	<0.001				
8/13/2021					<0.001	<0.001	<0.001
2/1/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/2/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/23/2023			<0.001				
1/24/2023	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
2/13/2024	<0.001	0.00018 (J)	<0.001	<0.001	<0.001	<0.001	<0.001
8/5/2024	<0.001	<0.001	<0.001				
8/6/2024				<0.001	<0.001	<0.001	<0.001
2/12/2025	<0.001		<0.001	<0.001	<0.001		
2/13/2025						<0.001	<0.001
2/14/2025		<0.001					

Time Series

Constituent: Lead (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.001	<0.001	<0.001		
10/26/2016	0.0002 (J)		<0.001		
11/7/2016		<0.001			
1/13/2017		<0.001			
1/27/2017	<0.001		<0.001		
5/25/2017	9E-05 (J)		<0.001		
6/3/2017		7E-05 (J)			
8/11/2017			8E-05 (J)		
10/2/2017	8E-05 (J)	<0.001			
11/15/2017	<0.001	<0.001	<0.001		
6/5/2018	<0.001	0.00036 (J)	<0.001		
10/2/2018	<0.001		<0.001		
10/5/2018		<0.001			
8/22/2019	<0.001	<0.001			
8/23/2019			4.9E-05 (J)		
10/21/2019		<0.001	4.9E-05 (J)		
10/22/2019	<0.001				
3/24/2020			9.4E-05 (J)		
3/25/2020	<0.001	<0.001			
5/22/2020				0.00014 (J)	<0.001
6/16/2020				0.00013 (J)	<0.001
8/25/2020				<0.001	4.5E-05 (J)
8/26/2020	<0.001	<0.001			
8/27/2020			<0.001		
9/18/2020					<0.001
9/21/2020	<0.001			<0.001	
9/28/2020		<0.001	7.5E-05 (J)		
11/11/2020					4.2E-05 (J)
11/12/2020				4.7E-05 (J)	
12/16/2020				<0.001	<0.001
1/20/2021				9.2E-05 (J)	<0.001
3/12/2021	<0.001			4.4E-05 (J)	4.6E-05 (J)
3/15/2021		0.00015 (J)	<0.001		
8/16/2021	<0.001	<0.001	<0.001		
8/19/2021				<0.001	<0.001
2/2/2022	<0.001	<0.001	<0.001		
2/3/2022				<0.001	<0.001
8/4/2022	<0.001	<0.001	<0.001	<0.001	<0.001
1/24/2023		<0.001	<0.001		
1/25/2023	<0.001			<0.001	<0.001
8/10/2023	<0.001	<0.001		<0.001	
8/11/2023			<0.001		<0.001
2/14/2024				<0.001	<0.001
2/15/2024	<0.001	<0.001			
2/16/2024			<0.001		
8/6/2024		<0.001			
8/7/2024	<0.001		<0.001	<0.001	<0.001
2/14/2025			<0.001		
2/15/2025	<0.001	<0.001		<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.03	<0.03	<0.03				
7/11/2016	<0.03	0.0014 (J)					
7/12/2016			0.0024 (J)				
8/30/2016	<0.03	<0.03	0.0025 (J)				<0.03
10/19/2016	<0.03	<0.03	0.003 (J)				
10/20/2016							<0.03
12/6/2016	<0.03	<0.03	0.0033 (J)				
1/24/2017	<0.03	<0.03	0.003 (J)				
1/25/2017							<0.03
3/21/2017	<0.03	0.0012 (J)	0.0034 (J)				
5/22/2017	<0.03	<0.03	0.003 (J)				
5/25/2017							<0.03
8/11/2017							<0.03
11/15/2017							<0.03
4/2/2018	<0.03	0.0015 (J)					
4/3/2018			0.003 (J)				
6/4/2018	0.001 (J)	0.0016 (J)	0.0027 (J)				
6/5/2018							<0.03
10/1/2018	0.00099 (J)	0.0013 (J)	0.0032 (J)				
10/2/2018							<0.03
3/12/2019	0.001 (J)	0.0018 (J)	0.0032 (J)				
4/1/2019			0.0032 (J)				
4/2/2019	0.001 (J)	0.0018 (J)					
8/22/2019							<0.03
9/23/2019	0.0011 (J)	0.0016 (J)	0.0029 (J)				
10/21/2019							<0.03
3/2/2020	0.0012 (J)	0.0017 (J)	0.0037 (J)				
3/24/2020							<0.03
3/25/2020	0.00083 (J)	0.0017 (J)	0.0035 (J)				
8/24/2020							<0.03
8/25/2020		0.0015 (J)	0.0027 (J)				
8/28/2020	0.00087 (J)						
9/15/2020	0.00087 (J)	0.0015 (J)	0.0026 (J)				<0.03
9/16/2020				0.0018 (J)	0.014 (J)		
9/25/2020						0.0049 (J)	
11/10/2020				0.0013 (J)	0.025 (J)		
11/11/2020						0.0032 (J)	
12/15/2020				0.0019 (J)	0.028 (J)		
12/16/2020						0.0045 (J)	
1/19/2021				0.0025 (J)	0.034		
1/20/2021						0.0025 (J)	
2/8/2021	0.00086 (J)						
2/9/2021		0.0012 (J)	0.0032 (J)	0.0026 (J)	0.026 (J)		
3/10/2021	0.0009 (J)				0.03		
3/11/2021		0.0011 (J)	0.0035 (J)	0.0022 (J)			<0.03
3/12/2021						0.005 (J)	
8/11/2021	0.00078 (J)			0.0024 (J)			
8/12/2021		0.0012 (J)	0.0028 (J)				
8/13/2021					0.032	0.0044 (J)	<0.03
2/1/2022	0.0011 (J)	0.0017 (J)	0.0037 (J)	0.0024 (J)	0.048	0.0055 (J)	<0.03
8/2/2022	<0.03	0.0013 (J)	0.003 (J)	0.0019 (J)	0.041	0.0045 (J)	<0.03
1/23/2023			0.003 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
1/24/2023	0.00092 (J)	0.0014 (J)		0.002 (J)	0.064	0.0044 (J)	<0.03
8/8/2023	<0.03	0.0017 (J)	0.0031 (J)	0.0021 (J)	0.092	0.0049 (J)	<0.03
2/13/2024	<0.03	0.0017 (J)	0.0034 (J)	0.0024 (J)	0.088	0.0052 (J)	<0.03
8/5/2024	<0.03	0.0019 (J)	0.0034 (J)				
8/6/2024				0.0025 (J)	0.1	0.0048 (J)	<0.03
2/12/2025	0.00119 (J)		0.00331 (J)	0.00266 (J)	0.101		
2/13/2025						0.00456 (J)	<0.03
2/14/2025		0.00183 (J)					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.0333 (J)	0.0077 (J)	<0.03		
10/26/2016	0.0352 (J)		<0.03		
11/7/2016		0.0089 (J)			
1/13/2017		0.0091 (J)			
1/27/2017	0.0329 (J)		<0.03		
5/25/2017	0.0347 (J)		0.0011 (J)		
6/3/2017		0.0104 (J)			
8/11/2017			<0.03		
10/2/2017	0.0337 (J)	0.0095 (J)			
11/15/2017	0.0347 (J)	0.0086 (J)	<0.03		
6/5/2018	0.033 (J)	0.0092 (J)	0.0012 (J)		
10/2/2018	0.031 (J)		0.0012 (J)		
10/5/2018		0.0091 (J)			
8/22/2019	0.029 (J)	0.0084 (J)			
8/23/2019			0.0011 (J)		
10/21/2019		0.009 (J)	0.0011 (J)		
10/22/2019	0.03 (J)				
3/24/2020			0.0012 (J)		
3/25/2020	0.024 (J)	0.0066 (J)			
5/22/2020				0.0052 (J)	0.0046 (J)
6/16/2020				0.0053 (J)	0.0045 (J)
8/25/2020				0.0037 (J)	0.0037 (J)
8/26/2020	0.023 (J)	0.0071 (J)			
8/27/2020			0.00091 (J)		
9/18/2020					0.0035 (J)
9/21/2020	0.023 (J)			0.0038 (J)	
9/28/2020		0.0076 (J)	0.0011 (J)		
11/11/2020					0.0032 (J)
11/12/2020				0.0038 (J)	
12/16/2020				0.0055 (J)	0.0029 (J)
1/20/2021				0.0046 (J)	0.0038 (J)
3/12/2021	0.023 (J)			0.0039 (J)	0.0038 (J)
3/15/2021		0.0077 (J)	0.001 (J)		
8/16/2021	0.025 (J)	0.0075 (J)	0.0011 (J)		
8/19/2021				0.0074 (J)	0.0032 (J)
2/2/2022	0.025 (J)	0.0082 (J)	0.0012 (J)		
2/3/2022				0.0057 (J)	0.0038 (J)
8/4/2022	0.023 (J)	0.0069 (J)	0.0011 (J)	0.0035 (J)	0.0034 (J)
1/24/2023		0.0066 (J)	0.0011 (J)		
1/25/2023	0.018 (J)			0.0045 (J)	0.0046 (J)
8/10/2023	0.023 (J)	0.0069 (J)		0.0042 (J)	
8/11/2023			0.00097 (J)		0.0041 (J)
2/14/2024				0.0083 (J)	0.0041 (J)
2/15/2024	0.021 (J)	0.0056 (J)			
2/16/2024			<0.03		
8/6/2024		0.0063 (J)			
8/7/2024	0.023 (J)		<0.03	0.0038 (J)	0.0042 (J)
2/14/2025			0.00104 (J)		
2/15/2025	0.02 (J)	0.00449 (J)		0.00823 (J)	0.00401 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.0002	<0.0002	<0.0002				
7/11/2016	<0.0002	<0.0002					
7/12/2016			<0.0002				
8/30/2016	4E-05 (J)	4E-05 (J)	<0.0002				4.3E-05 (J)
10/19/2016	<0.0002	<0.0002	<0.0002				
10/20/2016							<0.0002
12/6/2016	<0.0002	<0.0002	<0.0002				
1/24/2017	<0.0002	<0.0002	<0.0002				
1/25/2017							4E-05 (J)
3/21/2017	<0.0002	<0.0002	<0.0002				
5/22/2017	<0.0002	<0.0002	<0.0002				
5/25/2017							7E-05 (J)
8/11/2017							<0.0002
11/15/2017							<0.0002
4/2/2018	<0.0002	<0.0002					
4/3/2018			<0.0002				
6/5/2018							<0.0002
10/2/2018							<0.0002
3/12/2019	<0.0002	<0.0002	<0.0002				
8/22/2019							<0.0002
3/2/2020	<0.0002	<0.0002	<0.0002				
8/24/2020							<0.0002
8/25/2020		<0.0002	<0.0002				
8/28/2020	<0.0002						
9/16/2020				<0.0002	<0.0002		
9/25/2020						<0.0002	
11/10/2020				<0.0002	<0.0002		
11/11/2020						<0.0002	
12/15/2020				<0.0002	<0.0002		
12/16/2020						<0.0002	
1/19/2021				<0.0002	<0.0002		
1/20/2021						<0.0002	
2/8/2021	<0.0002						
2/9/2021		<0.0002	<0.0002	<0.0002	<0.0002		
8/11/2021	<0.0002			<0.0002			
8/12/2021		<0.0002	<0.0002				
8/13/2021					<0.0002	<0.0002	<0.0002
2/1/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/2/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/23/2023			<0.0002				
1/24/2023	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
8/8/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/13/2024	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/5/2024	<0.0002	<0.0002	<0.0002				
8/6/2024				<0.0002	<0.0002	<0.0002	<0.0002
2/12/2025	<0.0002		<0.0002	<0.0002	<0.0002		
2/13/2025						<0.0002	<0.0002
2/14/2025		<0.0002					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	4E-05 (J)	<0.0002	<0.0002		
10/26/2016	<0.0002		<0.0002		
11/7/2016		<0.0002			
1/13/2017		<0.0002			
1/27/2017	<0.0002		<0.0002		
5/25/2017	7E-05 (J)		5.1E-05 (J)		
6/3/2017		<0.0002			
8/11/2017			<0.0002		
10/2/2017	<0.0002	<0.0002			
11/15/2017	<0.0002	<0.0002	<0.0002		
6/5/2018	<0.0002	<0.0002	<0.0002		
10/2/2018	<0.0002		<0.0002		
10/5/2018		<0.0002			
8/22/2019	<0.0002	<0.0002			
8/23/2019			<0.0002		
5/22/2020				<0.0002	<0.0002
6/16/2020				<0.0002	<0.0002
8/25/2020				<0.0002	<0.0002
8/26/2020	<0.0002	<0.0002			
8/27/2020			<0.0002		
9/18/2020					<0.0002
9/21/2020				<0.0002	
11/11/2020					<0.0002
11/12/2020				<0.0002	
12/16/2020				<0.0002	<0.0002
1/20/2021				<0.0002	<0.0002
8/16/2021	<0.0002	<0.0002	<0.0002		
8/19/2021				<0.0002	<0.0002
2/2/2022	<0.0002	<0.0002	<0.0002		
2/3/2022				<0.0002	<0.0002
8/4/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/24/2023		<0.0002	<0.0002		
1/25/2023	<0.0002			<0.0002	<0.0002
8/10/2023	<0.0002	<0.0002		<0.0002	
8/11/2023			<0.0002		<0.0002
2/14/2024				<0.0002	<0.0002
2/15/2024	<0.0002	<0.0002			
2/16/2024			<0.0002		
8/6/2024		<0.0002			
8/7/2024	<0.0002		<0.0002	<0.0002	<0.0002
2/14/2025			<0.0002		
2/15/2025	<0.0002	<0.0002		<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.01	<0.01	<0.01				
7/11/2016	<0.01	<0.01					
7/12/2016			<0.01				
8/30/2016	<0.01	<0.01	<0.01				0.0026 (J)
10/19/2016	<0.01	<0.01	<0.01				
10/20/2016							0.005 (J)
12/6/2016	<0.01	<0.01	<0.01				
1/24/2017	<0.01	<0.01	<0.01				
1/25/2017							0.0054 (J)
3/21/2017	<0.01	<0.01	<0.01				
5/22/2017	<0.01	<0.01	<0.01				
5/25/2017							0.0018 (J)
8/11/2017							0.0029 (J)
11/15/2017							0.0018 (J)
4/2/2018	<0.01	<0.01					
4/3/2018			<0.01				
6/4/2018	<0.01	<0.01	<0.01				
6/5/2018							0.0028 (J)
10/1/2018	<0.01	<0.01	<0.01				
10/2/2018							<0.01
3/12/2019	<0.01	<0.01	<0.01				
4/1/2019			<0.01				
4/2/2019	<0.01	<0.01					
8/22/2019							0.003 (J)
9/23/2019	<0.01	<0.01	<0.01				
10/21/2019							0.0049 (J)
3/2/2020	<0.01	<0.01	<0.01				
3/24/2020							0.0091 (J)
3/25/2020	<0.01	<0.01	<0.01				
6/16/2020	<0.01		<0.01				
8/24/2020							0.0031 (J)
8/25/2020		<0.01	<0.01				
8/28/2020	<0.01						
9/15/2020	<0.01	<0.01	<0.01				0.0045 (J)
9/16/2020				0.0044 (J)	0.0019 (J)		
9/25/2020						0.0014 (J)	
11/10/2020				0.0072 (J)	0.0018 (J)		
11/11/2020						0.0049 (J)	
12/15/2020				0.0044 (J)	0.0019 (J)		
12/16/2020						0.0024 (J)	
1/19/2021				0.0038 (J)	0.0035 (J)		
1/20/2021						0.0063 (J)	
2/8/2021	<0.01						
2/9/2021		<0.01	<0.01	0.0045 (J)	0.0038 (J)		
3/10/2021	<0.01				0.0019 (J)		
3/11/2021		<0.01	<0.01	0.0064 (J)			0.0014 (J)
3/12/2021						0.0019 (J)	
8/11/2021	<0.01			0.0034 (J)			
8/12/2021		<0.01	<0.01				
8/13/2021					0.0051 (J)	<0.01	0.0022 (J)
2/1/2022	<0.01	<0.01	<0.01	0.0036 (J)	0.0055 (J)	<0.01	0.002 (J)
8/2/2022	<0.01	<0.01	<0.01	0.0042 (J)	0.002 (J)	<0.01	0.0042 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
1/23/2023			<0.01				
1/24/2023	<0.01	<0.01		0.0027 (J)	0.0026 (J)	<0.01	0.0035 (J)
8/8/2023	<0.01	<0.01	<0.01	0.0019 (J)	0.0013 (J)	<0.01	0.0039 (J)
2/13/2024	<0.01	<0.01	<0.01	0.0015 (J)	0.0018 (J)	<0.01	0.0042 (J)
8/5/2024	<0.01	<0.01	<0.01				
8/6/2024				0.001 (J)	0.00079 (J)	<0.01	0.0047 (J)
2/12/2025	<0.01		<0.01	<0.01	<0.01		
2/13/2025						<0.01	0.005 (J)
2/14/2025		<0.01					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.0176	<0.01	<0.01		
10/26/2016	0.0187		<0.01		
11/7/2016		<0.01			
1/13/2017		<0.01			
1/27/2017	0.0214		<0.01		
5/25/2017	0.0231		0.0009 (J)		
6/3/2017		<0.01			
8/11/2017			0.0013 (J)		
10/2/2017	0.0259	<0.01			
11/15/2017	0.0281	<0.01	0.0012 (J)		
6/5/2018	0.033	<0.01	<0.01		
10/2/2018	0.036		<0.01		
10/5/2018		<0.01			
8/22/2019	0.039	<0.01			
8/23/2019			0.0014 (J)		
10/21/2019		<0.01	0.0013 (J)		
10/22/2019	0.04				
3/24/2020			0.001 (J)		
3/25/2020	0.034	<0.01			
5/22/2020				<0.01	<0.01
6/16/2020				<0.01	<0.01
8/25/2020				0.00099 (J)	<0.01
8/26/2020	0.05	<0.01			
8/27/2020			0.00091 (J)		
9/18/2020					<0.01
9/21/2020	0.043			<0.01	
9/28/2020		<0.01	0.0009 (J)		
11/11/2020					<0.01
11/12/2020				0.0017 (J)	
12/16/2020				0.014	<0.01
1/20/2021				0.0013 (J)	<0.01
3/12/2021	0.033			0.0012 (J)	<0.01
3/15/2021		<0.01	0.00092 (J)		
8/16/2021	0.035	<0.01	0.00091 (J)		
8/19/2021				0.021	<0.01
2/2/2022	0.034	<0.01	0.001 (J)		
2/3/2022				0.0067 (J)	<0.01
8/4/2022	0.032	<0.01	<0.01	0.0023 (J)	<0.01
1/24/2023		<0.01	<0.01		
1/25/2023	0.03			0.0053 (J)	<0.01
8/10/2023	0.035	<0.01		0.0031 (J)	
8/11/2023			<0.01		<0.01
2/14/2024				0.026	<0.01
2/15/2024	0.033	<0.01			
2/16/2024			0.00072 (J)		
8/6/2024		<0.01			
8/7/2024	0.036		0.0012 (J)	0.0028 (J)	<0.01
2/14/2025			<0.01		
2/15/2025	0.033	<0.01		0.028	<0.01

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH, Field (SU) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	7.27	5.81	7.45				
7/11/2016	7.06	5.68					
7/12/2016			7.32				
8/30/2016	7.28	5.63	7.43				6.75
10/19/2016	7.02	5.46	7.03				
10/20/2016							6.73
12/6/2016	7.09	5.38	7.08				
1/24/2017	7.2	5.37	7.39				
1/25/2017							6.88
3/21/2017	7.01	4.9	6.83				
5/22/2017	7.11	5.2	7.02				
5/25/2017							6.55
8/11/2017							6.56
10/3/2017	7.21	5.3	7.47				
11/15/2017							6.47
4/2/2018	7.1	5.4					
4/3/2018			7.38				
6/4/2018	7.06	5.27	7.38				
6/5/2018							6.66
10/1/2018	7.09	5.31	7.13				
10/2/2018							6.44
3/12/2019	7.03	5.42	7.29				
4/1/2019			7.16				
4/2/2019	6.86	5.41					6.57
6/18/2019							6.46
8/22/2019							6.51
9/23/2019	7.02	5.33	7.3				
9/30/2019	7	5.35	7.37				
10/21/2019							6.69
3/2/2020	7.1	5.43	7.12				
3/24/2020							7.08
3/25/2020	6.95	5.36	7.4				
6/16/2020	6.97		7.31				
8/24/2020							6.54
8/25/2020		5.15	7.14				
8/28/2020	7.02						
9/15/2020	7.15	5.22	7.29				6.68
9/16/2020				7.52	7.83		
9/25/2020						7.57	
11/10/2020				7.27	7.84		
11/11/2020						7.4	
12/15/2020				7.39	7.87		
12/16/2020						7.39	
1/19/2021				7.39	7.86		
1/20/2021						7.47	
2/8/2021	7.11						
2/9/2021		5.42	7.23	7.44	7.84		
3/10/2021	6.95				7.92		
3/11/2021		5.8	7.33	7.46			6.65
3/12/2021						7.52	
8/11/2021	6.98			7.4			
8/12/2021		5.05	7.31				

Time Series

Constituent: pH, Field (SU) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
8/13/2021					7.77	7.42	6.56
2/1/2022	7.19	5.24	7.45	7.52	8.25	7.45	6.57
8/2/2022	7.03	4.57	7.02	7.15	7.9	7.39	6.67
1/23/2023			7.32				
1/24/2023	6.76	5.22		7.56	8.22	7.15	6.43
8/8/2023	7.05	5.01	7.42	7.39	8.2	7.39	6.67
2/13/2024	7.06	5.49	7.35	7.47	8.1	7.47	6.82
5/3/2024							6.78
8/5/2024	7.29	4.91	7.27				
8/6/2024				7.46	8.36	7.47	6.86
2/12/2025	7.08		7.37	7.5	8.49		
2/13/2025						7.63	6.99
2/14/2025		5.75	7.45				

Time Series

Constituent: pH, Field (SU) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	6.73	6.62	6.99		
10/26/2016	6.77		7.06		
11/7/2016		6.71			
1/13/2017		6.57			
1/27/2017	6.74		7.13		
5/25/2017	6.99		7.1		
6/3/2017		6.71			
8/11/2017		6.56	7.02		
10/2/2017	7.66	7.65			
11/15/2017	6.71	6.69	7.04		
6/5/2018	6.83	6.79	7.17		
10/2/2018	6.83		7.08		
10/5/2018		6.71			
4/2/2019	6.87				
4/3/2019		6.73	7.14		
6/17/2019	6.79	6.75			
6/18/2019			7.11		
8/22/2019	6.79	6.77			
8/23/2019			7.02		
10/21/2019		6.74	7.05		
10/22/2019	6.74				
3/24/2020			7.18		
3/25/2020	6.8	6.91			
5/22/2020				6.43	7.22
6/15/2020	6.8				
6/16/2020				6.29	6.92
8/25/2020				6.36	6.78
8/26/2020	6.96	6.73			
8/27/2020			7.15		
9/18/2020					6.97
9/21/2020	6.98			6.22	
9/28/2020		6.93	7.27		
11/11/2020					6.86
11/12/2020				6.13	
12/16/2020				6.61	6.93
1/20/2021				6.23	6.99
3/12/2021	6.95			6.18	7.05
3/15/2021		6.87	7.22		
8/16/2021	6.92	6.74	7.09		
8/19/2021				7.24	7.32
2/2/2022	7	6.92	7.28		
2/3/2022				6.56	7.01
8/4/2022	6.93	6.8	7.15	6.09	6.99
1/24/2023		6.75	7.05		
1/25/2023	6.87			6.32	6.89
8/10/2023	6.96	6.89		6.29	
8/11/2023			7.2		6.95
2/14/2024				6.76	6.98
2/15/2024	6.9	6.87			
2/16/2024			7.33		
8/6/2024		6.91			
8/7/2024	7.01		7.24	6.15	6.99

Time Series

Constituent: pH, Field (SU) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
2/14/2025			7.31		
2/15/2025	7.06	7.12		6.88	7.13

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.005	<0.005	<0.005				
7/11/2016	<0.005	<0.005					
7/12/2016			<0.005				
8/30/2016	<0.005	<0.005	<0.005				<0.005
10/19/2016	<0.005	<0.005	<0.005				
10/20/2016							<0.005
12/6/2016	<0.005	<0.005	<0.005				
1/24/2017	<0.005	<0.005	<0.005				
1/25/2017							<0.005
3/21/2017	<0.005	<0.005	<0.005				
5/22/2017	<0.005	<0.005	<0.005				
5/25/2017							<0.005
8/11/2017							<0.005
11/15/2017							<0.005
4/2/2018	<0.005	<0.005					
4/3/2018			<0.005				
6/4/2018	<0.005	<0.005	<0.005				
6/5/2018							<0.005
10/1/2018	<0.005	<0.005	<0.005				
10/2/2018							0.0015 (J)
3/12/2019	<0.005	<0.005	<0.005				
4/1/2019			<0.005				
4/2/2019	<0.005	<0.005					
8/22/2019							<0.005
9/23/2019	<0.005	<0.005	<0.005				
3/2/2020	<0.005	<0.005	<0.005				
3/25/2020	<0.005	<0.005	<0.005				
8/24/2020							<0.005
8/25/2020		<0.005	<0.005				
8/28/2020	<0.005						
9/15/2020	<0.005	<0.005	<0.005				
9/16/2020				<0.005	<0.005		
9/25/2020						<0.005	
11/10/2020				<0.005	<0.005		
11/11/2020						<0.005	
12/15/2020				<0.005	<0.005		
12/16/2020						<0.005	
1/19/2021				<0.005	<0.005		
1/20/2021						<0.005	
2/8/2021	<0.005						
2/9/2021		<0.005	<0.005	<0.005	<0.005		
3/10/2021	0.0047 (J)				<0.005		
3/11/2021		<0.005	<0.005	<0.005			
8/11/2021	<0.005			<0.005			
8/12/2021		<0.005	<0.005				
8/13/2021					<0.005	<0.005	<0.005
2/1/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
8/2/2022	<0.005	0.0014 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
1/23/2023			<0.005				
1/24/2023	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005
8/8/2023	<0.005	0.0019 (J)	<0.005	<0.005	<0.005	<0.005	<0.005
2/13/2024	<0.005	0.002 (J)	<0.005	<0.005	<0.005	<0.005	0.0016 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
8/5/2024	<0.005	0.0013 (J)	<0.005				
8/6/2024				<0.005	<0.005	<0.005	0.0012 (J)
2/12/2025	<0.005		<0.005	<0.005	<0.005		
2/13/2025						<0.005	0.0013 (J)
2/14/2025		0.0043 (J)					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005	<0.005		
10/26/2016	<0.005		<0.005		
11/7/2016		<0.005			
1/13/2017		0.0011 (J)			
1/27/2017	<0.005		<0.005		
5/25/2017	<0.005		<0.005		
6/3/2017		<0.005			
8/11/2017			<0.005		
10/2/2017	0.002 (J)	<0.005			
11/15/2017	<0.005	<0.005	<0.005		
6/5/2018	<0.005	<0.005	<0.005		
10/2/2018	<0.005		0.0014 (J)		
10/5/2018		<0.005			
8/22/2019	<0.005	<0.005			
8/23/2019			<0.005		
5/22/2020				<0.005	<0.005
6/16/2020				<0.005	<0.005
8/25/2020				<0.005	<0.005
8/26/2020	<0.005	<0.005			
8/27/2020			<0.005		
9/18/2020					<0.005
9/21/2020				<0.005	
11/11/2020					<0.005
11/12/2020				<0.005	
12/16/2020				<0.005	<0.005
1/20/2021				<0.005	<0.005
8/16/2021	<0.005	<0.005	<0.005		
8/19/2021				<0.005	<0.005
2/2/2022	<0.005	<0.005	<0.005		
2/3/2022				<0.005	<0.005
8/4/2022	<0.005	<0.005	<0.005	<0.005	<0.005
1/24/2023		<0.005	<0.005		
1/25/2023	<0.005			<0.005	<0.005
8/10/2023	<0.005	<0.005		<0.005	
8/11/2023			<0.005		<0.005
2/14/2024				<0.005	<0.005
2/15/2024	<0.005	<0.005			
2/16/2024			<0.005		
8/6/2024		<0.005			
8/7/2024	<0.005		<0.005	<0.005	<0.005
2/14/2025			<0.005		
2/15/2025	<0.005	<0.005		<0.005	0.0013 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	66.9	48.6	42.3				
7/11/2016	41	45					
7/12/2016			44				
8/30/2016	36	42	40				49
10/19/2016	46	44	43				
10/20/2016							49
12/6/2016	59	44	43				
1/24/2017	46	46	48				
1/25/2017							48
3/21/2017	63	46	45				
5/22/2017	77	48	46				
5/25/2017							48
8/11/2017							47
10/3/2017	42	47	48				
11/15/2017							49
6/4/2018	71.8	47.8	46.6				
6/5/2018							48.9
10/1/2018	49.1	48.1	48.6				
10/2/2018							48.6
4/1/2019			50.4				
4/2/2019	84.3	48.7					39.6
6/18/2019							44.5
9/23/2019	70.2	47.2	43.9				
10/21/2019							45.6
3/24/2020							25.9
3/25/2020	85.9	46.3	50.5				
6/16/2020	88.2		49.5				
9/15/2020	47.3	51.5	44.7				41.4
9/16/2020				43	24.95 (D)		
9/25/2020						6.8	
11/10/2020				39	6.3		
11/11/2020						11.2	
12/15/2020				38.8	6.7		
12/16/2020						11.3	
1/19/2021				37.3	7.4		
1/20/2021						14.2	
3/10/2021	49.6				<1		
3/11/2021		52.9	50.4	38.6			40.7
3/12/2021						8.7	
8/11/2021	48.9			30.5			
8/12/2021		47.4	38.6				
8/13/2021					56.1	8.1	42.1
2/1/2022	43.7	67.1	46	37.5	56.3	2.5	41.1
8/2/2022	58.1	86.9	43.5	37	13.2	2.1	41.5
1/23/2023			39.5				
1/24/2023	48.3	79.7		34.7	10.1	5.2	36.5
8/8/2023	67.7	89.9	35	25.6	1.3	2.2	34.9
2/13/2024	50.4	93.9	35.5	28.9	2	6	35.6
8/5/2024	49.4	87.2	31.1				
8/6/2024				25.5	0.86 (J)	2.9	37.8
2/12/2025	43.8		28	25.2	0.51 (J)		
2/13/2025						9.5	32.7

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
2/14/2025		94.5					

Time Series

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	290	280	72		
10/26/2016	280		71		
11/7/2016		300			
1/13/2017		270			
1/27/2017	290		74		
5/25/2017	280		73		
6/3/2017		270			
8/11/2017			71		
10/2/2017	300	330			
11/15/2017	300	280	70		
6/5/2018	273	241	74		
10/2/2018	328		80.7		
10/5/2018		271			
4/2/2019	256				
4/3/2019		230	75.2		
6/17/2019	243	219			
6/18/2019			75.3		
10/21/2019		238	78.5		
10/22/2019	266				
3/24/2020			74.6		
3/25/2020	226	116			
5/22/2020				345	56.1
6/15/2020	212				
6/16/2020				320	57.6
8/25/2020				353	62.8
9/18/2020					62.7
9/21/2020	225			352	
9/28/2020		182	86.2		
11/11/2020					62.3
11/12/2020				300	
12/16/2020				306	68.1
1/20/2021				335	66.6
3/12/2021	210			293	69.7
3/15/2021		177	74		
8/16/2021	211	158	74		
8/19/2021				264	64.4
2/2/2022	201	147	70.7		
2/3/2022				304	66.8
8/4/2022	230	162	73.1	331	68.3
1/24/2023		151	69.6		
1/25/2023	230			306	63.7
8/10/2023	195	138		290	
8/11/2023			67.6		60.5
2/14/2024				243	66.4
2/15/2024	209	108			
2/16/2024			74.5		
8/6/2024		127			
8/7/2024	191		69.7	289	72.8
2/14/2025			61.4		
2/15/2025	175	73.1		201	64.8

Time Series

Constituent: TDS (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	421	143	267				
7/11/2016	363	125					
7/12/2016			249				
8/30/2016	330	168	254				280
10/19/2016	380	176	357				
10/20/2016							265
12/6/2016	377	145	285				
1/24/2017	342	129	300				
1/25/2017							371
3/21/2017	340	103	288				
5/22/2017	338	92	263				
5/25/2017							237
8/11/2017							253
10/3/2017	343	127	300				
11/15/2017							261
6/4/2018	415	140	266				
6/5/2018							276
10/1/2018	354	135	291				
10/2/2018							256
4/1/2019			284				
4/2/2019	452	133					814 (O)
6/18/2019							233
9/23/2019	442	129	268				
10/21/2019							296
3/24/2020							278
3/25/2020	496	138	284				
6/16/2020	632		448				
9/15/2020	265	124	258				267
9/16/2020				272	270		
9/25/2020						263	
11/10/2020				307	287		
11/11/2020						276	
12/15/2020				289	295		
12/16/2020						294	
1/19/2021				270	278		
1/20/2021						289	
3/10/2021	348				289		
3/11/2021		169	267	279			206
3/12/2021						260	
8/11/2021	366			277			
8/12/2021		118	265				
8/13/2021					436	272	201
2/1/2022	270	156	350	156	444	268	203
8/2/2022	400	196	287	278	311	261	217
1/23/2023			293				
1/24/2023	369	164		271	363	289	246
8/8/2023	457	189	285	274	361	261	248
2/13/2024	402	214	284	291	379	279	222
8/5/2024	444	217	304				
8/6/2024				283	380	256	270
2/12/2025	374		267	273	363		
2/13/2025						272	206

Time Series

Constituent: TDS (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
2/14/2025		242					

Time Series

Constituent: TDS (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	700	876	379		
10/26/2016	795		409		
11/7/2016		1000			
1/13/2017		827			
1/27/2017	706		370		
5/25/2017	669		351		
6/3/2017		846			
8/11/2017			322		
10/2/2017	672	884			
11/15/2017	721	838	350		
6/5/2018	723	823	360		
10/2/2018	703		363		
10/5/2018		813			
4/2/2019	540				
4/3/2019		785	369		
6/17/2019		751			
6/18/2019			323		
10/21/2019		771	357		
10/22/2019	693				
3/24/2020			355		
3/25/2020	665	521			
5/22/2020				809	496
6/15/2020	685				
6/16/2020				665	508
8/25/2020				772	505
9/18/2020					452
9/21/2020	272			956	
9/28/2020		<10	176		
11/11/2020					468
11/12/2020				694	
12/16/2020				816	536
1/20/2021				726	472
3/12/2021	584			664	474
3/15/2021		614	340		
8/16/2021	632	626	352		
8/19/2021				732	488
2/2/2022	612	638	347		
2/3/2022				726	466
8/4/2022	632	640	334	706	510
1/24/2023		602	350		
1/25/2023	656			798	517
8/10/2023	661	642		760	
8/11/2023			361		535
2/14/2024				687	502
2/15/2024	620	524			
2/16/2024			333		
8/6/2024		661			
8/7/2024	647		337	695	518
2/14/2025			317		
2/15/2025	626	457		640	525

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
5/19/2016	<0.001	<0.001	<0.001				
7/11/2016	<0.001	<0.001					
7/12/2016			<0.001				
8/30/2016	<0.001	<0.001	<0.001				<0.001
10/19/2016	<0.001	<0.001	<0.001				
10/20/2016							<0.001
12/6/2016	<0.001	<0.001	<0.001				
1/24/2017	<0.001	<0.001	<0.001				
1/25/2017							<0.001
3/21/2017	<0.001	3E-05 (J)	<0.001				
5/22/2017	<0.001	<0.001	<0.001				
5/25/2017							<0.001
8/11/2017							<0.001
11/15/2017							<0.001
4/2/2018	<0.001	<0.001					
4/3/2018			<0.001				
6/4/2018	<0.001	<0.001	<0.001				
6/5/2018							<0.001
10/1/2018	<0.001	<0.001	<0.001				
10/2/2018							<0.001
3/12/2019	<0.001	<0.001	<0.001				
4/1/2019			<0.001				
4/2/2019	<0.001	<0.001					
8/22/2019							<0.001
9/23/2019	<0.001	<0.001	<0.001				
3/2/2020	<0.001	<0.001	<0.001				
3/25/2020	<0.001	<0.001	<0.001				
8/24/2020							<0.001
8/25/2020		<0.001	<0.001				
8/28/2020	<0.001						
9/15/2020	<0.001	<0.001	<0.001				
9/16/2020				<0.001	<0.001		
9/25/2020						<0.001	
11/10/2020				<0.001	<0.001		
11/11/2020						<0.001	
12/15/2020				<0.001	<0.001		
12/16/2020						<0.001	
1/19/2021				<0.001	<0.001		
1/20/2021						<0.001	
2/8/2021	<0.001						
2/9/2021		<0.001	<0.001	<0.001	<0.001		
3/10/2021	<0.001				<0.001		
3/11/2021		<0.001	<0.001	<0.001			
8/11/2021	<0.001			<0.001			
8/12/2021		<0.001	<0.001				
8/13/2021					<0.001	<0.001	<0.001
2/1/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/2/2022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1/23/2023			<0.001				
1/24/2023	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/13/2024	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWA-122 (bg)
8/5/2024	<0.001	<0.001	<0.001				
8/6/2024				<0.001	<0.001	<0.001	<0.001
2/12/2025	<0.001		<0.001	<0.001	<0.001		
2/13/2025						<0.001	<0.001
2/14/2025		<0.001					

Time Series

Constituent: Thallium (mg/L) Analysis Run 4/22/2025 5:28 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

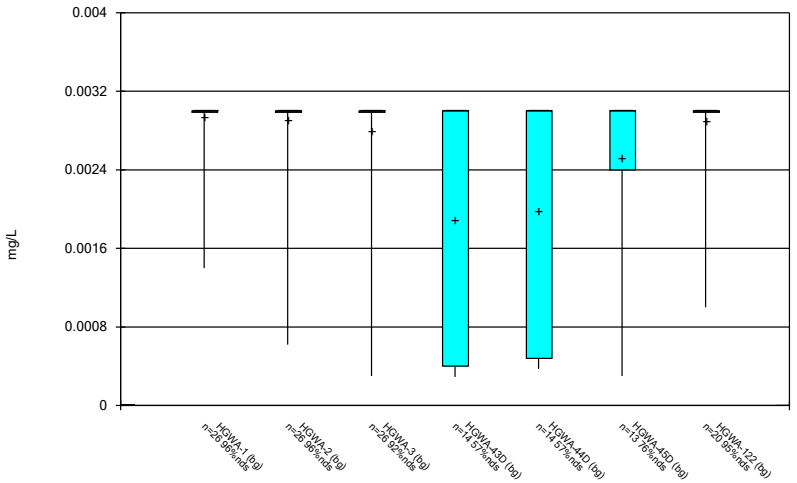
	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.001	<0.001	<0.001		
10/26/2016	<0.001		<0.001		
11/7/2016		<0.001			
1/13/2017		<0.001			
1/27/2017	<0.001		<0.001		
5/25/2017	<0.001		<0.001		
6/3/2017		<0.001			
8/11/2017			<0.001		
10/2/2017	<0.001	<0.001			
11/15/2017	<0.001	<0.001	<0.001		
6/5/2018	<0.001	<0.001	<0.001		
10/2/2018	<0.001		<0.001		
10/5/2018		<0.001			
8/22/2019	<0.001	<0.001			
8/23/2019			<0.001		
5/22/2020				<0.001	<0.001
6/16/2020				<0.001	<0.001
8/25/2020				<0.001	<0.001
8/26/2020	<0.001	<0.001			
8/27/2020			<0.001		
9/18/2020					<0.001
9/21/2020				<0.001	
11/11/2020					<0.001
11/12/2020				<0.001	
12/16/2020				<0.001	<0.001
1/20/2021				<0.001	<0.001
8/16/2021	<0.001	<0.001	<0.001		
8/19/2021				<0.001	<0.001
2/2/2022	<0.001	<0.001	<0.001		
2/3/2022				<0.001	<0.001
8/4/2022	<0.001	<0.001	<0.001	<0.001	<0.001
1/24/2023		<0.001	<0.001		
1/25/2023	<0.001			<0.001	<0.001
8/10/2023	<0.001	<0.001		<0.001	
8/11/2023			<0.001		<0.001
2/14/2024				<0.001	<0.001
2/15/2024	<0.001	<0.001			
2/16/2024			<0.001		
8/6/2024		<0.001			
8/7/2024	<0.001		<0.001	<0.001	<0.001
2/14/2025			<0.001		
2/15/2025	<0.001	<0.001		<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

FIGURE B.

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Box & Whiskers Plot

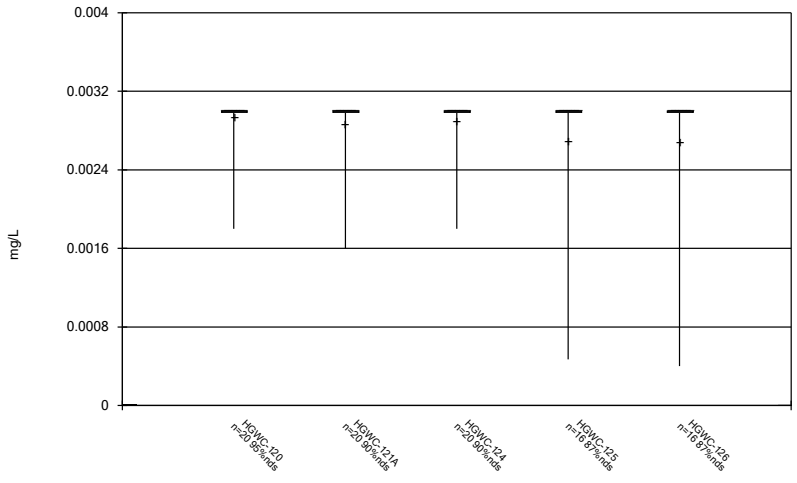


Constituent: Antimony Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

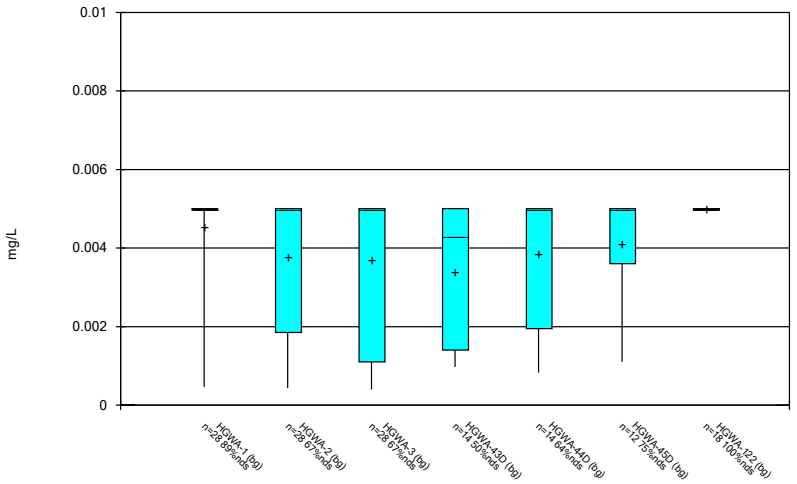


Constituent: Antimony Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

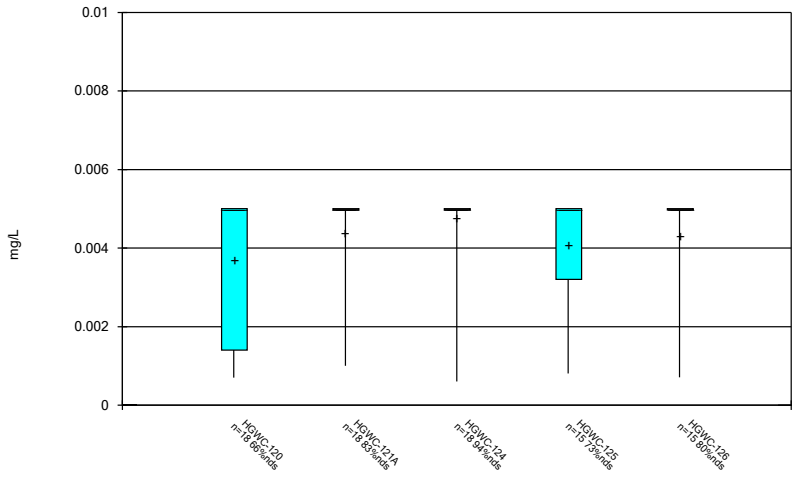


Constituent: Arsenic Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

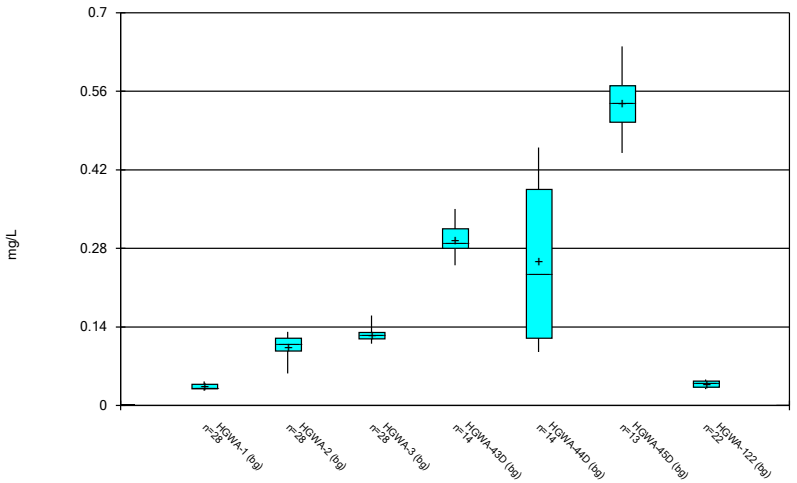


Constituent: Arsenic Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

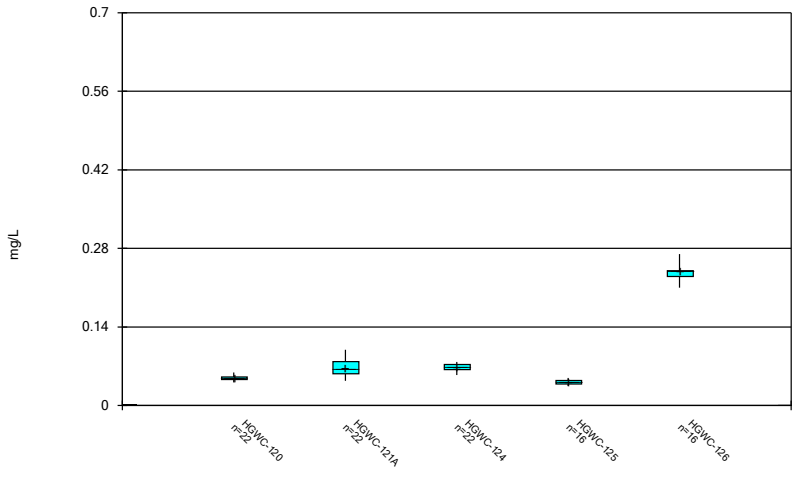


Constituent: Barium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

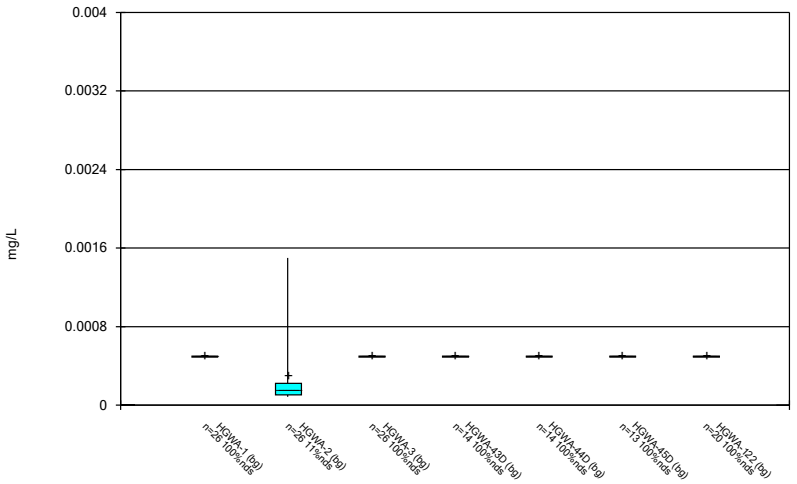


Constituent: Barium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

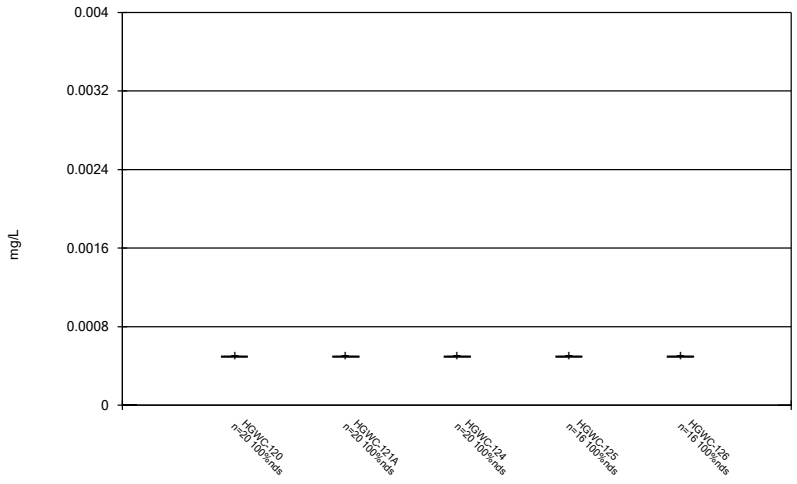


Constituent: Beryllium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

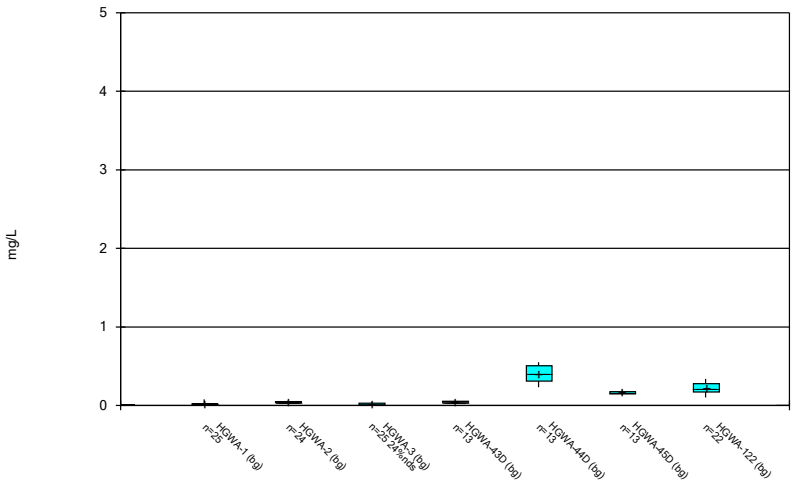


Constituent: Beryllium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

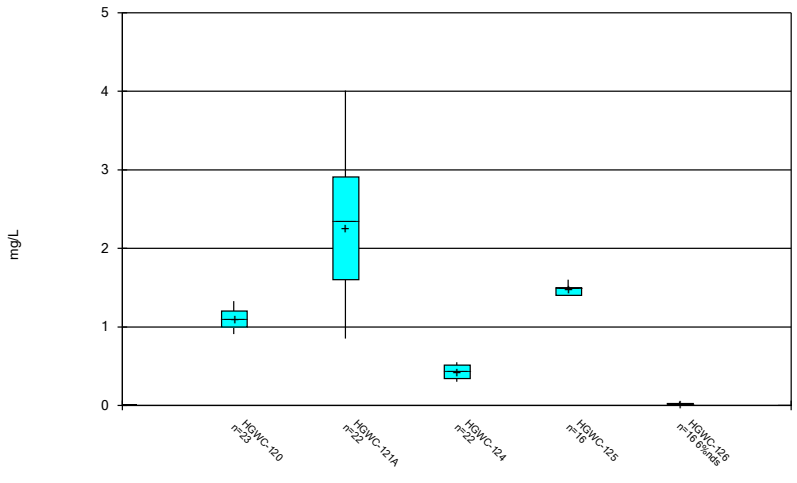


Constituent: Boron Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

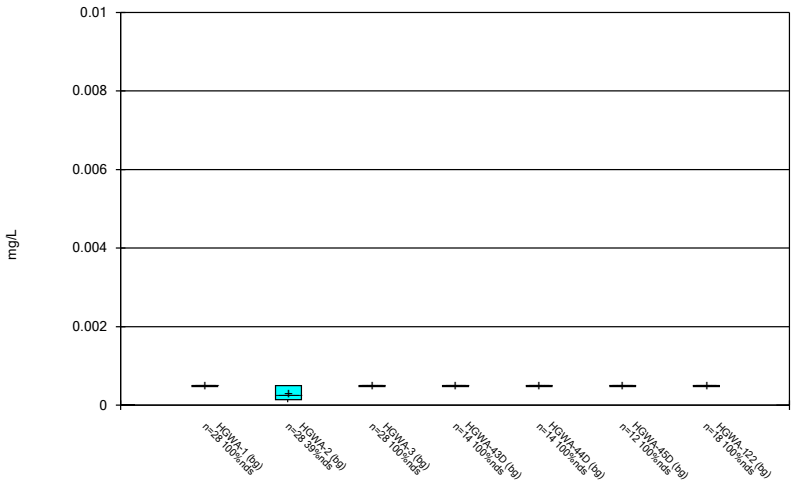


Constituent: Boron Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

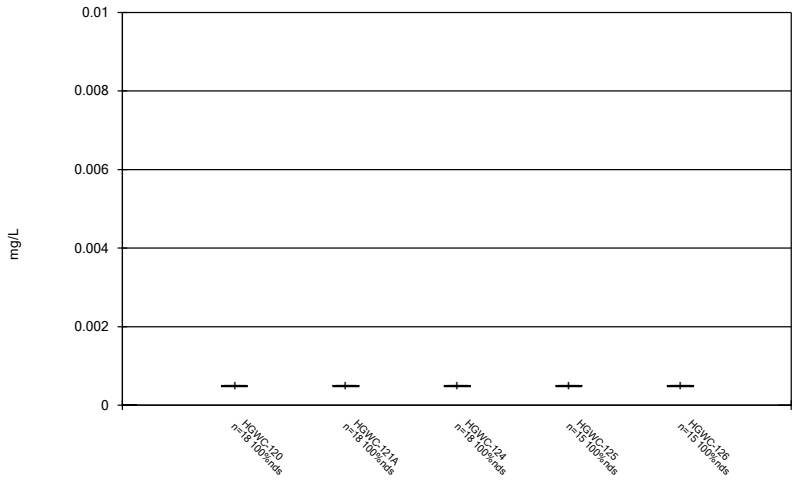


Constituent: Cadmium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

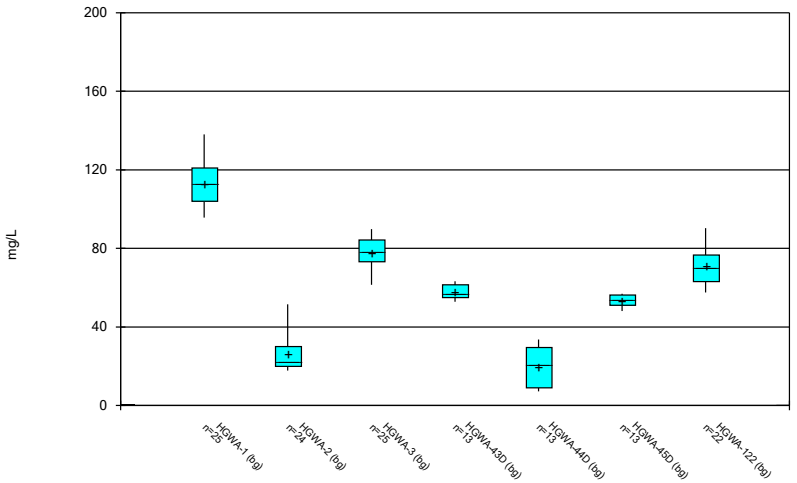


Constituent: Cadmium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

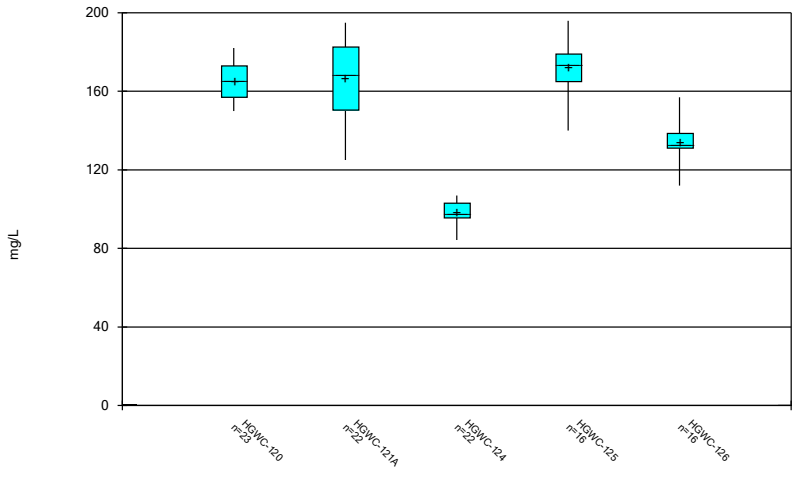


Constituent: Calcium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

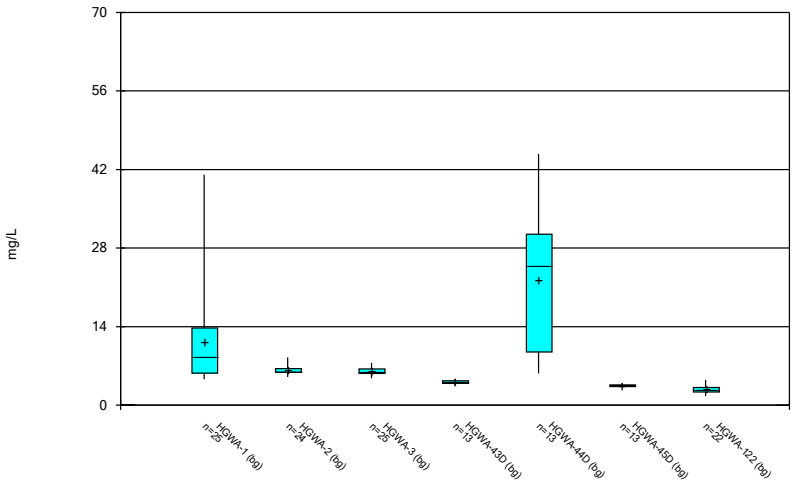


Constituent: Calcium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

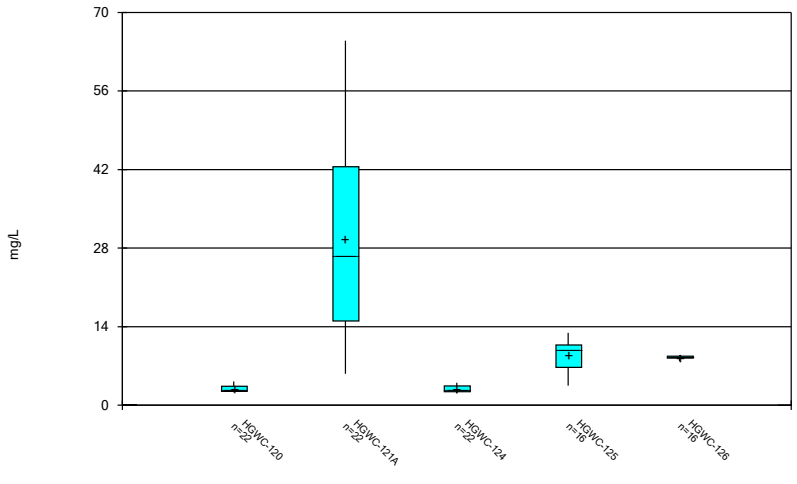


Constituent: Chloride Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

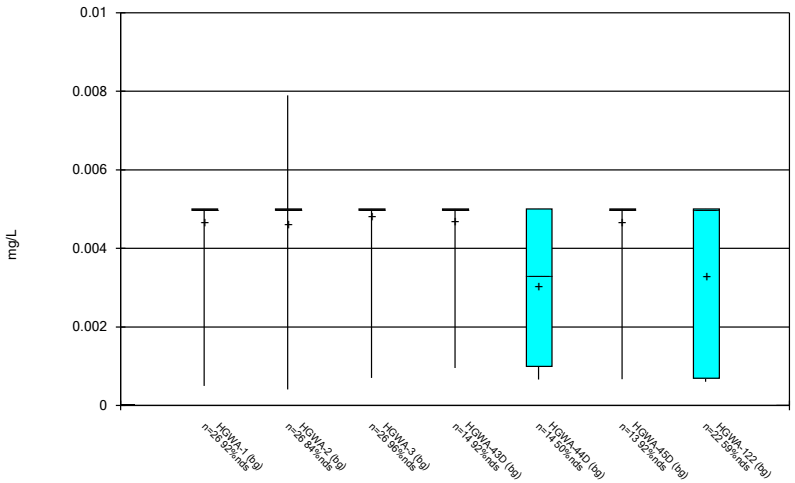


Constituent: Chloride Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

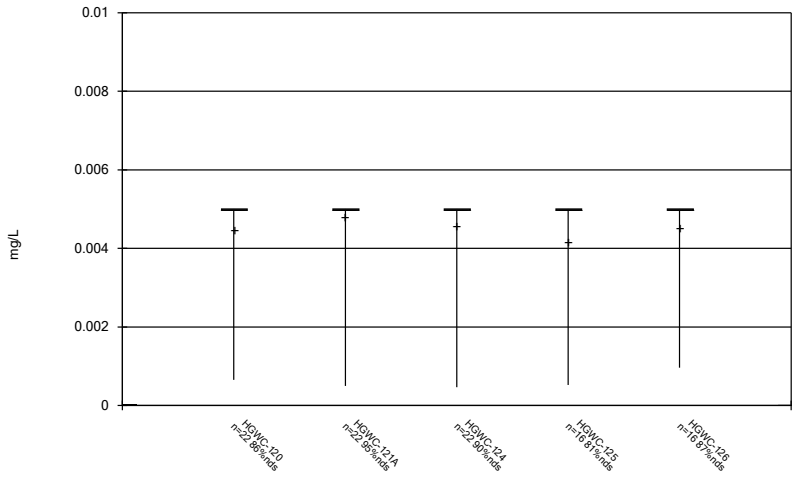


Constituent: Chromium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

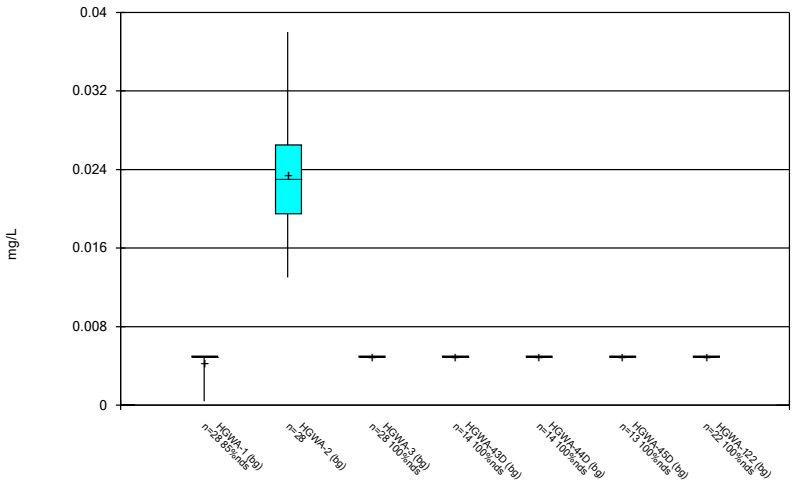


Constituent: Chromium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

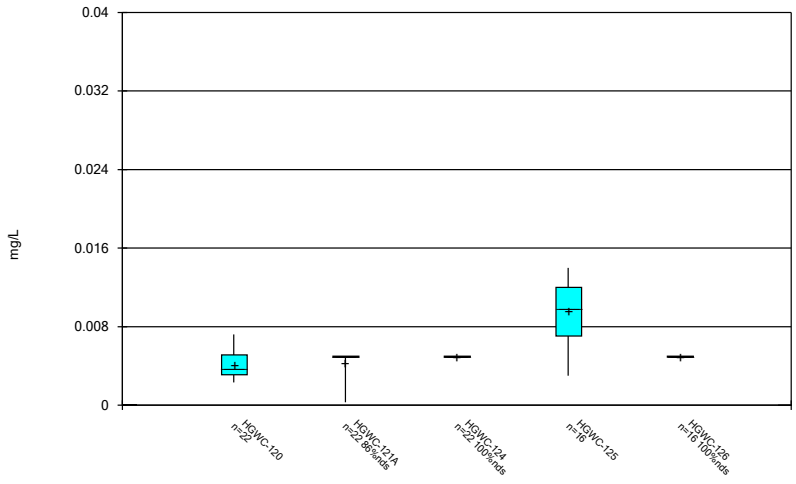


Constituent: Cobalt Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

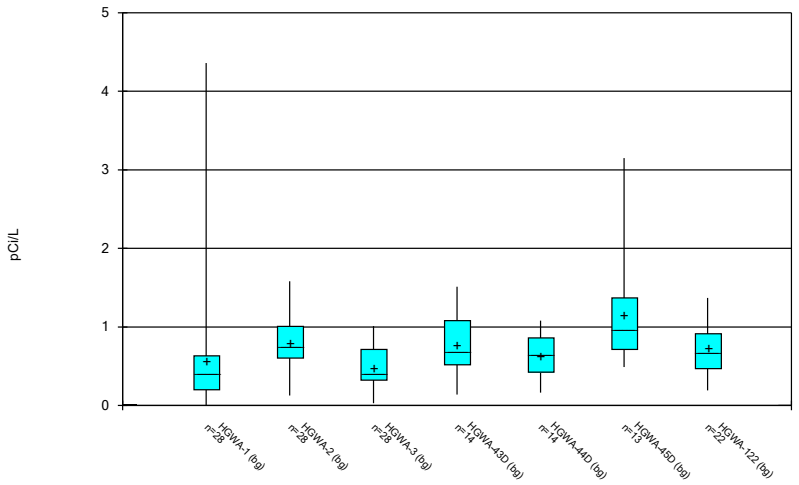


Constituent: Cobalt Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

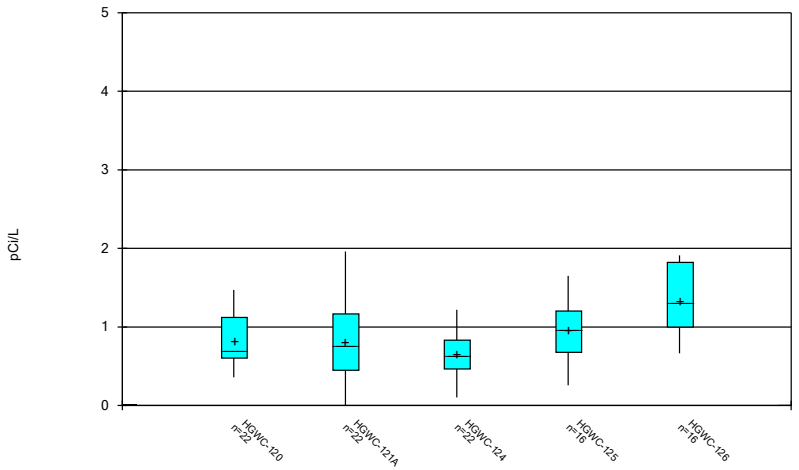


Constituent: Combined Radium 226 + 228 Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

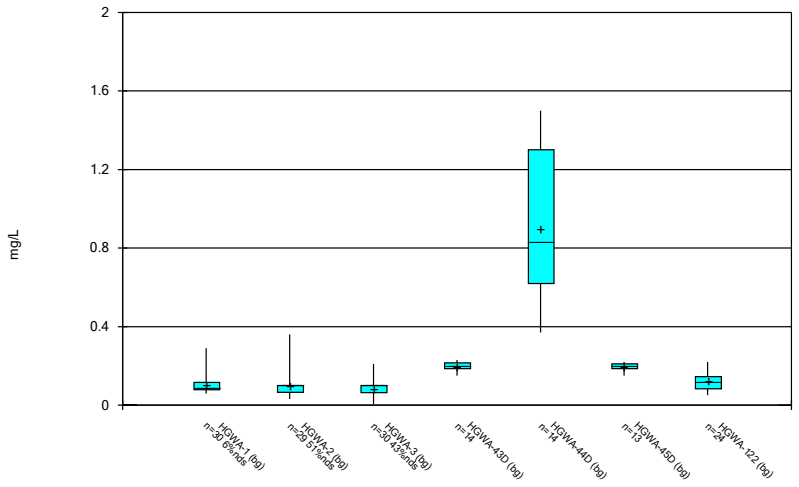


Constituent: Combined Radium 226 + 228 Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

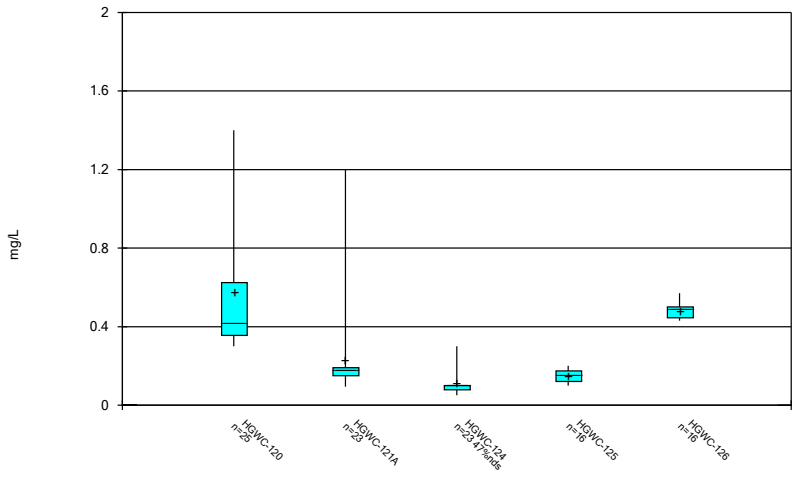


Constituent: Fluoride Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

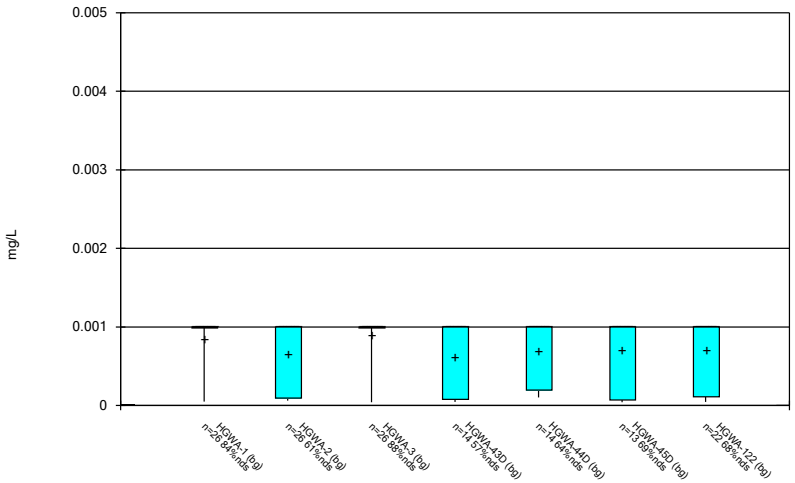


Constituent: Fluoride Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

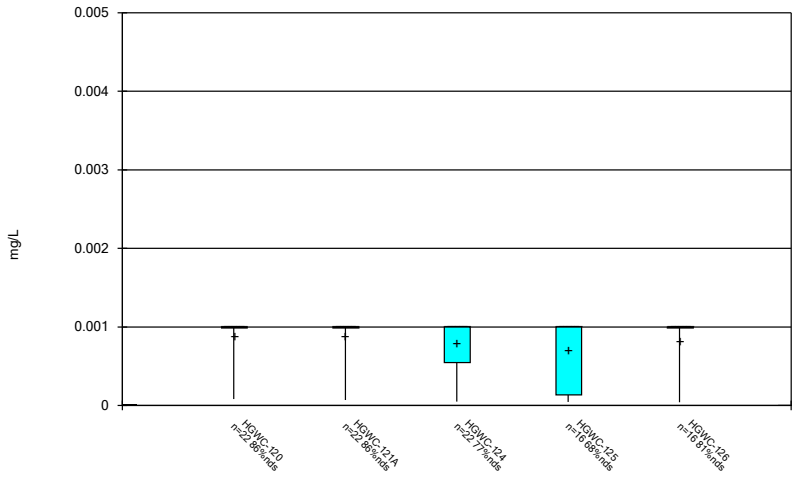


Constituent: Lead Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

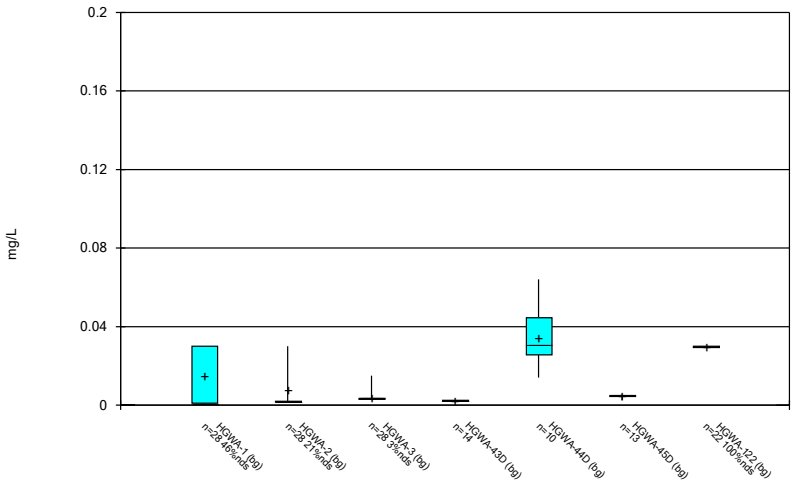


Constituent: Lead Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

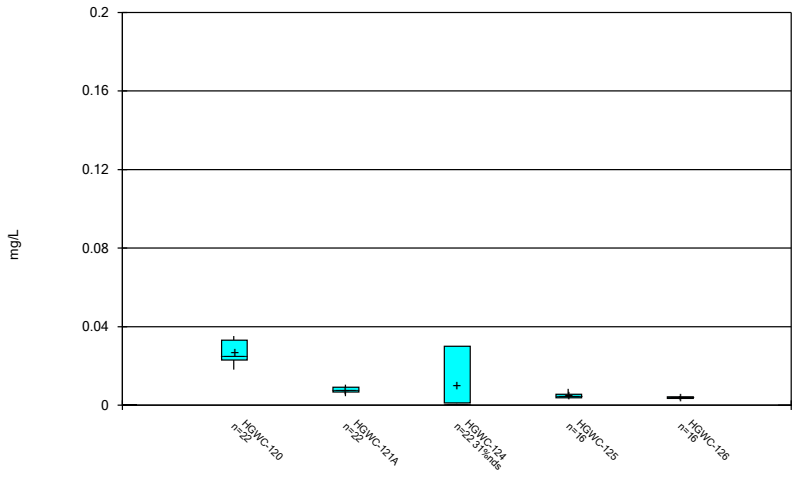


Constituent: Lithium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

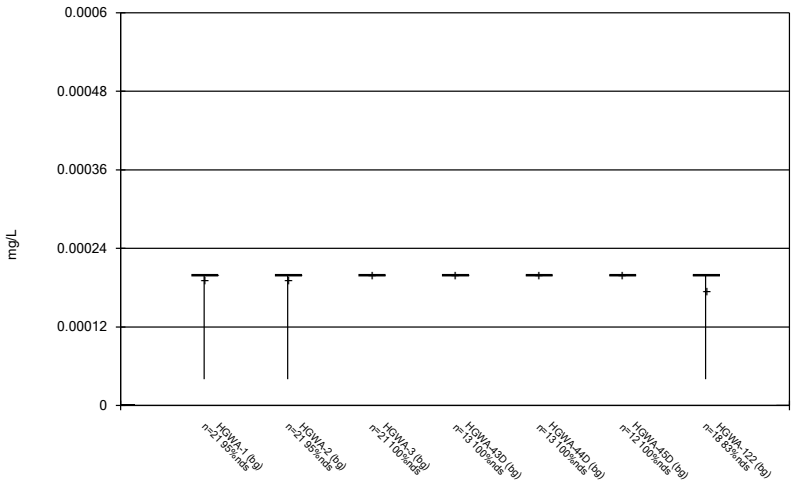


Constituent: Lithium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

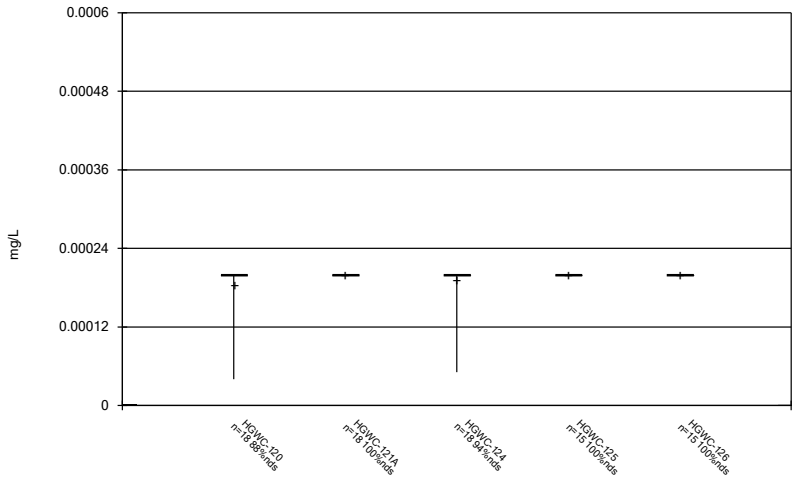


Constituent: Mercury Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

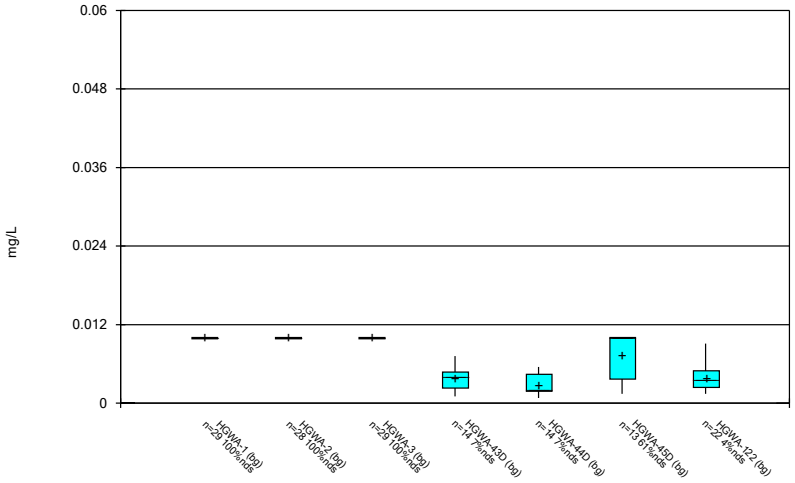


Constituent: Mercury Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

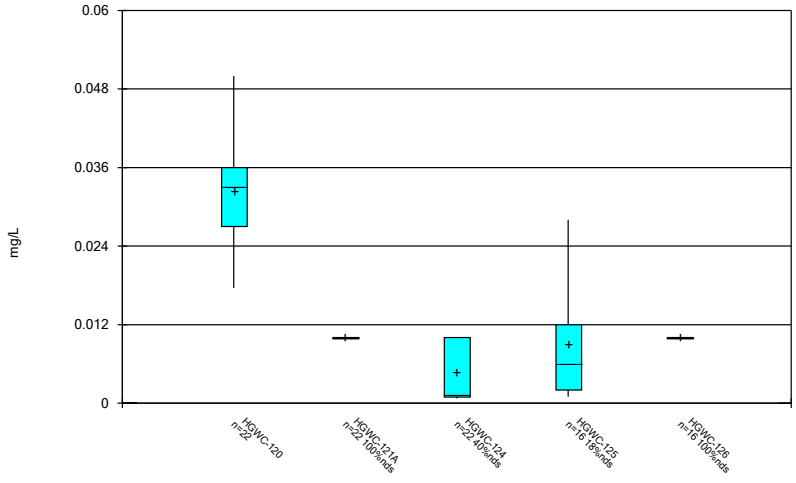


Constituent: Molybdenum Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

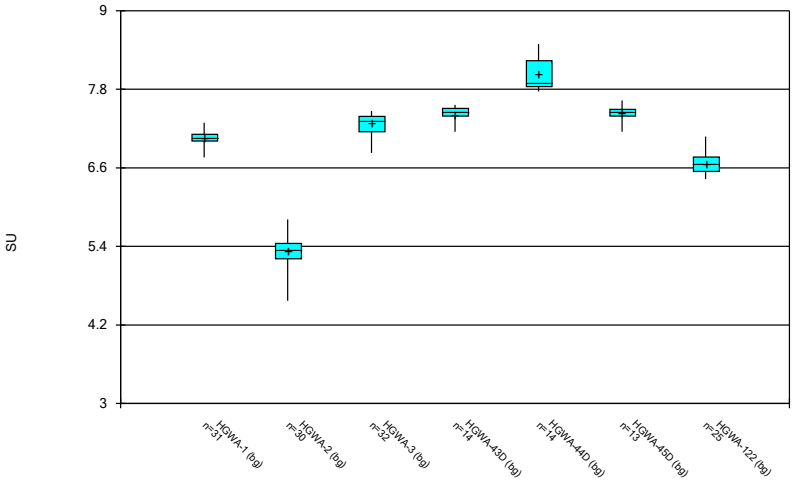


Constituent: Molybdenum Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

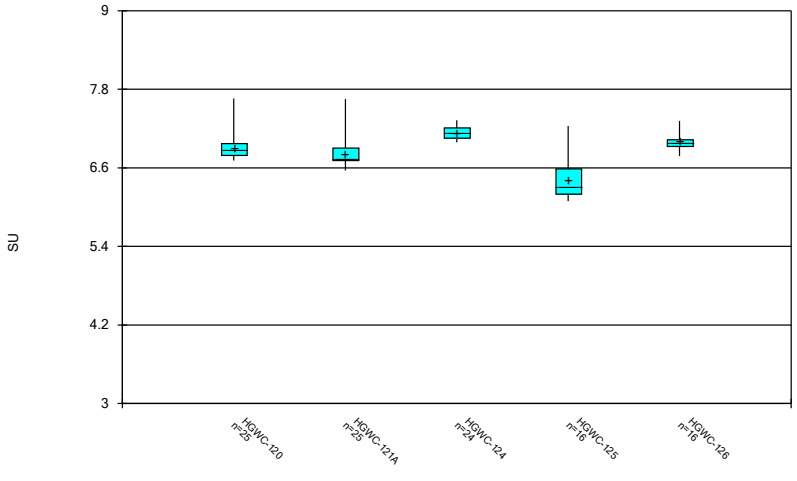


Constituent: pH, Field Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

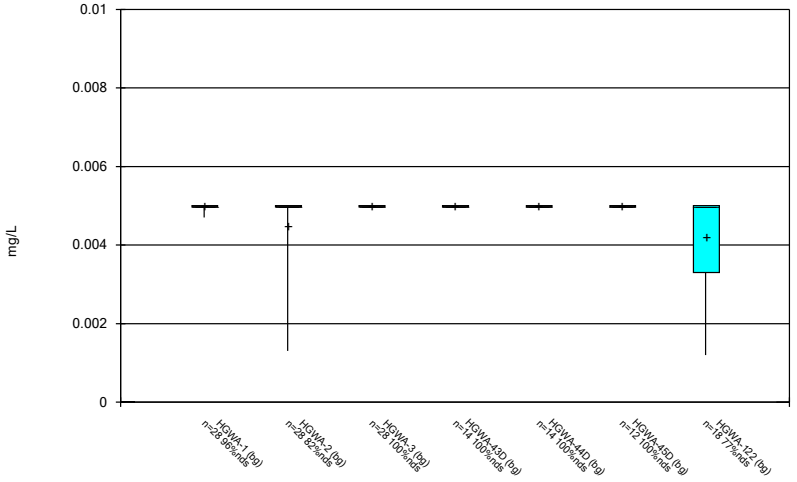


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Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

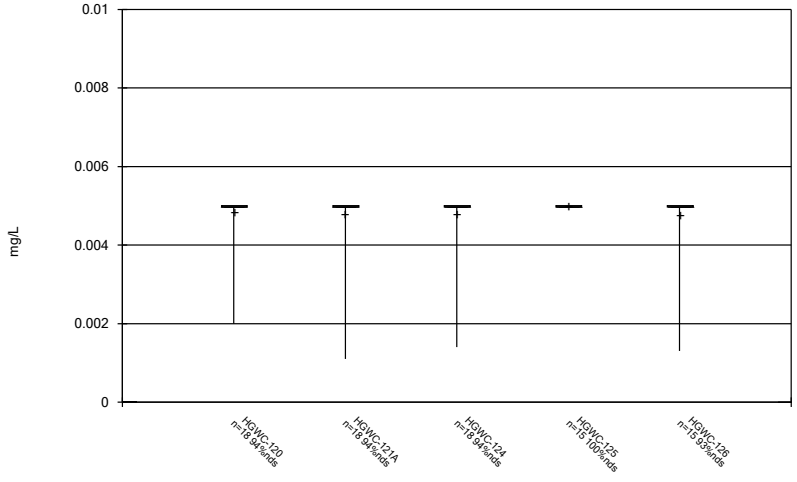


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Box & Whiskers Plot

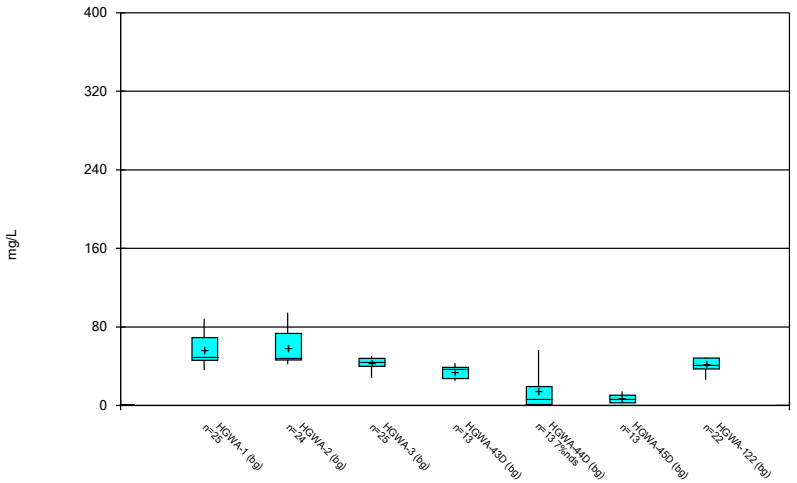


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Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

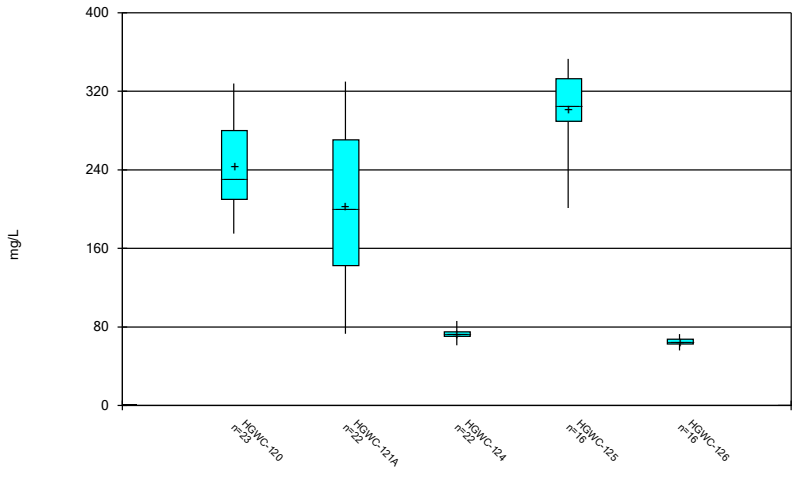


Constituent: Sulfate Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

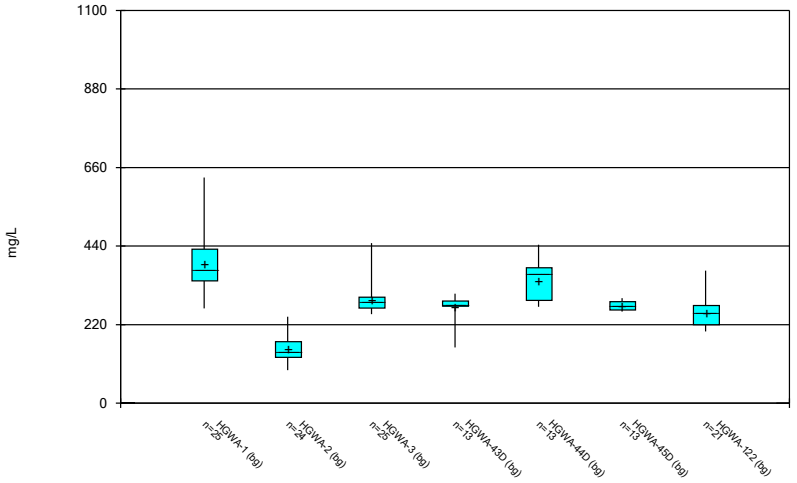


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Box & Whiskers Plot

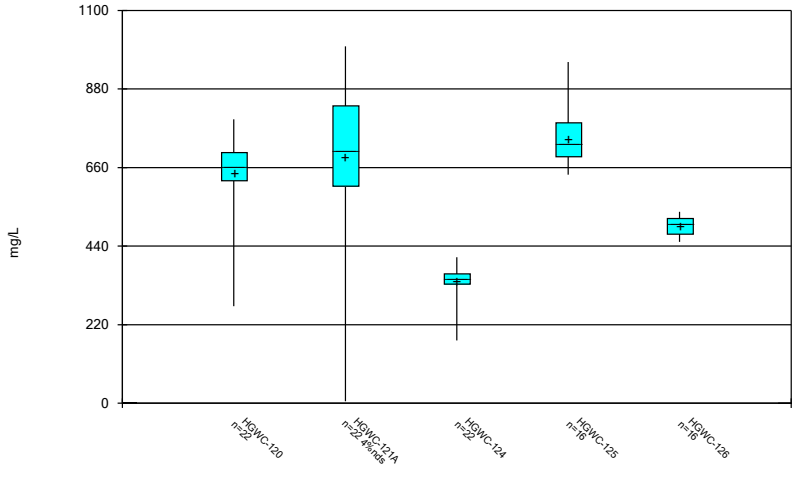


Constituent: TDS Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

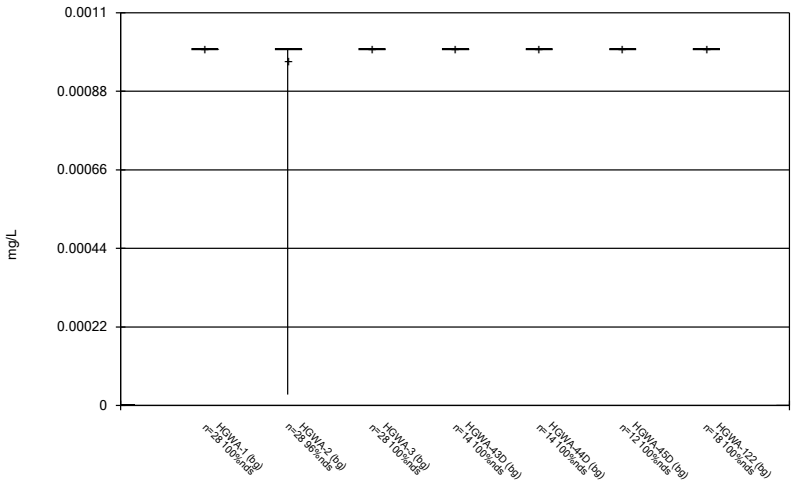


Constituent: TDS Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot

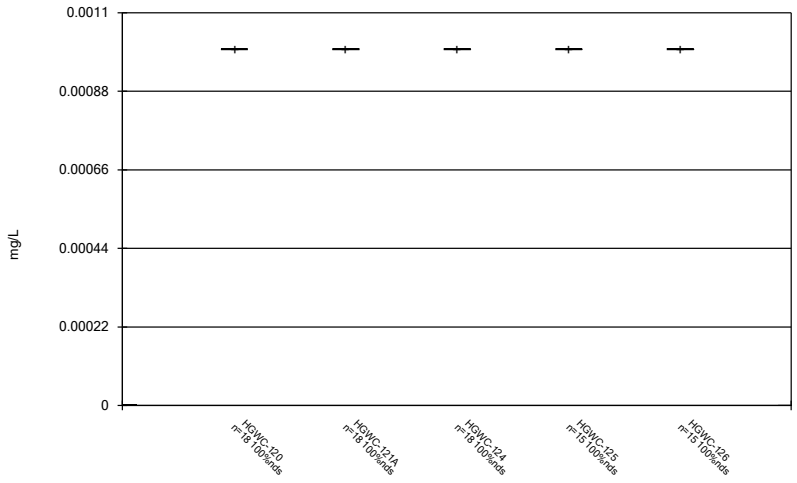


Constituent: Thallium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

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Box & Whiskers Plot



Constituent: Thallium Analysis Run 4/22/2025 5:29 PM

Plant Hammond Client: Southern Company Data: Hammond AP3

FIGURE C.

Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:30 PM

	HGWA-122 TDS (mg/L)
4/2/2019	814 (O)

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:33 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**HGWC-120**	**0.55**	**n/a**	**2/15/2025**	**1.2**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-121A**	**0.55**	**n/a**	**2/15/2025**	**0.85**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-125**	**0.55**	**n/a**	**2/15/2025**	**1.5**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-120**	**138**	**n/a**	**2/15/2025**	**162**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-125**	**138**	**n/a**	**2/15/2025**	**169**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-126**	**138**	**n/a**	**2/15/2025**	**143**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-120**	**94.5**	**n/a**	**2/15/2025**	**175**	**Yes**	**135**	**n/a**	**n/a**	**0.7407**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**HGWC-125**	**94.5**	**n/a**	**2/15/2025**	**201**	**Yes**	**135**	**n/a**	**n/a**	**0.7407**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**HGWC-125**	**632**	**n/a**	**2/15/2025**	**640**	**Yes**	**134**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001103**	**NP Inter (normality) 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:33 PM

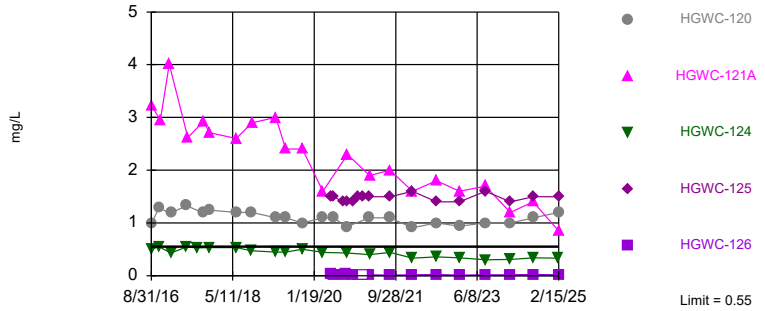
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**HGWC-120**	**0.55**	**n/a**	**2/15/2025**	**1.2**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**HGWC-121A**	**0.55**	**n/a**	**2/15/2025**	**0.85**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	HGWC-124	0.55	n/a	2/14/2025	0.33J	No	135	n/a	n/a	4.444	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Boron (mg/L)	**HGWC-125**	**0.55**	**n/a**	**2/15/2025**	**1.5**	**Yes**	**135**	**n/a**	**n/a**	**4.444**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	HGWC-126	0.55	n/a	2/15/2025	0.016J	No	135	n/a	n/a	4.444	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-120**	**138**	**n/a**	**2/15/2025**	**162**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	HGWC-121A	138	n/a	2/15/2025	125	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-124	138	n/a	2/14/2025	95.1	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Calcium (mg/L)	**HGWC-125**	**138**	**n/a**	**2/15/2025**	**169**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**HGWC-126**	**138**	**n/a**	**2/15/2025**	**143**	**Yes**	**135**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	HGWC-120	44.8	n/a	2/15/2025	2.7	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-121A	44.8	n/a	2/15/2025	5.6	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-124	44.8	n/a	2/14/2025	2.1	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-125	44.8	n/a	2/15/2025	3.6	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-126	44.8	n/a	2/15/2025	8.8	No	135	n/a	n/a	0	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-120	1.5	n/a	2/15/2025	0.34	No	154	n/a	n/a	19.48	n/a	n/a	0.00008349	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-121A	1.5	n/a	2/15/2025	0.18	No	154	n/a	n/a	19.48	n/a	n/a	0.00008349	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-124	1.5	n/a	2/14/2025	0.1ND	No	154	n/a	n/a	19.48	n/a	n/a	0.00008349	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-125	1.5	n/a	2/15/2025	0.19	No	154	n/a	n/a	19.48	n/a	n/a	0.00008349	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-126	1.5	n/a	2/15/2025	0.49	No	154	n/a	n/a	19.48	n/a	n/a	0.00008349	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-120	8.49	4.57	2/15/2025	7.06	No	159	n/a	n/a	0	n/a	n/a	0.0001554	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-121A	8.49	4.57	2/15/2025	7.12	No	159	n/a	n/a	0	n/a	n/a	0.0001554	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-124	8.49	4.57	2/14/2025	7.31	No	159	n/a	n/a	0	n/a	n/a	0.0001554	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-125	8.49	4.57	2/15/2025	6.88	No	159	n/a	n/a	0	n/a	n/a	0.0001554	NP Inter (normality) 1 of 2
pH, Field (SU)	HGWC-126	8.49	4.57	2/15/2025	7.13	No	159	n/a	n/a	0	n/a	n/a	0.0001554	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-120**	**94.5**	**n/a**	**2/15/2025**	**175**	**Yes**	**135**	**n/a**	**n/a**	**0.7407**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	HGWC-121A	94.5	n/a	2/15/2025	73.1	No	135	n/a	n/a	0.7407	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-124	94.5	n/a	2/14/2025	61.4	No	135	n/a	n/a	0.7407	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**HGWC-125**	**94.5**	**n/a**	**2/15/2025**	**201**	**Yes**	**135**	**n/a**	**n/a**	**0.7407**	**n/a**	**n/a**	**0.0001085**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	HGWC-126	94.5	n/a	2/15/2025	64.8	No	135	n/a	n/a	0.7407	n/a	n/a	0.0001085	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-120	632	n/a	2/15/2025	626	No	134	n/a	n/a	0	n/a	n/a	0.0001103	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-121A	632	n/a	2/15/2025	457	No	134	n/a	n/a	0	n/a	n/a	0.0001103	NP Inter (normality) 1 of 2
TDS (mg/L)	HGWC-124	632	n/a	2/14/2025	317	No	134	n/a	n/a	0	n/a	n/a	0.0001103	NP Inter (normality) 1 of 2
TDS (mg/L)	**HGWC-125**	**632**	**n/a**	**2/15/2025**	**640**	**Yes**	**134**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001103**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	HGWC-126	632	n/a	2/15/2025	525	No	134	n/a	n/a	0	n/a	n/a	0.0001103	NP Inter (normality) 1 of 2

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Hollow symbols indicate censored values.

Exceeds Limit: HGWC-120, HGWC-121A, HGWC-125

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 135 background values. 4.444% NDs. Annual per-constituent alpha = 0.001085. Individual comparison alpha = 0.0001085 (1 of 2). Comparing 5 points to limit.

Constituent: Boron Analysis Run 4/22/2025 5:32 PM View: Appendix III Interwell

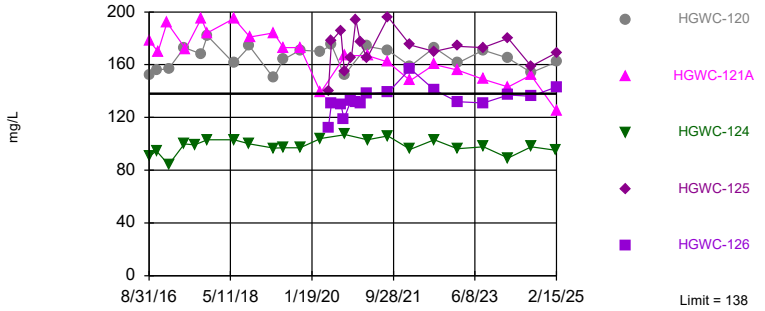
Plant Hammond Client: Southern Company Data: Hammond AP3

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Exceeds Limit: HGWC-120, HGWC-125, HGWC-126

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 135 background values. Annual per-constituent alpha = 0.001085. Individual comparison alpha = 0.0001085 (1 of 2). Comparing 5 points to limit.

Constituent: Calcium Analysis Run 4/22/2025 5:32 PM View: Appendix III Interwell

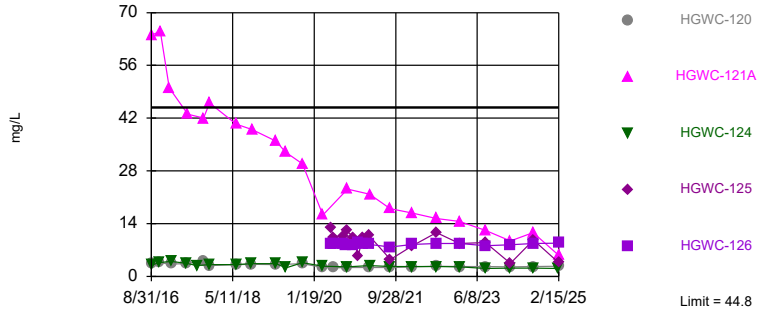
Plant Hammond Client: Southern Company Data: Hammond AP3

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Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 135 background values. Annual per-constituent alpha = 0.001085. Individual comparison alpha = 0.0001085 (1 of 2). Comparing 5 points to limit.

Constituent: Chloride Analysis Run 4/22/2025 5:32 PM View: Appendix III Interwell

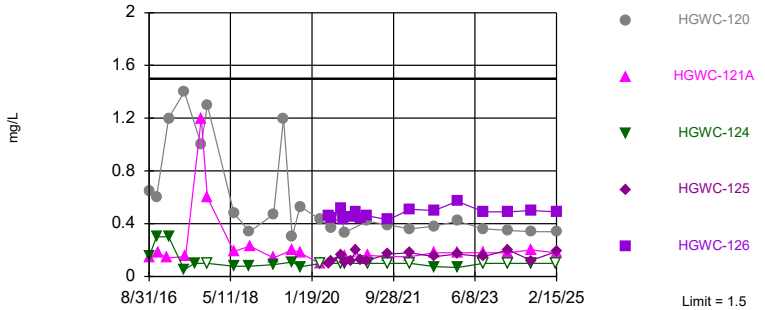
Plant Hammond Client: Southern Company Data: Hammond AP3

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 154 background values. 19.48% NDs. Annual per-constituent alpha = 0.0008346. Individual comparison alpha = 0.00008349 (1 of 2). Comparing 5 points to limit.

Constituent: Fluoride Analysis Run 4/22/2025 5:32 PM View: Appendix III Interwell

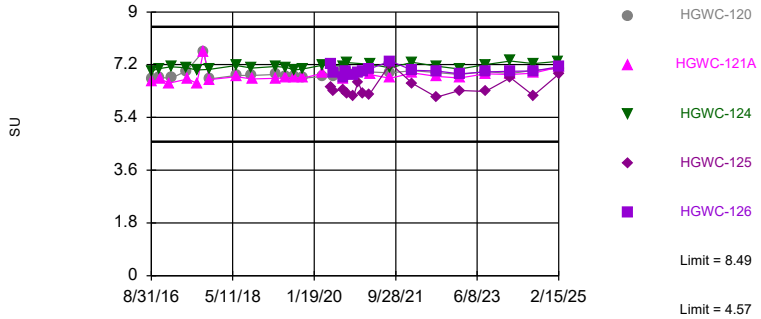
Plant Hammond Client: Southern Company Data: Hammond AP3

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Within Limits

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 159 background values. Annual per-constituent alpha = 0.001554. Individual comparison alpha = 0.0001554 (1 of 2). Comparing 5 points to limit.

Constituent: pH, Field Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

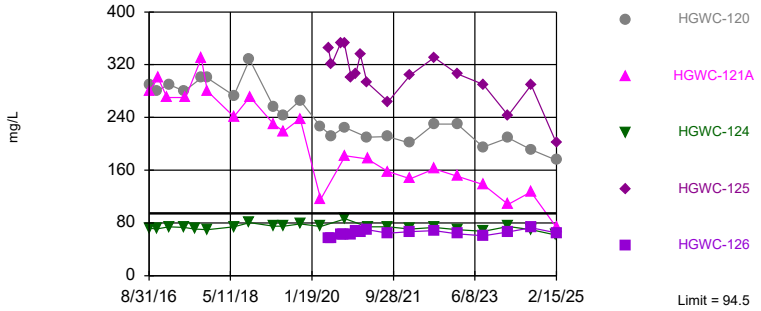
Plant Hammond Client: Southern Company Data: Hammond AP3

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Exceeds Limit: HGWC-120, HGWC-125

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 135 background values. 0.7407% NDs. Annual per-constituent alpha = 0.001085. Individual comparison alpha = 0.0001085 (1 of 2). Comparing 5 points to limit.

Constituent: Sulfate Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

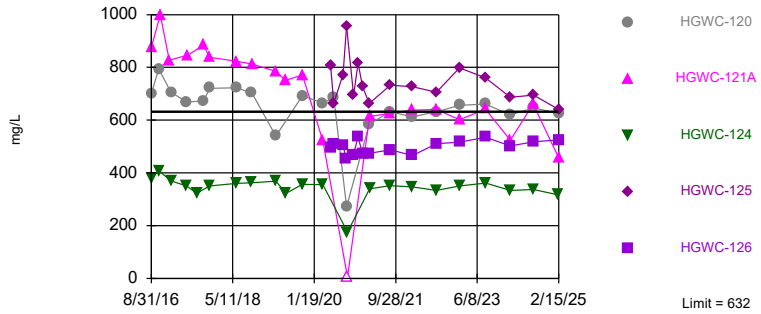
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Hollow symbols indicate censored values.

Exceeds Limit: HGWC-125

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 134 background values. Annual per-constituent alpha = 0.001102. Individual comparison alpha = 0.0001103 (1 of 2). Comparing 5 points to limit.

Constituent: TDS Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
5/19/2016	0.0214 (J)	0.0321 (J)	<0.04						
7/11/2016	0.0142 (J)	0.0337 (J)							
7/12/2016			0.0074 (J)						
8/30/2016	0.0074 (J)	0.0173 (J)	<0.04	0.277					
8/31/2016					0.981	0.494	3.23		
10/19/2016	0.0224 (J)	0.0341 (J)	0.0085 (J)						
10/20/2016				0.336					
10/26/2016					1.28	0.55			
11/7/2016							2.95		
12/6/2016	0.0211 (J)	0.0326 (J)	0.0085 (J)						
1/13/2017							4.01		
1/24/2017	0.0165 (J)	0.0365 (J)	0.01 (J)						
1/25/2017				0.274					
1/27/2017					1.19	0.428			
3/21/2017	0.0187 (J)	0.0349 (J)	0.0079 (J)						
5/22/2017	0.0782	0.0475	0.0131 (J)						
5/25/2017				0.298	1.33	0.544			
6/3/2017							2.62		
8/11/2017				0.285		0.524			
10/2/2017					1.19		2.92		
10/3/2017	0.0198 (J)	0.0386 (J)	0.0097 (J)						
11/15/2017				0.322	1.24	0.531	2.71		
6/4/2018	0.02 (J)	0.036 (J)	0.017 (J)						
6/5/2018				0.24	1.2	0.53	2.6		
10/1/2018	0.013 (J)	0.035 (J)	0.0061 (J)						
10/2/2018				0.28	1.2	0.47			
10/5/2018							2.9		
4/1/2019			0.0066 (J)						
4/2/2019	0.016 (J)	0.034 (J)		0.18	1.1				
4/3/2019						0.45	3		
6/17/2019					1.1		2.4		
6/18/2019				0.25		0.45			
9/23/2019	0.021 (J)	0.04 (J)	0.0081 (J)						
10/21/2019				0.25		0.5	2.4		
10/22/2019					1				
3/24/2020				0.1		0.44			
3/25/2020	0.025 (J)	0.039 (J)	0.0096 (J)		1.1		1.6		
5/22/2020								1.5	0.026 (J)
6/15/2020					1.1				
6/16/2020	0.021 (J)		0.01 (J)					1.5	0.023 (J)
8/25/2020								1.4	0.016 (J)
9/15/2020	0.017 (J)	0.044 (J)	0.0071 (J)	0.22					
9/16/2020									
9/18/2020									0.041 (J)
9/21/2020					0.93			1.4	
9/25/2020									
9/28/2020						0.43	2.3		
11/10/2020									
11/11/2020									0.009 (J)
11/12/2020								1.4	
12/15/2020									
12/16/2020								1.5	0.011 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
1/19/2021									
1/20/2021								1.5	<0.04
3/10/2021	0.015 (J)								
3/11/2021		0.056	0.015 (J)	0.2					
3/12/2021					1.1			1.5	0.016 (J)
3/15/2021						0.4	1.9		
8/11/2021	0.02 (J)								
8/12/2021		0.044	<0.04						
8/13/2021				0.19					
8/16/2021					1.1	0.44	2		
8/19/2021								1.5	0.011 (J)
2/1/2022	0.016 (J)	0.056	0.011 (J)	0.17					
2/2/2022					0.91	0.33	1.6		
2/3/2022								1.6	0.016 (J)
8/2/2022	0.012 (J)	0.047	<0.04	0.18					
8/4/2022					1	0.36	1.8	1.4	0.023 (J)
1/23/2023			0.012 (J)						
1/24/2023	0.015 (J)	0.046		0.17		0.34	1.6		
1/25/2023					0.94			1.4	0.014 (J)
8/8/2023	0.023 (J)	0.06	0.011 (J)	0.18					
8/10/2023					1		1.7	1.6	
8/11/2023						0.3			0.016 (J)
2/13/2024	0.02 (J)	0.051	<0.04	0.15					
2/14/2024								1.4	0.019 (J)
2/15/2024					1		1.2		
2/16/2024						0.31			
8/5/2024	0.02 (J)	0.057	<0.04						
8/6/2024				0.15			1.4		
8/7/2024					1.1	0.34		1.5	0.021 (J)
2/12/2025	0.021 (J)		0.011 (J)						
2/13/2025				0.15					
2/14/2025		0.053				0.33 (J)			
2/15/2025					1.2		0.85	1.5	0.016 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/25/2020			
9/15/2020			
9/16/2020	0.23	0.061 (J)	
9/18/2020			
9/21/2020			
9/25/2020			0.16
9/28/2020			
11/10/2020	0.29	0.057 (J)	
11/11/2020			0.17
11/12/2020			
12/15/2020	0.31	0.052 (J)	
12/16/2020			0.16

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
1/19/2021	0.4	0.049 (J)	
1/20/2021			0.19
3/10/2021	0.39		
3/11/2021		0.06	
3/12/2021			0.19
3/15/2021			
8/11/2021		0.042	
8/12/2021			
8/13/2021	0.31		0.15
8/16/2021			
8/19/2021			
2/1/2022	0.44	0.05	0.14
2/2/2022			
2/3/2022			
8/2/2022	0.31	0.043	0.14
8/4/2022			
1/23/2023			
1/24/2023	0.44	0.037 (J)	0.14
1/25/2023			
8/8/2023	0.55	0.038 (J)	0.15
8/10/2023			
8/11/2023			
2/13/2024	0.49	0.037 (J)	0.15
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	0.52	0.043	0.16
8/7/2024			
2/12/2025	0.54	0.04 (J)	
2/13/2025			0.18
2/14/2025			
2/15/2025			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
5/19/2016	138	22.9	76.2						
7/11/2016	97.2	22.3							
7/12/2016			61.5						
8/30/2016	97.5	26.4	65.1	71.3					
8/31/2016					152	90.4	178		
10/19/2016	99.2	21.7	73.2						
10/20/2016				90.3					
10/26/2016					156	94.5			
11/7/2016							170		
12/6/2016	105	18.2	74.9						
1/13/2017							192		
1/24/2017	95.7	18.5	69.6						
1/25/2017				77.3					
1/27/2017					157	84.2			
3/21/2017	106	18.6	75.7						
5/22/2017	107	17.8	71.5						
5/25/2017				69.9	173	100			
6/3/2017							172		
8/11/2017				79.5		99.1			
10/2/2017					168		195		
10/3/2017	102	20.2	76.3						
11/15/2017				72.8	182	103	184		
6/4/2018	124	19.1	73.4						
6/5/2018				71.4	161	103	195		
10/1/2018	108	20.5 (J)	80.9						
10/2/2018				66.6	174	100			
10/5/2018							181		
4/1/2019			80.5						
4/2/2019	132	22.5 (J)		60.9	150				
4/3/2019						96.7	184		
6/17/2019					164		173		
6/18/2019				75		97.1			
9/23/2019	118	19.5	71						
10/21/2019				80.8		96.9	173		
10/22/2019					171				
3/24/2020				81.2		104			
3/25/2020	127	23	89.8		170		139		
5/22/2020								140	112
6/15/2020					175				
6/16/2020	130		85.1					178	131
8/25/2020								186	130
9/15/2020	103	21.1	73.1	75.8					
9/16/2020									
9/18/2020									119
9/21/2020					152			155	
9/25/2020									
9/28/2020						107	167		
11/10/2020									
11/11/2020									133
11/12/2020								165	
12/15/2020									
12/16/2020								194	132

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
1/19/2021									
1/20/2021								177	131
3/10/2021	111								
3/11/2021		43.8	83.8	60.4					
3/12/2021					174			165	138
3/15/2021						103	167		
8/11/2021	113								
8/12/2021		21.9	84						
8/13/2021				62.9					
8/16/2021					171	106	162		
8/19/2021								196	139
2/1/2022	106	27.2	85.1	57.5					
2/2/2022					159	95.9	148		
2/3/2022								175	157
8/2/2022	117	31.2	84.6	69.5					
8/4/2022					173	103	160	170	141
1/23/2023			85						
1/24/2023	117	29.4		63.3		96.2	156		
1/25/2023					161			174	132
8/8/2023	118	30.7	78.3	64.4					
8/10/2023					171		149	173	
8/11/2023						97.8			131
2/13/2024	116	38.8	83.6	61.9					
2/14/2024								180	137
2/15/2024					165		143		
2/16/2024						89.2			
8/5/2024	113	34.7	83.3						
8/6/2024				73.7			152		
8/7/2024					154	97.7		159	136
2/12/2025	125		86.6						
2/13/2025				68.8					
2/14/2025		51.5				95.1			
2/15/2025					162		125	169	143

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/25/2020			
9/15/2020			
9/16/2020	30	56	
9/18/2020			
9/21/2020			
9/25/2020			56.8
9/28/2020			
11/10/2020	33.6	63.3	
11/11/2020			54.9
11/12/2020			
12/15/2020	28.7	62.6	
12/16/2020			56.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
1/19/2021	33	60.1	
1/20/2021			55
3/10/2021	12.1 (D)		
3/11/2021		59.6	
3/12/2021			56.5
3/15/2021			
8/11/2021		61	
8/12/2021			
8/13/2021	28.9		53
8/16/2021			
8/19/2021			
2/1/2022	24.8	55.9	51.3
2/2/2022			
2/3/2022			
8/2/2022	20.9	54.1	49.9
8/4/2022			
1/23/2023			
1/24/2023	13.2	56.6	53.9
1/25/2023			
8/8/2023	8.1	52.8	48.1
8/10/2023			
8/11/2023			
2/13/2024	9.9	53.3	50.7
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	7.1	57.2	53.3
8/7/2024			
2/12/2025	7.2	61.8	
2/13/2025			55.9
2/14/2025			
2/15/2025			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-126	HGWC-125
5/19/2016	9.94	6.14	5.93						
7/11/2016	6.3	5.9							
7/12/2016			6.2						
8/30/2016	6	6.2	6.4	2.8					
8/31/2016					3.5	3	64		
10/19/2016	5.8	6.1	6.5						
10/20/2016				2.8					
10/26/2016					3.6	3.6			
11/7/2016							65		
12/6/2016	5.4	6	7.2						
1/13/2017							50		
1/24/2017	5.2	6.1	6.4						
1/25/2017				2.8					
1/27/2017					3.3	4			
3/21/2017	4.6	5.9	7.5						
5/22/2017	4.6	5.9	6.5						
5/25/2017				2.9	3.4	3.5			
6/3/2017							43		
8/11/2017				3		2.9			
10/2/2017					4.2		42		
10/3/2017	5.6	6.3	6.5						
11/15/2017				3.1	2.9	3.1	46		
6/4/2018	13.1	6.1	6.3						
6/5/2018				3	3.1	3.1	40.4		
10/1/2018	6.6	6.4	6.4						
10/2/2018				3.1	3.2	3.4			
10/5/2018							39		
4/1/2019			6.5						
4/2/2019	20.3	5.8		3.6	3.1				
4/3/2019						3.4	35.9		
6/17/2019							32.9		
6/18/2019				3.2		2.3 (J)			
9/23/2019	17.7	5.1	5.9						
10/21/2019				4.5		3.6	29.9		
10/22/2019					3.4				
3/24/2020				4.5		2.7			
3/25/2020	20.4	5.2	6.1		2.4		16.3		
5/22/2020								8.6	12.9
6/15/2020					2.3				
6/16/2020	41.1		5.8					8.6	10.4
8/25/2020								8.7	10.6
9/15/2020	13.4	5	6	3.6					
9/16/2020									
9/18/2020								8.4	
9/21/2020					2.4				12.1
9/25/2020									
9/28/2020						2.5	23.2		
11/10/2020									
11/11/2020								8.3	
11/12/2020									10.4
12/15/2020									
12/16/2020								8.9	5.3

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-126	HGWC-125
1/19/2021									
1/20/2021								8.5	10.2
3/10/2021	7.4								
3/11/2021		5.1	5.9	2.3					
3/12/2021					2.4			8.5	10.8
3/15/2021						2.9	21.8		
8/11/2021	9.6								
8/12/2021		5.2	4.8						
8/13/2021				2.6					
8/16/2021					2.4	2.6	18		
8/19/2021								7.8	4.5
2/1/2022	7.5	7	5.7	2.2					
2/2/2022					2.5	2.6	16.8		
2/3/2022								8.5	8.1
8/2/2022	14.1	7.8	5.9	2.7					
8/4/2022					2.7	2.6	15.4	8.7	11.6
1/23/2023			5.6						
1/24/2023	9	7.1		2.4		2.5	14.6		
1/25/2023					2.6			8.7	8.7
8/8/2023	26	6.6	5.3	2.2					
8/10/2023					2.6		12.2		9
8/11/2023						2.1		8.1	
2/13/2024	10	6.3	5.3	2.4					
2/14/2024								8.4	3.5
2/15/2024					2.5		9.4		
2/16/2024						2.2			
8/5/2024	8.7	7.9	5.2						
8/6/2024				2.1			11.6		
8/7/2024					2.6	2.2		8.7	9.7
2/12/2025	4.8		5						
2/13/2025				1.6					
2/14/2025		8.5				2.1			
2/15/2025					2.7		5.6	8.8	3.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/25/2020			
9/15/2020			
9/16/2020	4.1	5.65 (D)	
9/18/2020			
9/21/2020			
9/25/2020			3.6
9/28/2020			
11/10/2020	4.4	7.8	
11/11/2020			3.3
11/12/2020			
12/15/2020	4.7	9.4	
12/16/2020			3.4

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)
1/19/2021	4.1	9.5	
1/20/2021			3.5
3/10/2021		12.3	
3/11/2021	4.5		
3/12/2021			3.3
3/15/2021			
8/11/2021	3.5		
8/12/2021			
8/13/2021		39.9	3.3
8/16/2021			
8/19/2021			
2/1/2022	4.1	44.8	3.5
2/2/2022			
2/3/2022			
8/2/2022	4.3	19.8	3.9
8/4/2022			
1/23/2023			
1/24/2023	4.3	24.9	3.5
1/25/2023			
8/8/2023	3.5	27	3.6
8/10/2023			
8/11/2023			
2/13/2024	3.9	27.7	3.4
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	4	30.2	3.6
8/7/2024			
2/12/2025	3.8	30.7	
2/13/2025			3.2
2/14/2025			
2/15/2025			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-124	HGWC-120	HGWC-121A	HGWC-126	HGWC-125
5/19/2016	0.105 (J)	0.0513 (J)	0.0303 (J)						
7/11/2016	0.16 (J)		0.05 (J)						
7/12/2016		0.12 (J)							
8/30/2016	0.09 (J)	0.09 (J)	0.06 (J)	0.19 (J)					
8/31/2016					0.15 (J)	0.65	0.14 (J)		
10/19/2016	0.1 (J)	0.1 (J)	0.04 (J)						
10/20/2016				0.13 (J)					
10/26/2016					0.3	0.6			
11/7/2016							0.18 (J)		
12/6/2016	0.11 (J)	0.21 (J)	0.36						
1/13/2017							0.14 (J)		
1/24/2017	0.09 (J)	0.06 (J)	<0.1						
1/25/2017				0.22 (J)					
1/27/2017					0.3	1.2			
3/21/2017	0.13 (J)	0.005 (J)	<0.1						
5/22/2017	0.12 (J)	0.05 (J)	<0.1						
5/25/2017				0.12 (J)	0.05 (J)	1.4			
6/3/2017							0.15 (J)		
8/11/2017				0.12 (J)	0.1 (J)				
10/2/2017						1	1.2		
10/3/2017	0.13 (J)	0.13 (J)	<0.1						
11/15/2017				0.05 (J)	<0.1	1.3	0.6		
4/2/2018	<0.1		<0.1						
4/3/2018		<0.1							
6/4/2018	0.074 (J)	<0.1	<0.1						
6/5/2018				0.15 (J)	0.078 (J)	0.48	0.19 (J)		
10/1/2018	<0.1	<0.1	<0.1						
10/2/2018				0.22 (J)	0.078 (J)	0.34			
10/5/2018							0.23 (J)		
3/12/2019	0.29 (J)	0.072 (J)	0.038 (J)						
4/1/2019		0.029 (J)							
4/2/2019	0.1 (J)		0.071 (J)	0.2 (J)		0.47			
4/3/2019					0.089 (J)		0.14 (J)		
6/17/2019						1.2			
6/18/2019				0.14 (J)					
8/22/2019				0.12 (J)		0.3 (J)	0.2 (J)		
8/23/2019					0.11 (J)				
9/23/2019	0.078 (J)	<0.1	<0.1						
10/21/2019				0.15 (J)	0.073 (J)		0.18 (J)		
10/22/2019						0.53			
3/2/2020	0.076 (J)	<0.1	<0.1						
3/24/2020				0.085 (J)	<0.1				
3/25/2020	0.098 (J)	<0.1	<0.1			0.43	0.095 (J)		
5/22/2020								0.46	0.1 (J)
6/15/2020						0.37			
6/16/2020	0.071 (J)	<0.1						0.44	0.12
8/24/2020				0.075 (J)					
8/25/2020		<0.1	<0.1					0.52	0.16
8/26/2020						0.48	0.16		
8/27/2020					<0.1				
8/28/2020	0.08 (J)								
9/15/2020	0.082 (J)	<0.1	<0.1	0.096 (J)					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-124	HGWC-120	HGWC-121A	HGWC-126	HGWC-125
9/16/2020									
9/18/2020								0.43	
9/21/2020						0.33			0.11
9/25/2020									
9/28/2020					<0.1		0.15		
11/10/2020									
11/11/2020								0.45	
11/12/2020									0.12
12/15/2020									
12/16/2020								0.49	0.2
1/19/2021									
1/20/2021								0.44	0.13
2/8/2021	0.078 (J)								
2/9/2021		0.074 (J)	<0.1						
3/10/2021	0.079 (J)								
3/11/2021		<0.1	0.1	0.059 (J)					
3/12/2021						0.42		0.46	0.12
3/15/2021					<0.1		0.16		
8/11/2021	0.058 (J)								
8/12/2021		<0.1	<0.1						
8/13/2021				0.065 (J)					
8/16/2021					<0.1	0.39	0.15		
8/19/2021								0.43	0.17
2/1/2022	0.064 (J)	<0.1	<0.1	0.062 (J)					
2/2/2022					<0.1	0.36	0.15		
2/3/2022								0.51	0.18
8/2/2022	0.09 (J)	0.067 (J)	0.053 (J)	0.1					
8/4/2022					0.074 (J)	0.38	0.18	0.5	0.15
1/23/2023		0.061 (J)							
1/24/2023	0.089 (J)		0.053 (J)	0.13	0.068 (J)		0.18		
1/25/2023						0.42		0.57	0.17
8/8/2023	0.088 (J)	0.055 (J)	0.07 (J)	0.091 (J)					
8/10/2023						0.36	0.18		0.15
8/11/2023					<0.1			0.49	
2/13/2024	0.071 (J)	<0.1	0.17	0.081 (J)					
2/14/2024								0.49	0.2
2/15/2024						0.35	0.18		
2/16/2024					<0.1				
8/5/2024	0.11	0.077 (J)	0.12						
8/6/2024				0.14			0.2		
8/7/2024					<0.1	0.34		0.5	0.12
2/12/2025	0.1	0.073 (J)							
2/13/2025				0.12					
2/14/2025			0.1		<0.1				
2/15/2025						0.34	0.18	0.49	0.19

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
4/2/2018			
4/3/2018			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
3/12/2019			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
8/22/2019			
8/23/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/2/2020			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/24/2020			
8/25/2020			
8/26/2020			
8/27/2020			
8/28/2020			
9/15/2020			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
9/16/2020	0.37 (D)	0.22	
9/18/2020			
9/21/2020			
9/25/2020			0.21
9/28/2020			
11/10/2020	0.59	0.19	
11/11/2020			0.19
11/12/2020			
12/15/2020	0.67	0.21	
12/16/2020			0.18
1/19/2021	0.74	0.16	
1/20/2021			0.22
2/8/2021			
2/9/2021	0.44	0.19	
3/10/2021	0.65		
3/11/2021		0.2	
3/12/2021			0.2
3/15/2021			
8/11/2021		0.15	
8/12/2021			
8/13/2021	0.87		0.2
8/16/2021			
8/19/2021			
2/1/2022	0.96	0.19	0.15
2/2/2022			
2/3/2022			
8/2/2022	0.8	0.22	0.21
8/4/2022			
1/23/2023			
1/24/2023	1.3	0.23	0.19
1/25/2023			
8/8/2023	1.3	0.18	0.19
8/10/2023			
8/11/2023			
2/13/2024	1.5	0.2	0.17
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	1.3	0.21	0.2
8/7/2024			
2/12/2025	1.1	0.21	
2/13/2025			0.22
2/14/2025			
2/15/2025			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-121A	HGWC-124	HGWC-120	HGWC-126	HGWC-125
5/19/2016	7.27	7.45	5.81						
7/11/2016	7.06		5.68						
7/12/2016		7.32							
8/30/2016	7.28	7.43	5.63	6.75					
8/31/2016					6.62	6.99	6.73		
10/19/2016	7.02	7.03	5.46						
10/20/2016				6.73					
10/26/2016						7.06	6.77		
11/7/2016					6.71				
12/6/2016	7.09	7.08	5.38						
1/13/2017					6.57				
1/24/2017	7.2	7.39	5.37						
1/25/2017				6.88					
1/27/2017						7.13	6.74		
3/21/2017	7.01	6.83	4.9						
5/22/2017	7.11	7.02	5.2						
5/25/2017				6.55		7.1	6.99		
6/3/2017					6.71				
8/11/2017				6.56	6.56	7.02			
10/2/2017					7.65		7.66		
10/3/2017	7.21	7.47	5.3						
11/15/2017				6.47	6.69	7.04	6.71		
4/2/2018	7.1		5.4						
4/3/2018		7.38							
6/4/2018	7.06	7.38	5.27						
6/5/2018				6.66	6.79	7.17	6.83		
10/1/2018	7.09	7.13	5.31						
10/2/2018				6.44		7.08	6.83		
10/5/2018					6.71				
3/12/2019	7.03	7.29	5.42						
4/1/2019		7.16							
4/2/2019	6.86		5.41	6.57			6.87		
4/3/2019					6.73	7.14			
6/17/2019					6.75		6.79		
6/18/2019				6.46		7.11			
8/22/2019				6.51	6.77		6.79		
8/23/2019						7.02			
9/23/2019	7.02	7.3	5.33						
9/30/2019	7	7.37	5.35						
10/21/2019				6.69	6.74	7.05			
10/22/2019							6.74		
3/2/2020	7.1	7.12	5.43						
3/24/2020				7.08		7.18			
3/25/2020	6.95	7.4	5.36		6.91		6.8		
5/22/2020								7.22	6.43
6/15/2020							6.8		
6/16/2020	6.97	7.31						6.92	6.29
8/24/2020				6.54					
8/25/2020		7.14	5.15					6.78	6.36
8/26/2020					6.73		6.96		
8/27/2020						7.15			
8/28/2020	7.02								

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/22/2025 5:33 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-121A	HGWC-124	HGWC-120	HGWC-126	HGWC-125
9/15/2020	7.15	7.29	5.22	6.68					
9/16/2020									
9/18/2020								6.97	
9/21/2020							6.98		6.22
9/25/2020									
9/28/2020					6.93	7.27			
11/10/2020									
11/11/2020								6.86	
11/12/2020									6.13
12/15/2020									
12/16/2020								6.93	6.61
1/19/2021									
1/20/2021								6.99	6.23
2/8/2021	7.11								
2/9/2021		7.23	5.42						
3/10/2021	6.95								
3/11/2021		7.33	5.8	6.65					
3/12/2021							6.95	7.05	6.18
3/15/2021					6.87	7.22			
8/11/2021	6.98								
8/12/2021		7.31	5.05						
8/13/2021				6.56					
8/16/2021					6.74	7.09	6.92		
8/19/2021								7.32	7.24
2/1/2022	7.19	7.45	5.24	6.57					
2/2/2022					6.92	7.28	7		
2/3/2022								7.01	6.56
8/2/2022	7.03	7.02	4.57	6.67					
8/4/2022					6.8	7.15	6.93	6.99	6.09
1/23/2023		7.32							
1/24/2023	6.76		5.22	6.43	6.75	7.05			
1/25/2023							6.87	6.89	6.32
8/8/2023	7.05	7.42	5.01	6.67					
8/10/2023					6.89		6.96		6.29
8/11/2023						7.2		6.95	
2/13/2024	7.06	7.35	5.49	6.82					
2/14/2024								6.98	6.76
2/15/2024					6.87		6.9		
2/16/2024						7.33			
5/3/2024				6.78					
8/5/2024	7.29	7.27	4.91						
8/6/2024				6.86	6.91				
8/7/2024						7.24	7.01	6.99	6.15
2/12/2025	7.08	7.37							
2/13/2025				6.99					
2/14/2025		7.45	5.75			7.31			
2/15/2025					7.12		7.06	7.13	6.88

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/22/2025 5:34 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
4/2/2018			
4/3/2018			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
3/12/2019			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
8/22/2019			
8/23/2019			
9/23/2019			
9/30/2019			
10/21/2019			
10/22/2019			
3/2/2020			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/24/2020			
8/25/2020			
8/26/2020			
8/27/2020			
8/28/2020			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 4/22/2025 5:34 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
9/15/2020			
9/16/2020	7.83	7.52	
9/18/2020			
9/21/2020			
9/25/2020			7.57
9/28/2020			
11/10/2020	7.84	7.27	
11/11/2020			7.4
11/12/2020			
12/15/2020	7.87	7.39	
12/16/2020			7.39
1/19/2021	7.86	7.39	
1/20/2021			7.47
2/8/2021			
2/9/2021	7.84	7.44	
3/10/2021	7.92		
3/11/2021		7.46	
3/12/2021			7.52
3/15/2021			
8/11/2021		7.4	
8/12/2021			
8/13/2021	7.77		7.42
8/16/2021			
8/19/2021			
2/1/2022	8.25	7.52	7.45
2/2/2022			
2/3/2022			
8/2/2022	7.9	7.15	7.39
8/4/2022			
1/23/2023			
1/24/2023	8.22	7.56	7.15
1/25/2023			
8/8/2023	8.2	7.39	7.39
8/10/2023			
8/11/2023			
2/13/2024	8.1	7.47	7.47
2/14/2024			
2/15/2024			
2/16/2024			
5/3/2024			
8/5/2024			
8/6/2024	8.36	7.46	7.47
8/7/2024			
2/12/2025	8.49	7.5	
2/13/2025			7.63
2/14/2025			
2/15/2025			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 5:34 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
5/19/2016	66.9	48.6	42.3						
7/11/2016	41	45							
7/12/2016			44						
8/30/2016	36	42	40	49					
8/31/2016					290	72	280		
10/19/2016	46	44	43						
10/20/2016				49					
10/26/2016					280	71			
11/7/2016							300		
12/6/2016	59	44	43						
1/13/2017							270		
1/24/2017	46	46	48						
1/25/2017				48					
1/27/2017					290	74			
3/21/2017	63	46	45						
5/22/2017	77	48	46						
5/25/2017				48	280	73			
6/3/2017							270		
8/11/2017				47		71			
10/2/2017					300		330		
10/3/2017	42	47	48						
11/15/2017				49	300	70	280		
6/4/2018	71.8	47.8	46.6						
6/5/2018				48.9	273	74	241		
10/1/2018	49.1	48.1	48.6						
10/2/2018				48.6	328	80.7			
10/5/2018							271		
4/1/2019			50.4						
4/2/2019	84.3	48.7		39.6	256				
4/3/2019						75.2	230		
6/17/2019					243		219		
6/18/2019				44.5		75.3			
9/23/2019	70.2	47.2	43.9						
10/21/2019				45.6		78.5	238		
10/22/2019					266				
3/24/2020				25.9		74.6			
3/25/2020	85.9	46.3	50.5		226		116		
5/22/2020								345	56.1
6/15/2020					212				
6/16/2020	88.2		49.5					320	57.6
8/25/2020								353	62.8
9/15/2020	47.3	51.5	44.7	41.4					
9/16/2020									
9/18/2020									62.7
9/21/2020					225			352	
9/25/2020									
9/28/2020						86.2	182		
11/10/2020									
11/11/2020									62.3
11/12/2020								300	
12/15/2020									
12/16/2020								306	68.1

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 5:34 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
1/19/2021									
1/20/2021								335	66.6
3/10/2021	49.6								
3/11/2021		52.9	50.4	40.7					
3/12/2021					210			293	69.7
3/15/2021						74	177		
8/11/2021	48.9								
8/12/2021		47.4	38.6						
8/13/2021				42.1					
8/16/2021					211	74	158		
8/19/2021								264	64.4
2/1/2022	43.7	67.1	46	41.1					
2/2/2022					201	70.7	147		
2/3/2022								304	66.8
8/2/2022	58.1	86.9	43.5	41.5					
8/4/2022					230	73.1	162	331	68.3
1/23/2023			39.5						
1/24/2023	48.3	79.7		36.5		69.6	151		
1/25/2023					230			306	63.7
8/8/2023	67.7	89.9	35	34.9					
8/10/2023					195		138	290	
8/11/2023						67.6			60.5
2/13/2024	50.4	93.9	35.5	35.6					
2/14/2024								243	66.4
2/15/2024					209		108		
2/16/2024						74.5			
8/5/2024	49.4	87.2	31.1						
8/6/2024				37.8			127		
8/7/2024					191	69.7		289	72.8
2/12/2025	43.8		28						
2/13/2025				32.7					
2/14/2025		94.5				61.4			
2/15/2025					175		73.1	201	64.8

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 5:34 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/25/2020			
9/15/2020			
9/16/2020	24.95 (D)	43	
9/18/2020			
9/21/2020			
9/25/2020			6.8
9/28/2020			
11/10/2020	6.3	39	
11/11/2020			11.2
11/12/2020			
12/15/2020	6.7	38.8	
12/16/2020			11.3

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 4/22/2025 5:34 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
1/19/2021	7.4	37.3	
1/20/2021			14.2
3/10/2021	<1		
3/11/2021		38.6	
3/12/2021			8.7
3/15/2021			
8/11/2021		30.5	
8/12/2021			
8/13/2021	56.1		8.1
8/16/2021			
8/19/2021			
2/1/2022	56.3	37.5	2.5
2/2/2022			
2/3/2022			
8/2/2022	13.2	37	2.1
8/4/2022			
1/23/2023			
1/24/2023	10.1	34.7	5.2
1/25/2023			
8/8/2023	1.3	25.6	2.2
8/10/2023			
8/11/2023			
2/13/2024	2	28.9	6
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	0.86 (J)	25.5	2.9
8/7/2024			
2/12/2025	0.51 (J)	25.2	
2/13/2025			9.5
2/14/2025			
2/15/2025			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 4/22/2025 5:34 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
5/19/2016	421	267	143						
7/11/2016	363		125						
7/12/2016		249							
8/30/2016	330	254	168	280					
8/31/2016					700	379	876		
10/19/2016	380	357	176						
10/20/2016				265					
10/26/2016					795	409			
11/7/2016							1000		
12/6/2016	377	285	145						
1/13/2017							827		
1/24/2017	342	300	129						
1/25/2017				371					
1/27/2017					706	370			
3/21/2017	340	288	103						
5/22/2017	338	263	92						
5/25/2017				237	669	351			
6/3/2017							846		
8/11/2017				253		322			
10/2/2017					672		884		
10/3/2017	343	300	127						
11/15/2017				261	721	350	838		
6/4/2018	415	266	140						
6/5/2018				276	723	360	823		
10/1/2018	354	291	135						
10/2/2018				256	703	363			
10/5/2018							813		
4/1/2019		284							
4/2/2019	452		133	814 (O)	540				
4/3/2019						369	785		
6/17/2019							751		
6/18/2019				233		323			
9/23/2019	442	268	129						
10/21/2019				296		357	771		
10/22/2019					693				
3/24/2020				278		355			
3/25/2020	496	284	138		665		521		
5/22/2020								809	496
6/15/2020					685				
6/16/2020	632	448						665	508
8/25/2020								772	505
9/15/2020	265	258	124	267					
9/16/2020									
9/18/2020									452
9/21/2020					272			956	
9/25/2020									
9/28/2020						176	<10		
11/10/2020									
11/11/2020									468
11/12/2020								694	
12/15/2020									
12/16/2020								816	536

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 4/22/2025 5:34 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-124	HGWC-121A	HGWC-125	HGWC-126
1/19/2021									
1/20/2021								726	472
3/10/2021	348								
3/11/2021		267	169	206					
3/12/2021					584			664	474
3/15/2021						340	614		
8/11/2021	366								
8/12/2021		265	118						
8/13/2021				201					
8/16/2021					632	352	626		
8/19/2021								732	488
2/1/2022	270	350	156	203					
2/2/2022					612	347	638		
2/3/2022								726	466
8/2/2022	400	287	196	217					
8/4/2022					632	334	640	706	510
1/23/2023		293							
1/24/2023	369		164	246		350	602		
1/25/2023					656			798	517
8/8/2023	457	285	189	248					
8/10/2023					661		642	760	
8/11/2023						361			535
2/13/2024	402	284	214	222					
2/14/2024								687	502
2/15/2024					620		524		
2/16/2024						333			
8/5/2024	444	304	217						
8/6/2024				270			661		
8/7/2024					647	337		695	518
2/12/2025	374	267							
2/13/2025				206					
2/14/2025			242			317			
2/15/2025					626		457	640	525

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 4/22/2025 5:34 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
5/19/2016			
7/11/2016			
7/12/2016			
8/30/2016			
8/31/2016			
10/19/2016			
10/20/2016			
10/26/2016			
11/7/2016			
12/6/2016			
1/13/2017			
1/24/2017			
1/25/2017			
1/27/2017			
3/21/2017			
5/22/2017			
5/25/2017			
6/3/2017			
8/11/2017			
10/2/2017			
10/3/2017			
11/15/2017			
6/4/2018			
6/5/2018			
10/1/2018			
10/2/2018			
10/5/2018			
4/1/2019			
4/2/2019			
4/3/2019			
6/17/2019			
6/18/2019			
9/23/2019			
10/21/2019			
10/22/2019			
3/24/2020			
3/25/2020			
5/22/2020			
6/15/2020			
6/16/2020			
8/25/2020			
9/15/2020			
9/16/2020	270	272	
9/18/2020			
9/21/2020			
9/25/2020			263
9/28/2020			
11/10/2020	287	307	
11/11/2020			276
11/12/2020			
12/15/2020	295	289	
12/16/2020			294

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 4/22/2025 5:34 PM View: Appendix III Interwell

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
1/19/2021	278	270	
1/20/2021			289
3/10/2021	289		
3/11/2021		279	
3/12/2021			260
3/15/2021			
8/11/2021		277	
8/12/2021			
8/13/2021	436		272
8/16/2021			
8/19/2021			
2/1/2022	444	156	268
2/2/2022			
2/3/2022			
8/2/2022	311	278	261
8/4/2022			
1/23/2023			
1/24/2023	363	271	289
1/25/2023			
8/8/2023	361	274	261
8/10/2023			
8/11/2023			
2/13/2024	379	291	279
2/14/2024			
2/15/2024			
2/16/2024			
8/5/2024			
8/6/2024	380	283	256
8/7/2024			
2/12/2025	363	273	
2/13/2025			272
2/14/2025			
2/15/2025			

FIGURE E.

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**HGWA-2 (bg)**	**0.002553**	**192**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-43D (bg)**	**-0.00484**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-44D (bg)**	**0.06008**	**56**	**43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-122 (bg)**	**-0.01946**	**-159**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWC-121A**	**-0.2456**	**-181**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-2 (bg)**	**1.743**	**142**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**1.808**	**153**	**111**	**Yes**	**25**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-44D (bg)**	**-6.278**	**-58**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-2 (bg)**	**4.631**	**200**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-43D (bg)**	**-3.467**	**-66**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWA-122 (bg)**	**-1.832**	**-153**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-120**	**-13.99**	**-181**	**-98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-125**	**-19.76**	**-71**	**-58**	**Yes**	**16**	**0**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

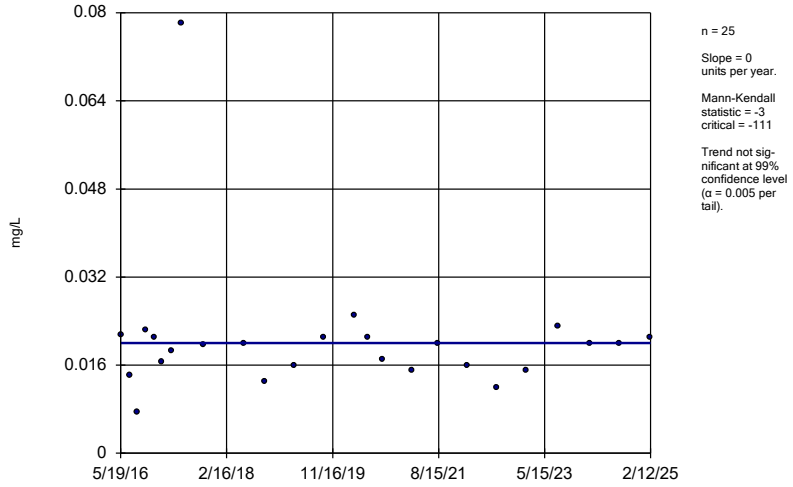
Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	0	-3	-111	No	25	0	n/a	0.01	NP
Boron (mg/L)	**HGWA-2 (bg)**	**0.002553**	**192**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-3 (bg)	0.0004291	70	111	No	25	24	n/a	0.01	NP
Boron (mg/L)	**HGWA-43D (bg)**	**-0.00484**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**HGWA-44D (bg)**	**0.06008**	**56**	**43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWA-45D (bg)	-0.001229	-10	-43	No	13	0	n/a	0.01	NP
Boron (mg/L)	**HGWA-122 (bg)**	**-0.01946**	**-159**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-120	-0.0298	-90	-98	No	23	0	n/a	0.01	NP
Boron (mg/L)	**HGWC-121A**	**-0.2456**	**-181**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	HGWC-125	0	12	58	No	16	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.026	100	111	No	25	0	n/a	0.01	NP
Calcium (mg/L)	**HGWA-2 (bg)**	**1.743**	**142**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**HGWA-3 (bg)**	**1.808**	**153**	**111**	**Yes**	**25**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWA-43D (bg)	-1.38	-24	-43	No	13	0	n/a	0.01	NP
Calcium (mg/L)	**HGWA-44D (bg)**	**-6.278**	**-58**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	HGWA-45D (bg)	-1.215	-30	-43	No	13	0	n/a	0.01	NP
Calcium (mg/L)	HGWA-122 (bg)	-1.424	-69	-92	No	22	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-120	0.2519	12	98	No	23	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-125	-0.1971	-1	-58	No	16	0	n/a	0.01	NP
Calcium (mg/L)	HGWC-126	2.924	58	58	No	16	0	n/a	0.01	NP
Sulfate (mg/L)	HGWA-1 (bg)	0.3291	19	111	No	25	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-2 (bg)**	**4.631**	**200**	**105**	**Yes**	**24**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-3 (bg)	-0.7966	-54	-111	No	25	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-43D (bg)**	**-3.467**	**-66**	**-43**	**Yes**	**13**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	HGWA-44D (bg)	-1.791	-24	-43	No	13	7.692	n/a	0.01	NP
Sulfate (mg/L)	HGWA-45D (bg)	-1.548	-24	-43	No	13	0	n/a	0.01	NP
Sulfate (mg/L)	**HGWA-122 (bg)**	**-1.832**	**-153**	**-92**	**Yes**	**22**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-120**	**-13.99**	**-181**	**-98**	**Yes**	**23**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**HGWC-125**	**-19.76**	**-71**	**-58**	**Yes**	**16**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	HGWA-1 (bg)	4.4	56	111	No	25	0	n/a	0.01	NP
TDS (mg/L)	HGWA-2 (bg)	8.099	101	105	No	24	0	n/a	0.01	NP
TDS (mg/L)	HGWA-3 (bg)	0.8767	34	111	No	25	0	n/a	0.01	NP
TDS (mg/L)	HGWA-43D (bg)	-0.688	-4	-43	No	13	0	n/a	0.01	NP
TDS (mg/L)	HGWA-44D (bg)	24.11	41	43	No	13	0	n/a	0.01	NP
TDS (mg/L)	HGWA-45D (bg)	-2.428	-15	-43	No	13	0	n/a	0.01	NP
TDS (mg/L)	HGWA-122 (bg)	-6.293	-71	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	HGWC-125	-16.65	-35	-58	No	16	0	n/a	0.01	NP

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Sen's Slope Estimator

HGWA-1 (bg)



n = 25

Slope = 0 units per year.

Mann-Kendall statistic = -3 critical = -111

Trend not significant at 99% confidence level (α = 0.005 per tail).

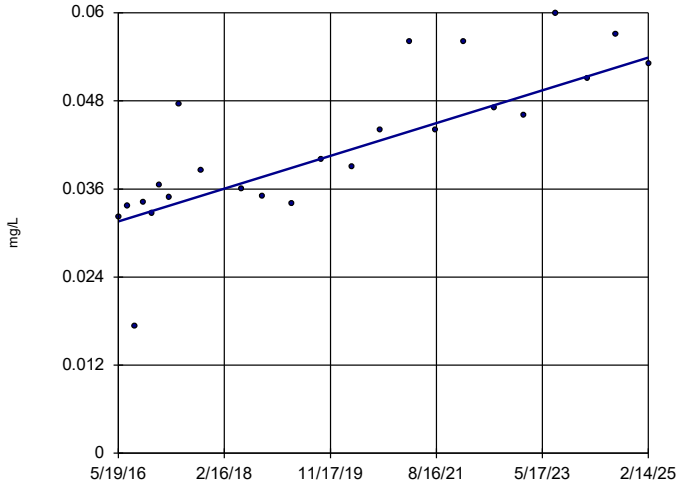
Constituent: Boron Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-2 (bg)



n = 24

Slope = 0.002553 units per year.

Mann-Kendall statistic = 192 critical = 105

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

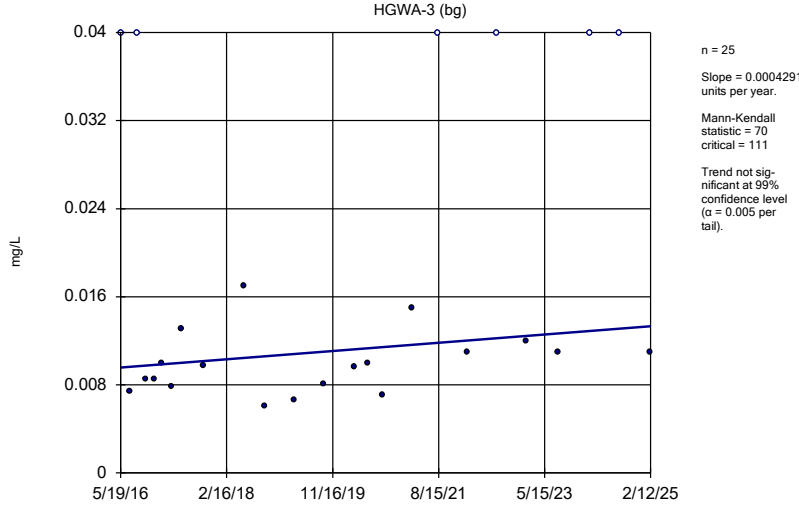
Plant Hammond Client: Southern Company Data: Hammond AP3

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Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-3 (bg)



n = 25

Slope = 0.0004291 units per year.

Mann-Kendall statistic = 70 critical = 111

Trend not significant at 99% confidence level (α = 0.005 per tail).

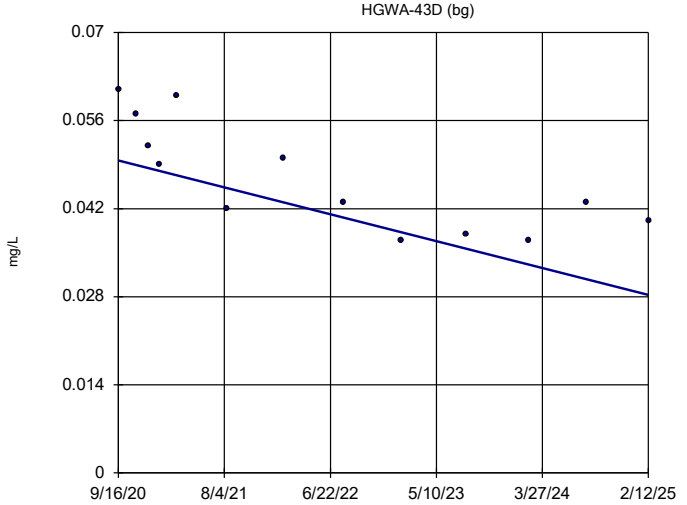
Constituent: Boron Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-43D (bg)



n = 13

Slope = -0.00484 units per year.

Mann-Kendall statistic = -48 critical = -43

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

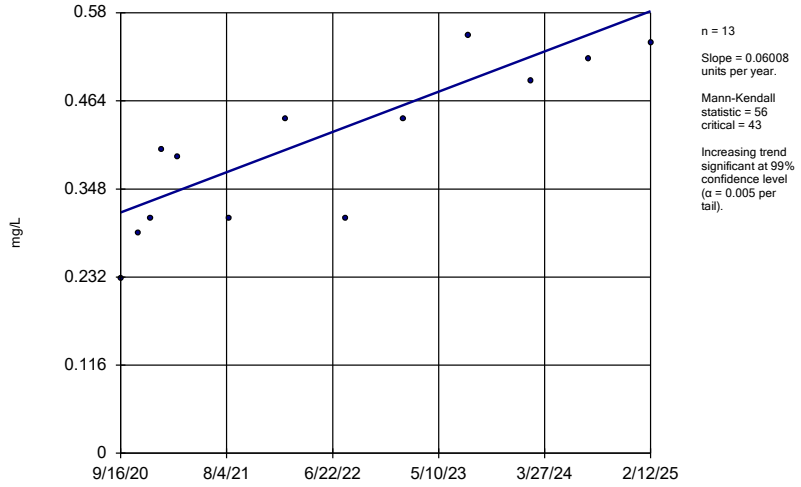
Constituent: Boron Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-44D (bg)



n = 13

Slope = 0.06008 units per year.

Mann-Kendall statistic = 56 critical = 43

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

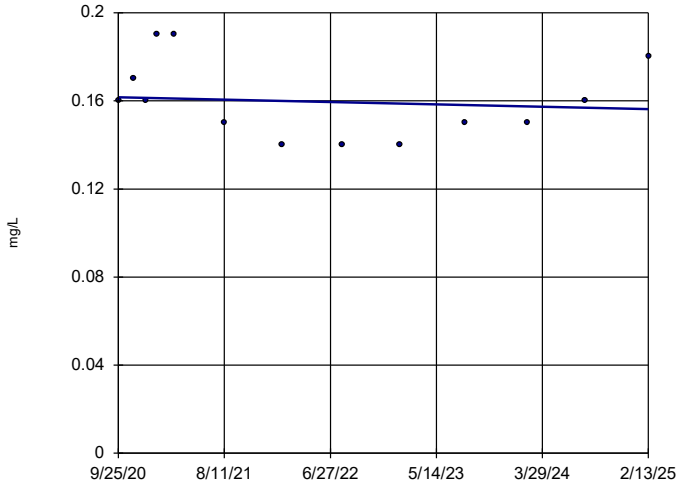
Constituent: Boron Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-45D (bg)



n = 13

Slope = -0.001229 units per year.

Mann-Kendall statistic = -10 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

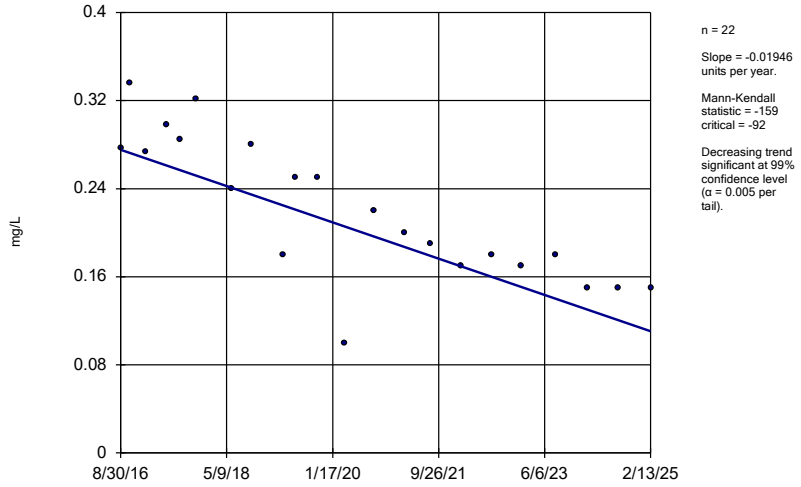
Constituent: Boron Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-122 (bg)



n = 22

Slope = -0.01946 units per year.

Mann-Kendall statistic = -159 critical = -92

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

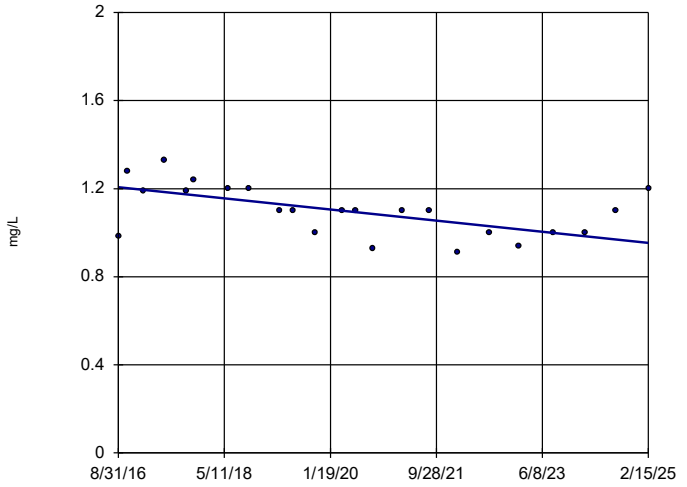
Constituent: Boron Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWC-120



n = 23

Slope = -0.0298 units per year.

Mann-Kendall statistic = -90 critical = -98

Trend not significant at 99% confidence level (α = 0.005 per tail).

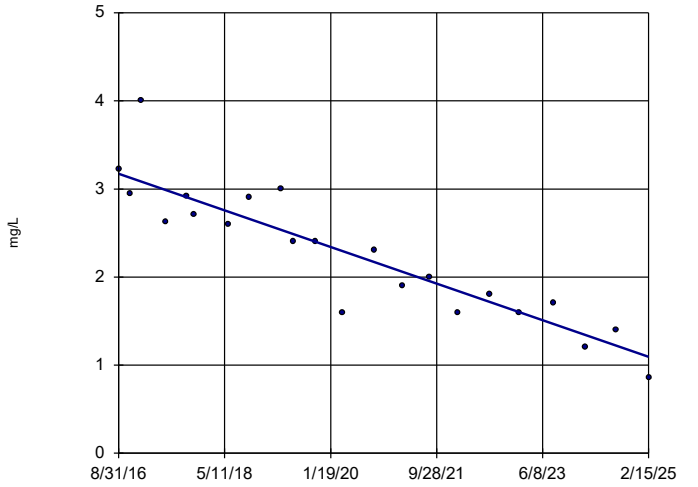
Constituent: Boron Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWC-121A



n = 22

Slope = -0.2456 units per year.

Mann-Kendall statistic = -181 critical = -92

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

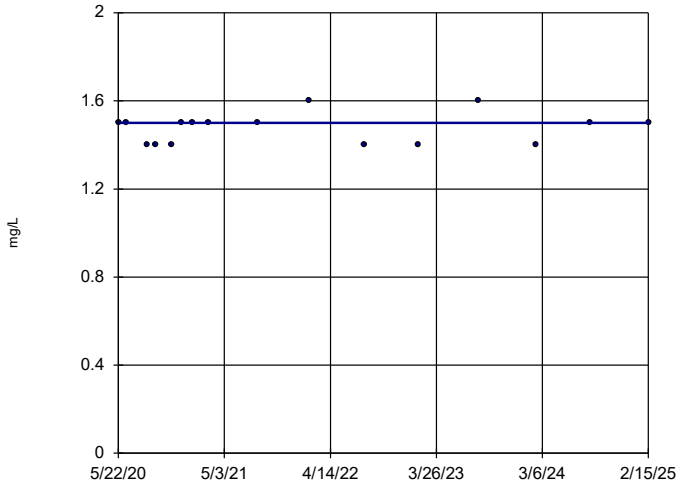
Constituent: Boron Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWC-125



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 12 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

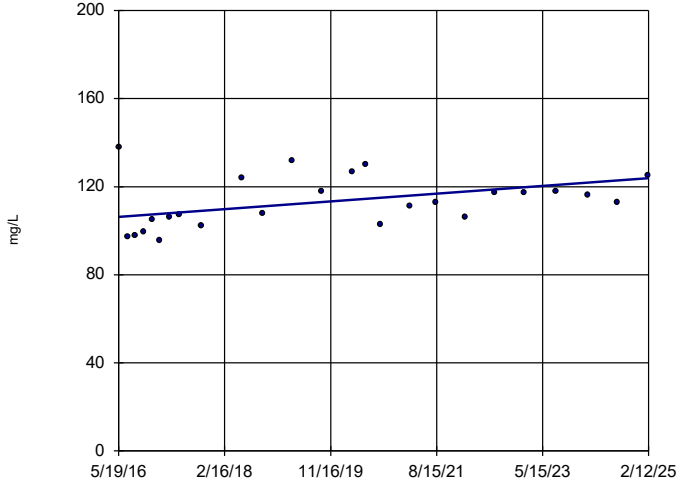
Constituent: Boron Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-1 (bg)



n = 25

Slope = 2.026 units per year.

Mann-Kendall statistic = 100 critical = 111

Trend not significant at 99% confidence level (α = 0.005 per tail).

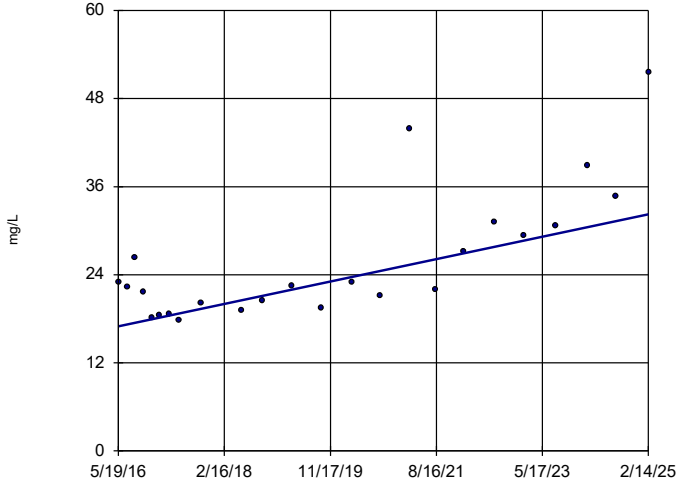
Constituent: Calcium Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-2 (bg)



n = 24

Slope = 1.743 units per year.

Mann-Kendall statistic = 142 critical = 105

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

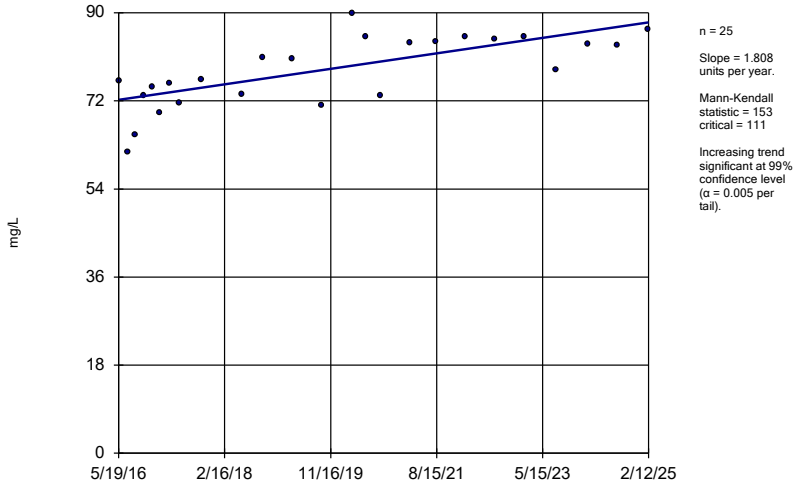
Constituent: Calcium Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-3 (bg)



n = 25

Slope = 1.808 units per year.

Mann-Kendall statistic = 153
critical = 111

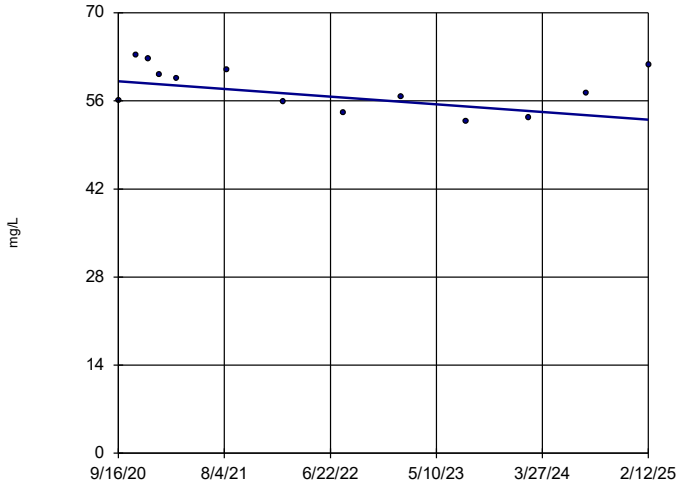
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-43D (bg)



n = 13

Slope = -1.38 units per year.

Mann-Kendall statistic = -24
critical = -43

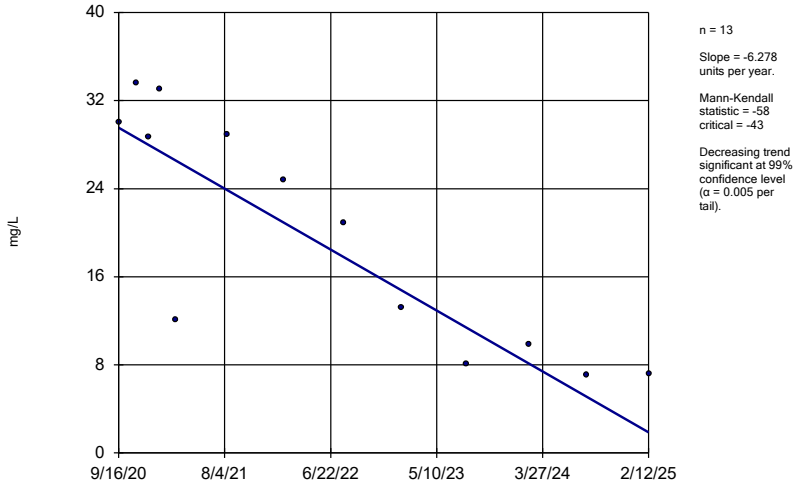
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-44D (bg)



n = 13

Slope = -6.278 units per year.

Mann-Kendall statistic = -58
critical = -43

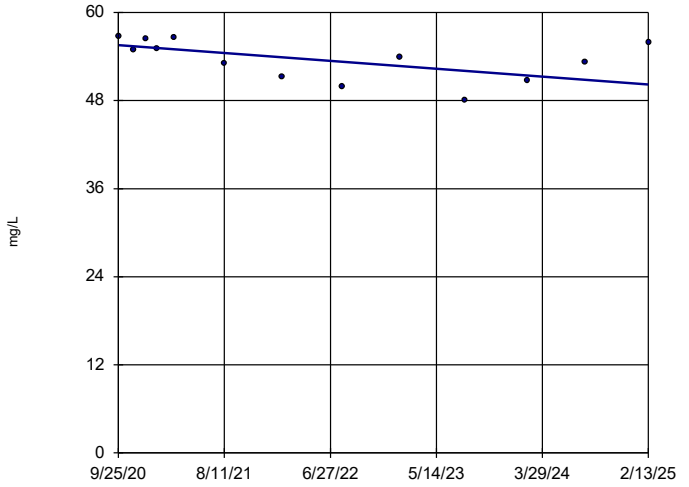
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-45D (bg)



n = 13

Slope = -1.215 units per year.

Mann-Kendall statistic = -30
critical = -43

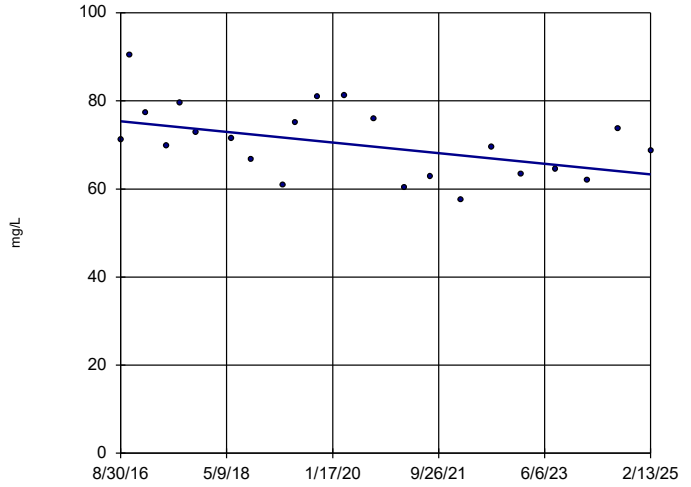
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-122 (bg)



n = 22

Slope = -1.424 units per year.

Mann-Kendall statistic = -69
critical = -92

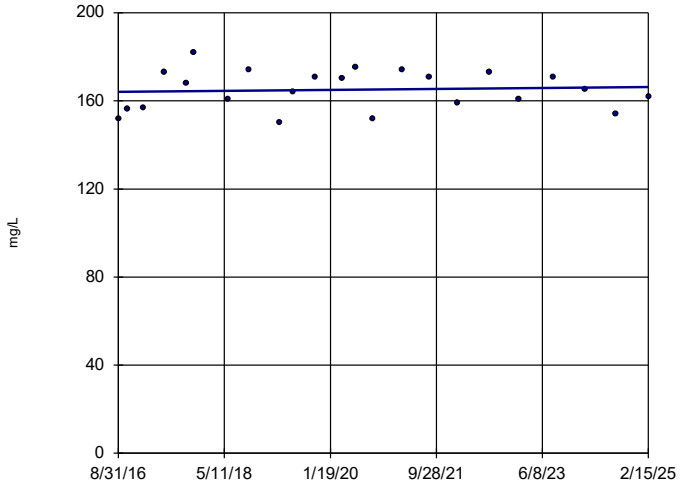
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWC-120



n = 23

Slope = 0.2519 units per year.

Mann-Kendall statistic = 12
critical = 98

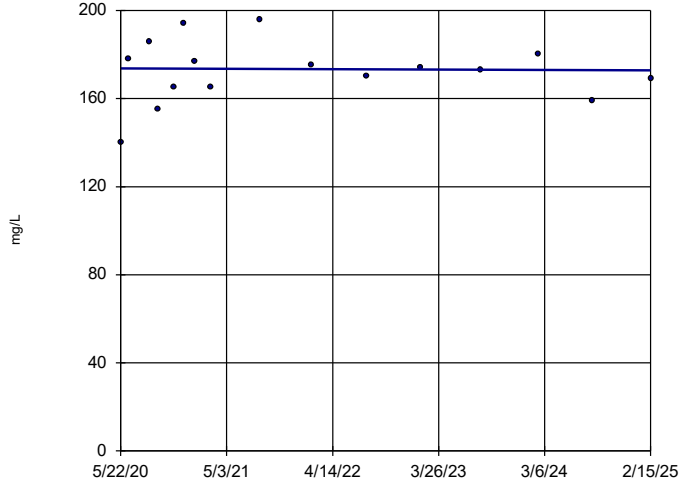
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWC-125



n = 16

Slope = -0.1971 units per year.

Mann-Kendall statistic = -1
critical = -58

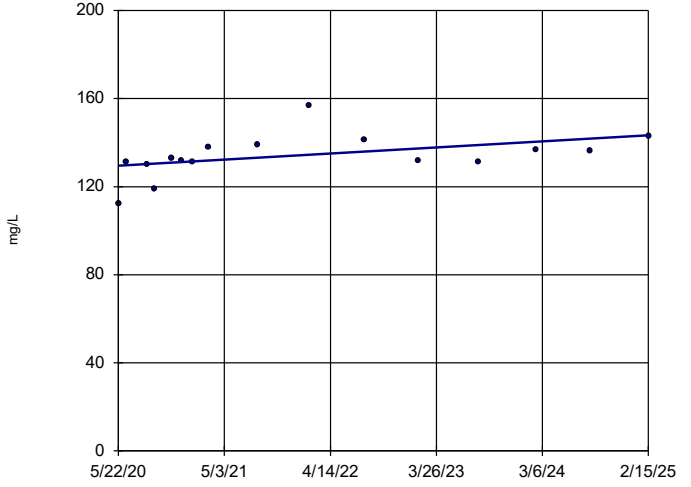
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWC-126



n = 16

Slope = 2.924 units per year.

Mann-Kendall statistic = 58
critical = 58

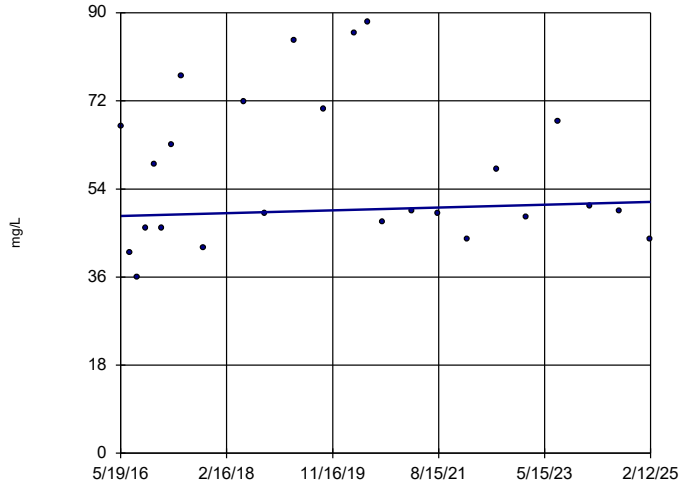
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-1 (bg)



n = 25

Slope = 0.3291 units per year.

Mann-Kendall statistic = 19
critical = 111

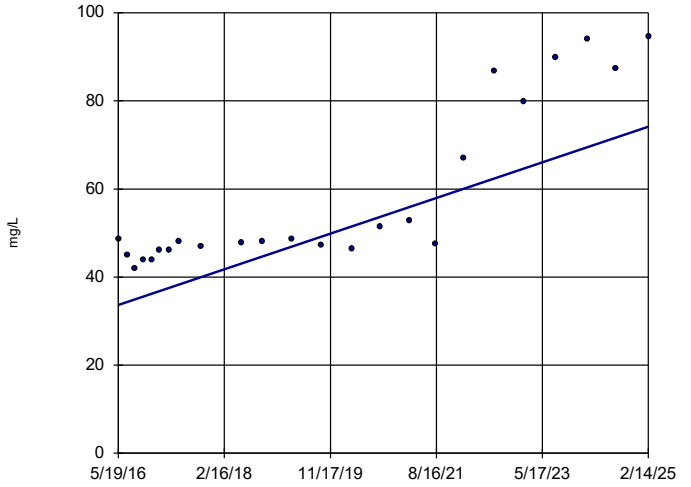
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-2 (bg)



n = 24

Slope = 4.631 units per year.

Mann-Kendall statistic = 200
critical = 105

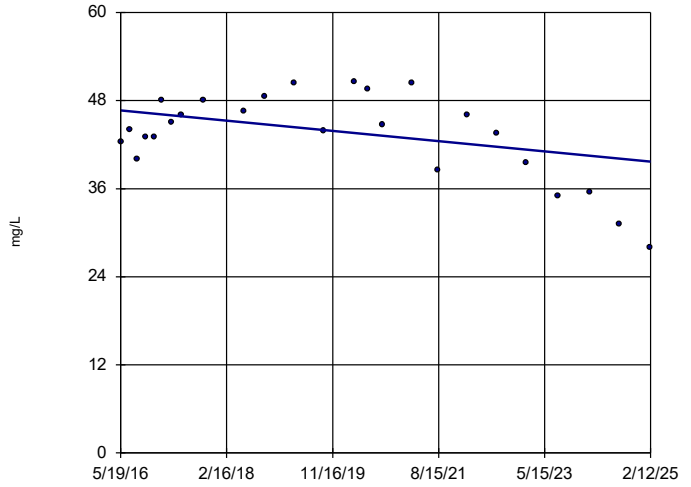
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-3 (bg)



n = 25

Slope = -0.7966 units per year.

Mann-Kendall statistic = -54
critical = -111

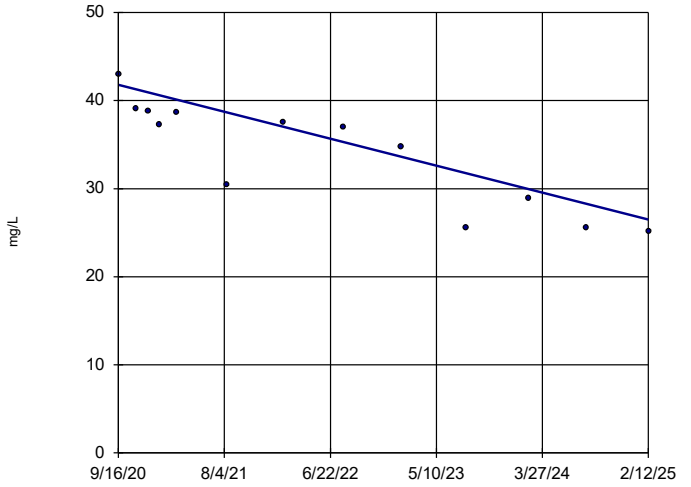
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-43D (bg)



n = 13

Slope = -3.467 units per year.

Mann-Kendall statistic = -66
critical = -43

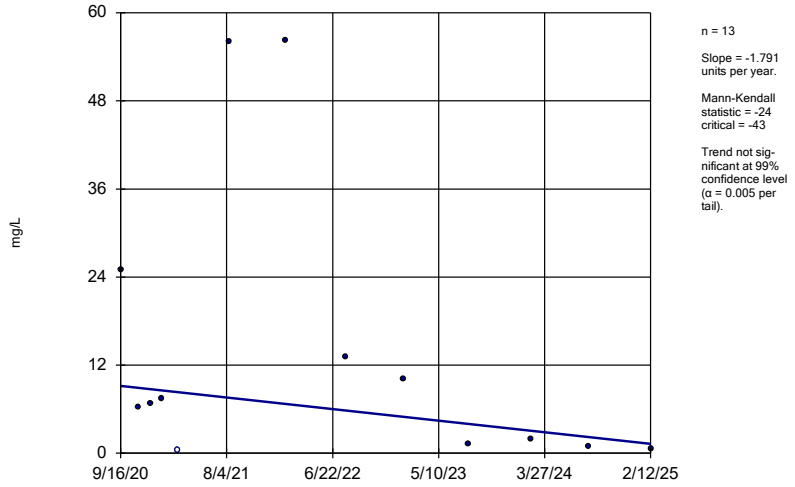
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests
Plant Hammond Client: Southern Company Data: Hammond AP3

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Hollow symbols indicate censored values.

Sen's Slope Estimator

HGWA-44D (bg)



n = 13

Slope = -1.791 units per year.

Mann-Kendall statistic = -24 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

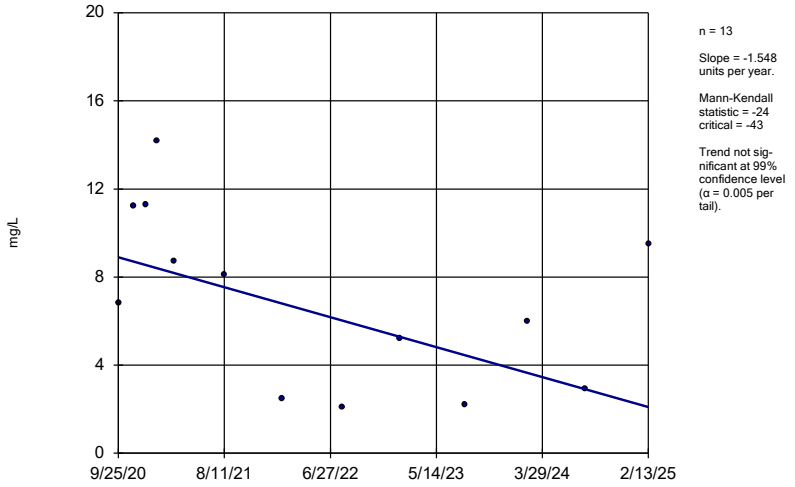
Constituent: Sulfate Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-45D (bg)



n = 13

Slope = -1.548 units per year.

Mann-Kendall statistic = -24 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

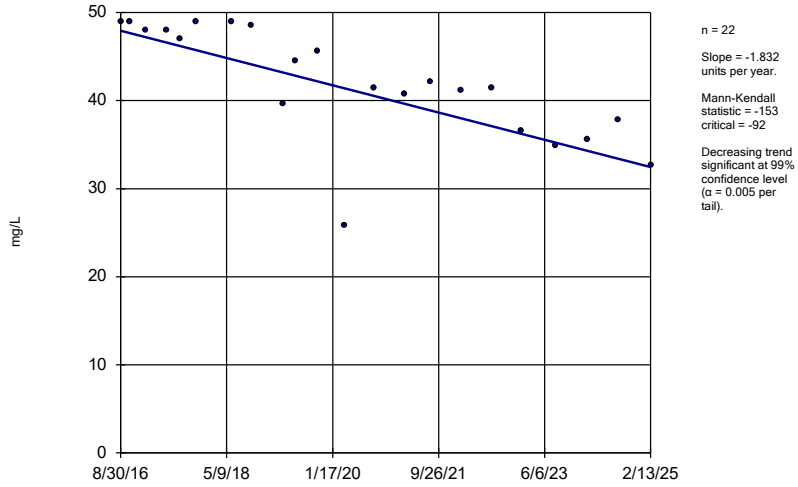
Constituent: Sulfate Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-122 (bg)



n = 22

Slope = -1.832 units per year.

Mann-Kendall statistic = -153 critical = -92

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

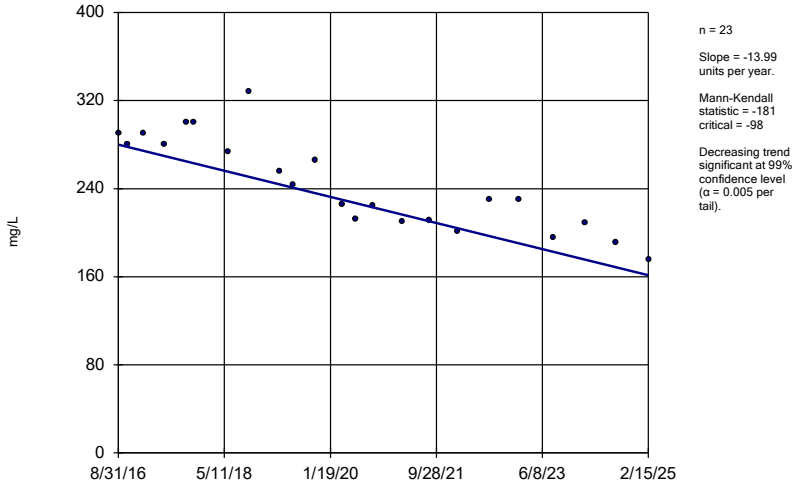
Constituent: Sulfate Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWC-120



n = 23

Slope = -13.99 units per year.

Mann-Kendall statistic = -181 critical = -98

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

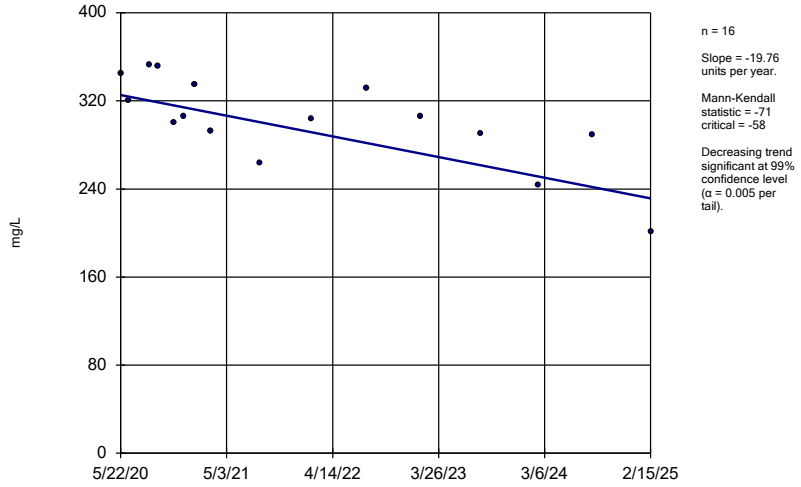
Constituent: Sulfate Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWC-125



n = 16

Slope = -19.76 units per year.

Mann-Kendall statistic = -71 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

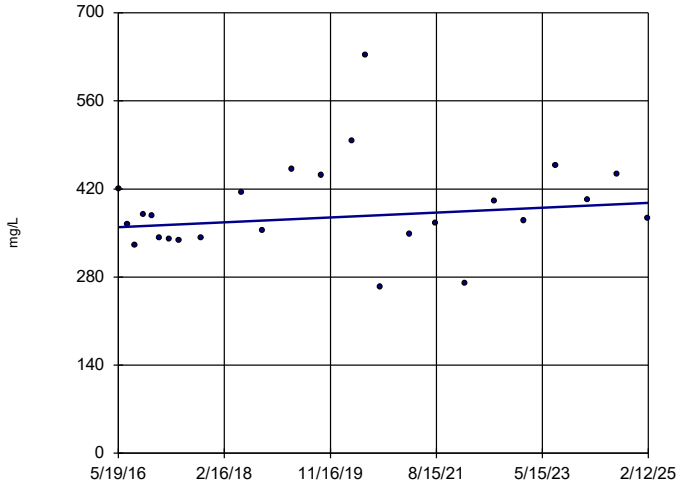
Constituent: Sulfate Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-1 (bg)



n = 25

Slope = 4.4 units per year.

Mann-Kendall statistic = 56 critical = 111

Trend not significant at 99% confidence level (α = 0.005 per tail).

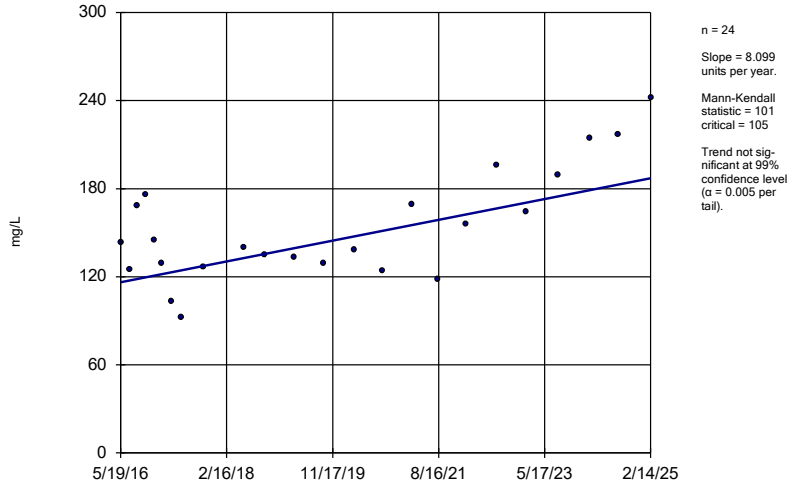
Constituent: TDS Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-2 (bg)



n = 24

Slope = 8.099 units per year.

Mann-Kendall statistic = 101 critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

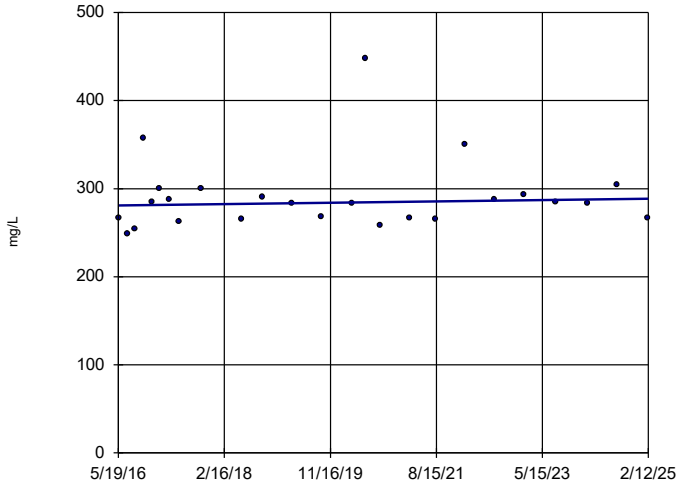
Constituent: TDS Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-3 (bg)



n = 25

Slope = 0.8767 units per year.

Mann-Kendall statistic = 34 critical = 111

Trend not significant at 99% confidence level (α = 0.005 per tail).

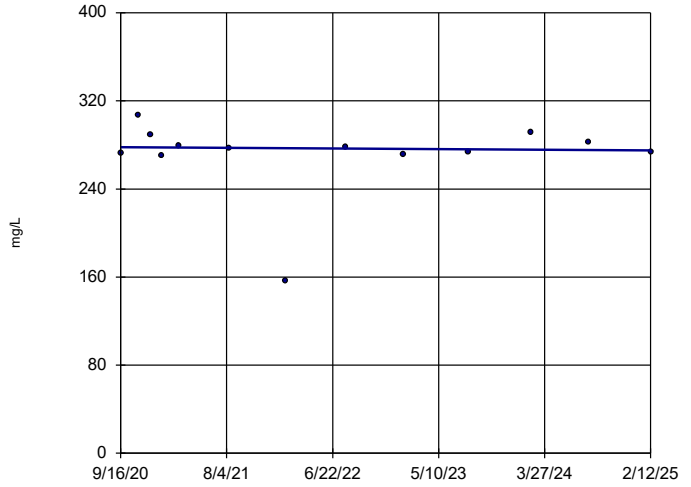
Constituent: TDS Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-43D (bg)



n = 13

Slope = -0.688 units per year.

Mann-Kendall statistic = -4 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

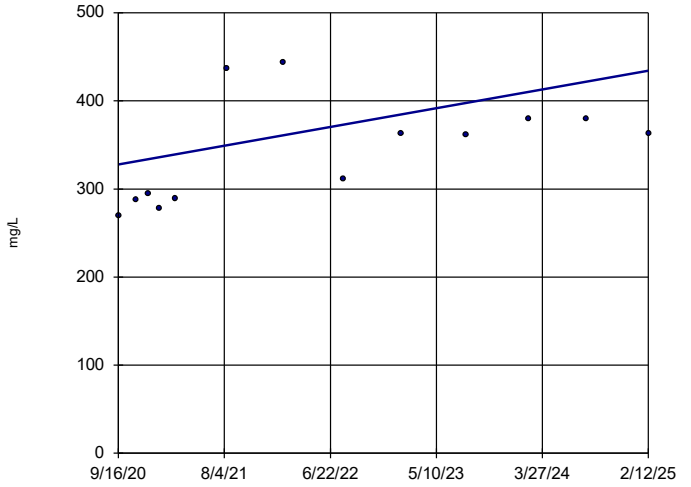
Constituent: TDS Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-44D (bg)



n = 13

Slope = 24.11 units per year.

Mann-Kendall statistic = 41 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

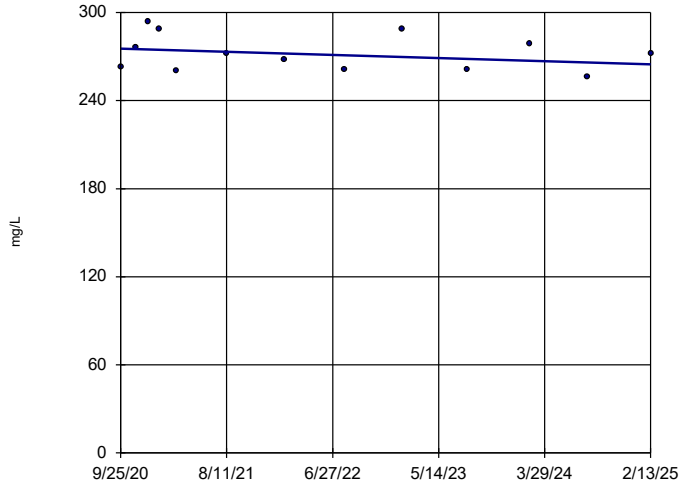
Constituent: TDS Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-45D (bg)



n = 13

Slope = -2.428 units per year.

Mann-Kendall statistic = -15 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

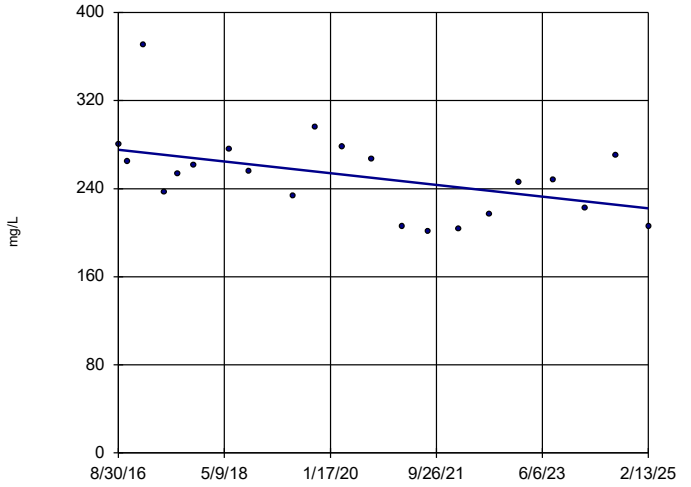
Constituent: TDS Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

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Sen's Slope Estimator

HGWA-122 (bg)



n = 21

Slope = -6.293 units per year.

Mann-Kendall statistic = -71 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

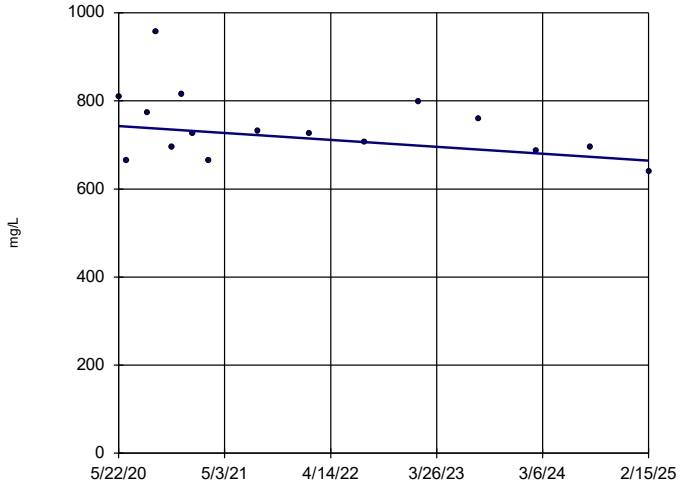
Constituent: TDS Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Sen's Slope Estimator

HGWC-125



n = 16

Slope = -16.65 units per year.

Mann-Kendall statistic = -35 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 4/22/2025 5:35 PM View: Appendix III Trend Tests

Plant Hammond Client: Southern Company Data: Hammond AP3

FIGURE F.

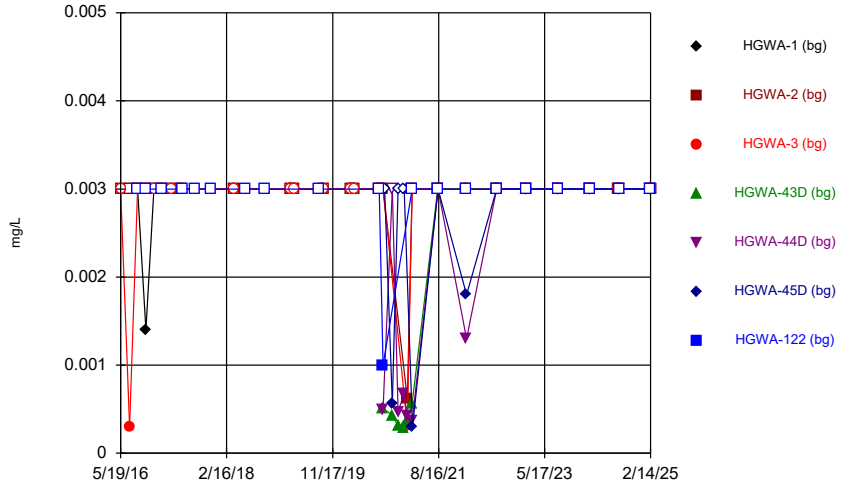
Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 5:39 PM

Constituent	Upper Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	139	n/a	n/a	85.61	n/a	n/a	0.0008009	NP Inter(NDs)
Arsenic (mg/L)	0.005	142	n/a	n/a	74.65	n/a	n/a	0.0006867	NP Inter(NDs)
Barium (mg/L)	0.64	147	n/a	n/a	0	n/a	n/a	0.0005313	NP Inter(normality)
Beryllium (mg/L)	0.0005	139	n/a	n/a	83.45	n/a	n/a	0.0008009	NP Inter(NDs)
Cadmium (mg/L)	0.0005	142	n/a	n/a	88.03	n/a	n/a	0.0006867	NP Inter(NDs)
Chromium (mg/L)	0.0079	141	n/a	n/a	82.27	n/a	n/a	0.0007228	NP Inter(NDs)
Cobalt (mg/L)	0.038	147	n/a	n/a	78.23	n/a	n/a	0.0005313	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.672	147	0.7856	0.2712	0	None	sqrt(x)	0.05	Inter
Fluoride (mg/L)	1.5	154	n/a	n/a	19.48	n/a	n/a	0.0003711	NP Inter(normality)
Lead (mg/L)	0.001	141	n/a	n/a	72.34	n/a	n/a	0.0007228	NP Inter(NDs)
Lithium (mg/L)	0.064	143	n/a	n/a	29.37	n/a	n/a	0.0006523	NP Inter(normality)
Mercury (mg/L)	0.0002	119	n/a	n/a	95.8	n/a	n/a	0.002234	NP Inter(NDs)
Molybdenum (mg/L)	0.01	149	n/a	n/a	65.1	n/a	n/a	0.0004795	NP Inter(NDs)
Selenium (mg/L)	0.005	142	n/a	n/a	92.96	n/a	n/a	0.0006867	NP Inter(NDs)
Thallium (mg/L)	0.001	142	n/a	n/a	99.3	n/a	n/a	0.0006867	NP Inter(NDs)

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Hollow symbols indicate censored values.

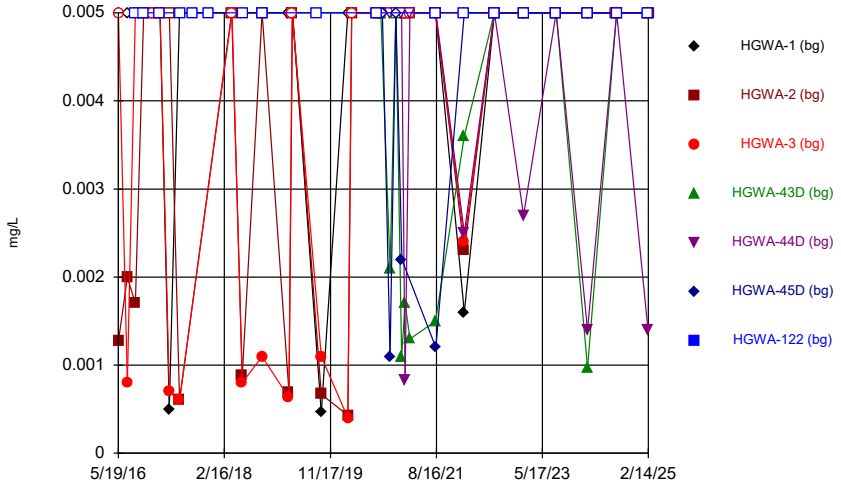
Time Series



Constituent: Antimony Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

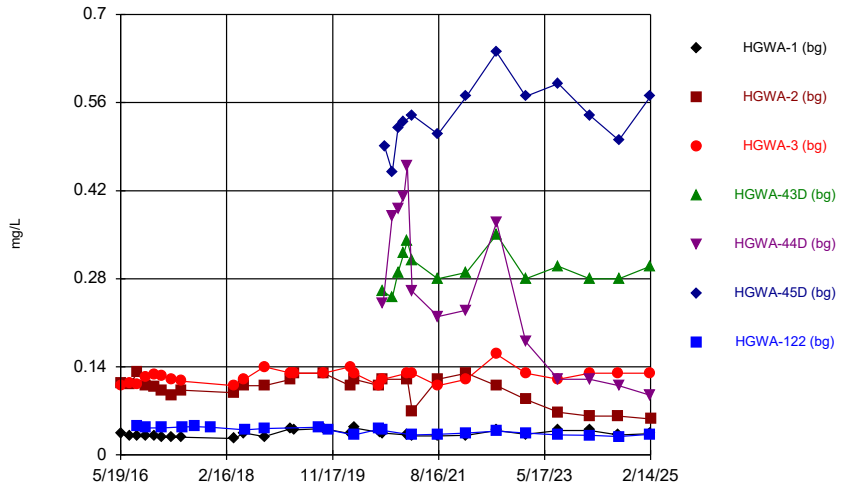
Time Series



Constituent: Arsenic Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

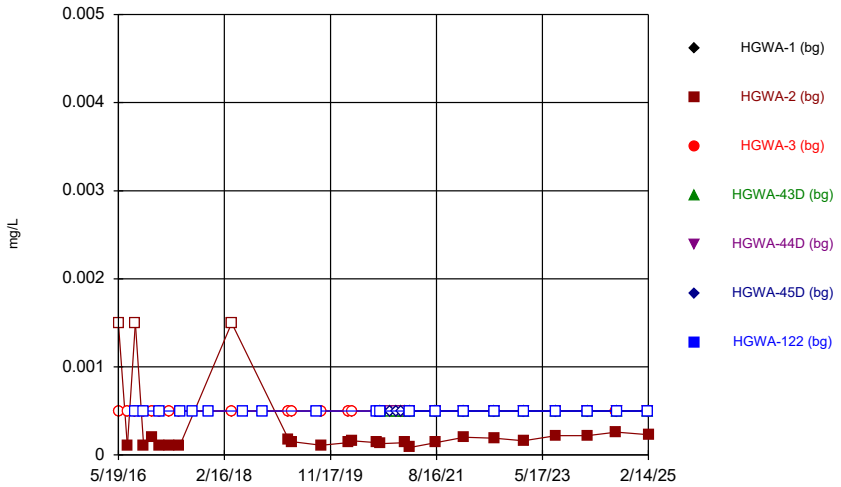
Time Series



Constituent: Barium Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

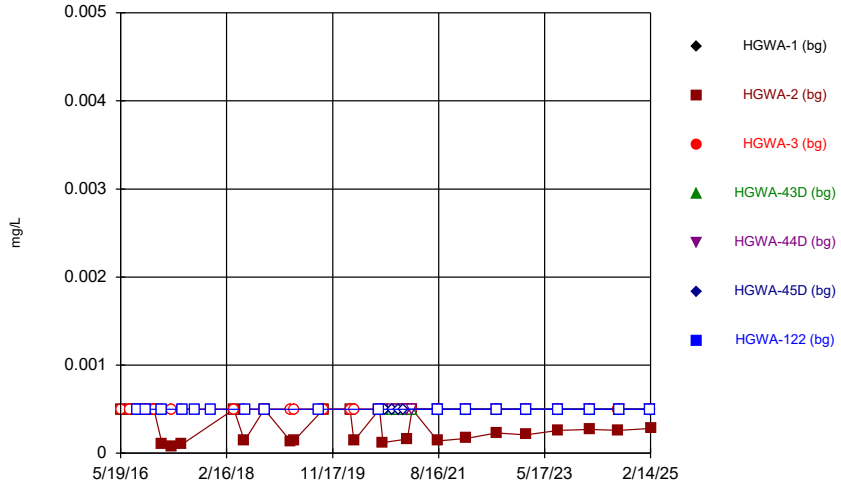
Time Series



Constituent: Beryllium Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

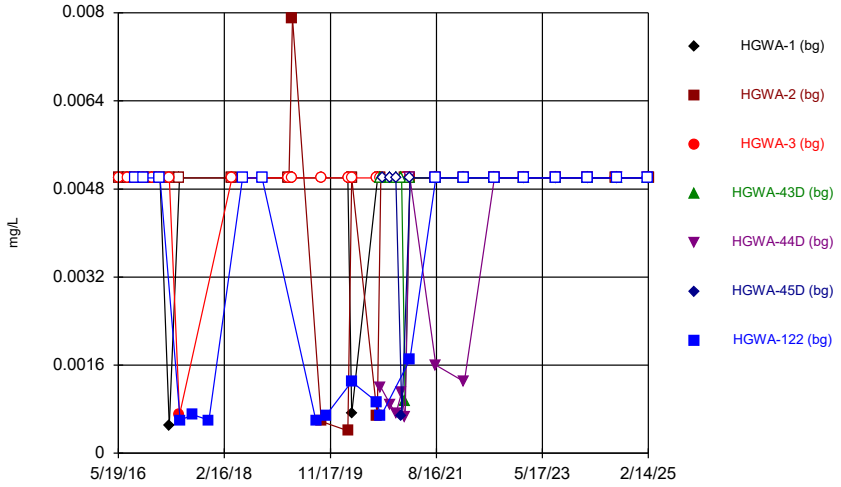
Time Series



Constituent: Cadmium Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

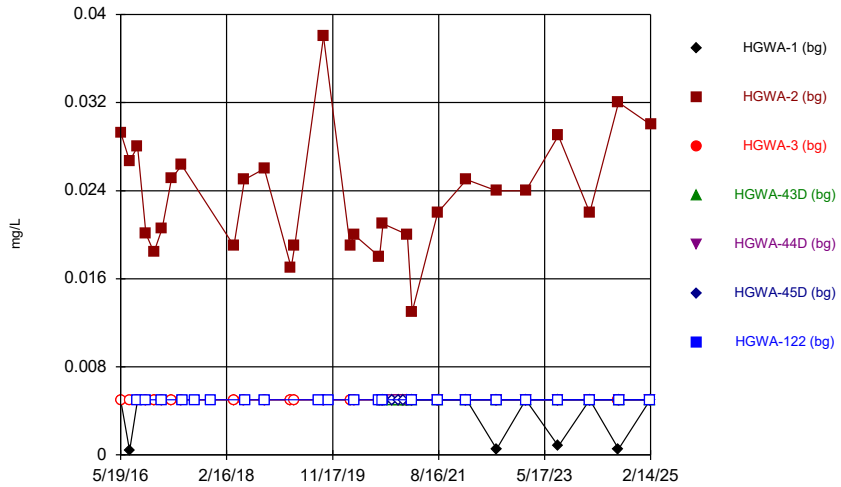
Time Series



Constituent: Chromium Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

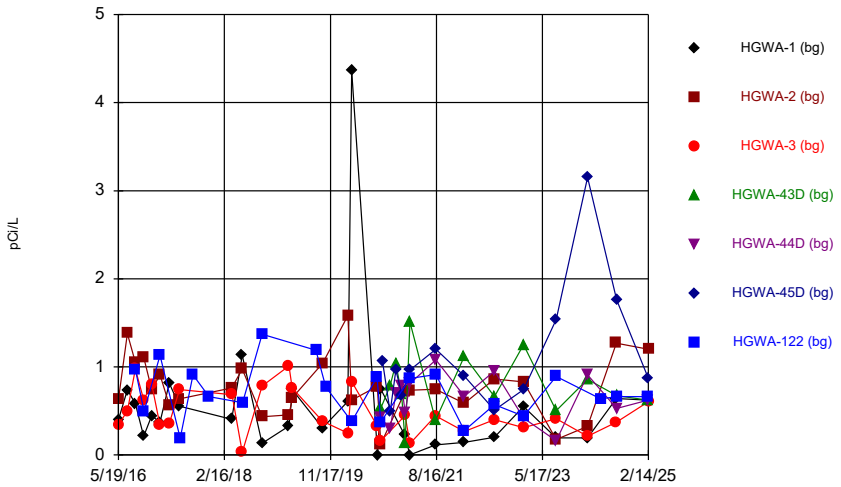
Time Series



Constituent: Cobalt Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

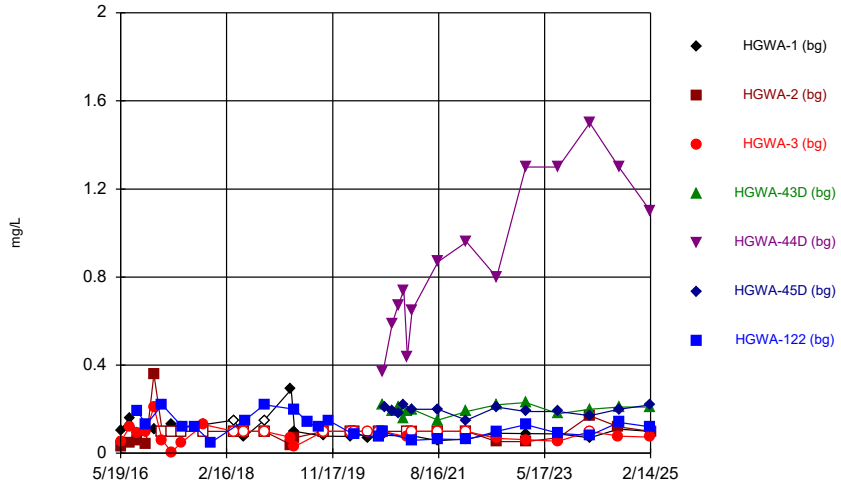
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

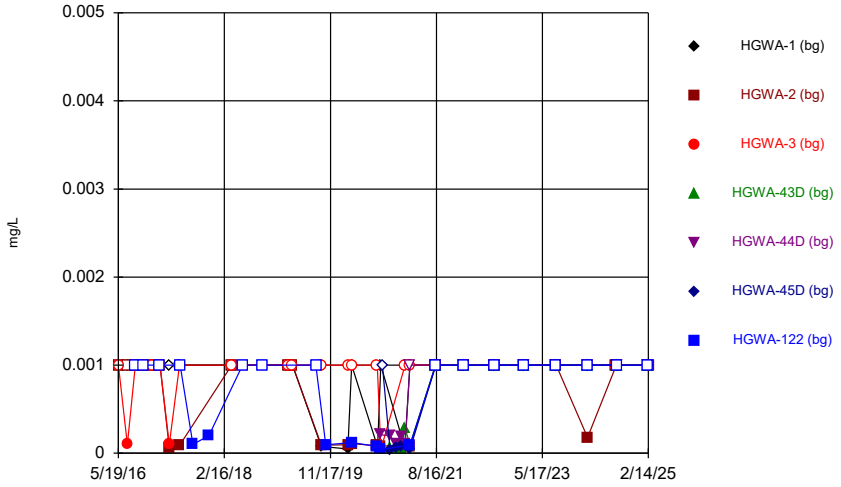
Time Series



Constituent: Fluoride Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

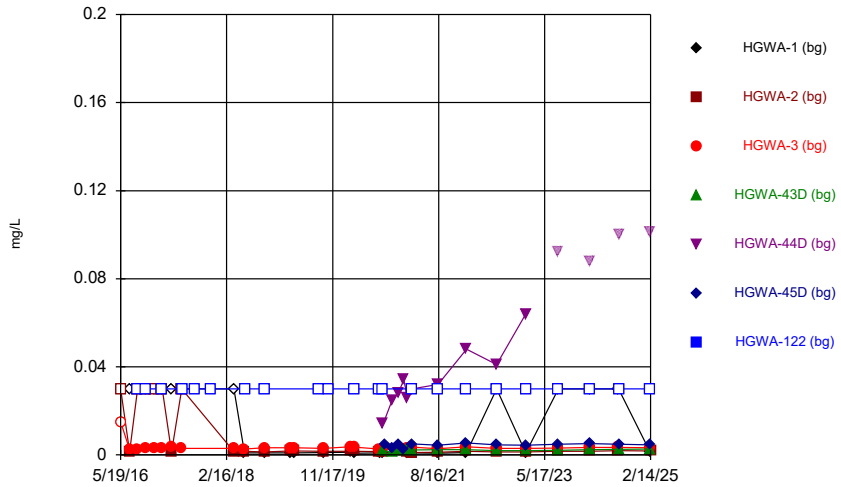
Time Series



Constituent: Lead Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

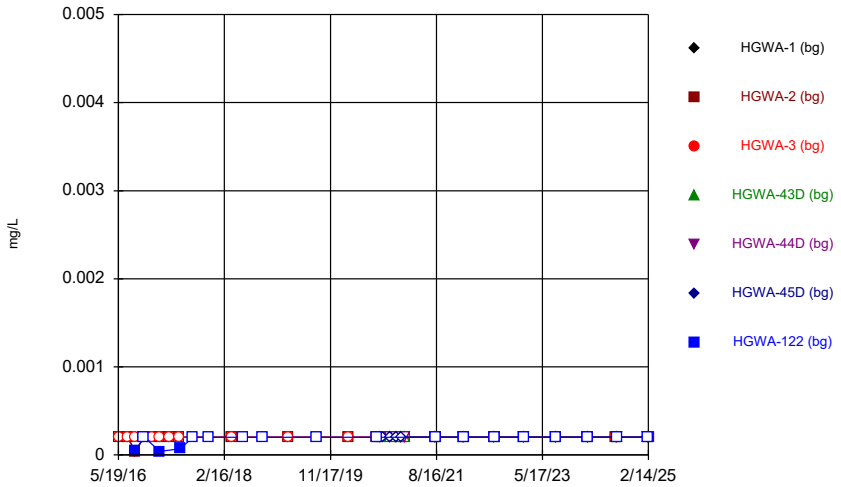
Time Series



Constituent: Lithium Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

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Hollow symbols indicate censored values.

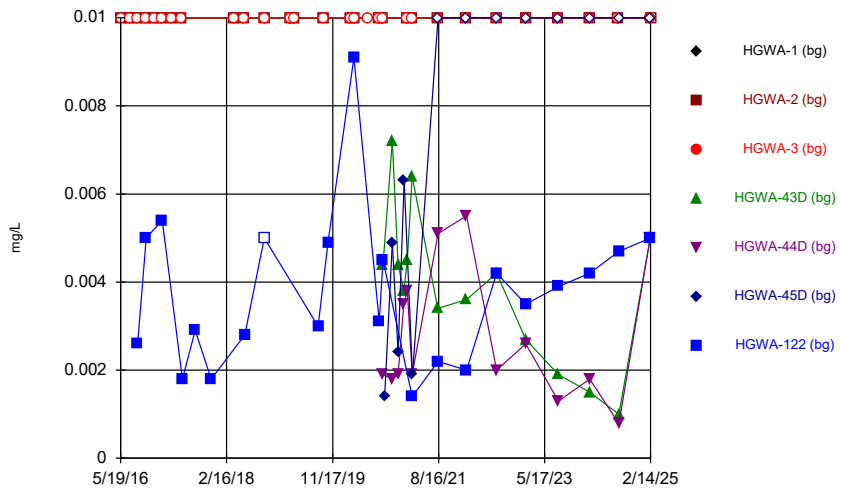
Time Series



Constituent: Mercury Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

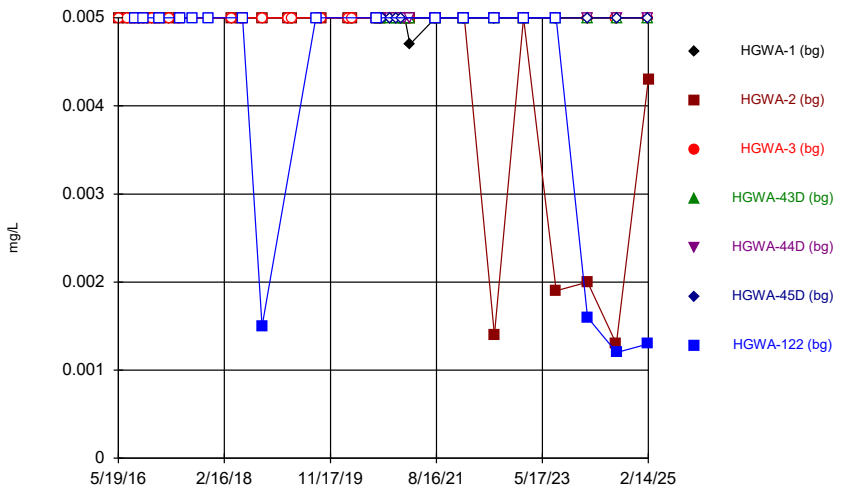
Time Series



Constituent: Molybdenum Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

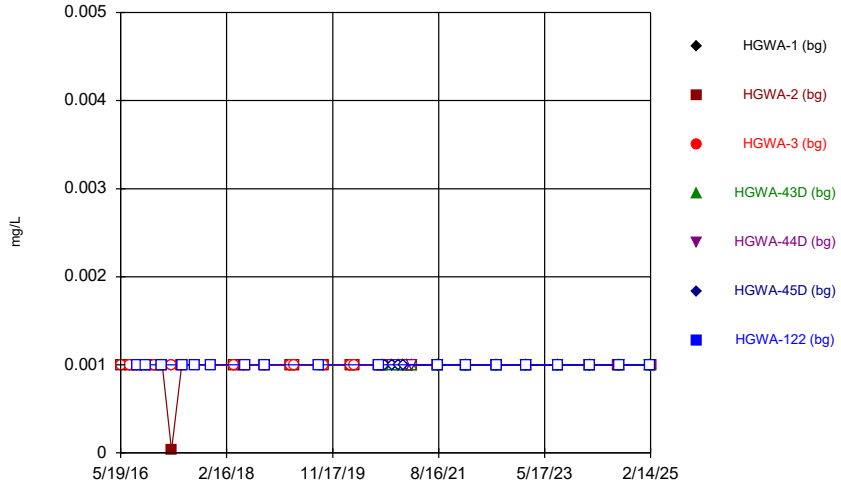
Time Series



Constituent: Selenium Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

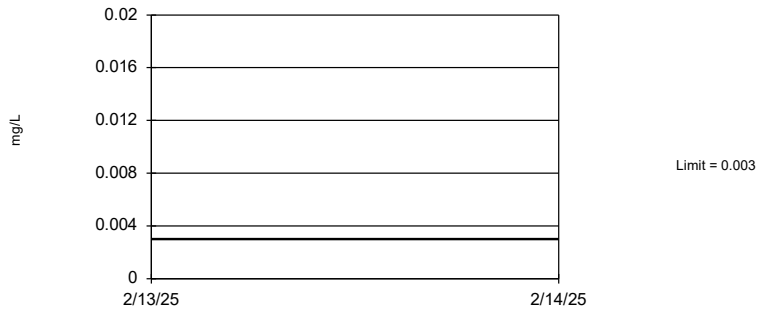


Constituent: Thallium Analysis Run 4/22/2025 5:37 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

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Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 139 background values. 85.61% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0008009.

Constituent: Antimony Analysis Run 4/22/2025 5:38 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 142 background values. 74.65% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0006867.

Constituent: Arsenic Analysis Run 4/22/2025 5:38 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



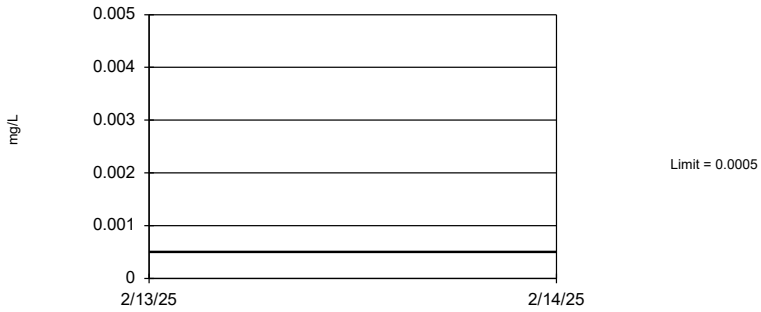
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 147 background values. 97.07% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0005313.

Constituent: Barium Analysis Run 4/22/2025 5:38 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



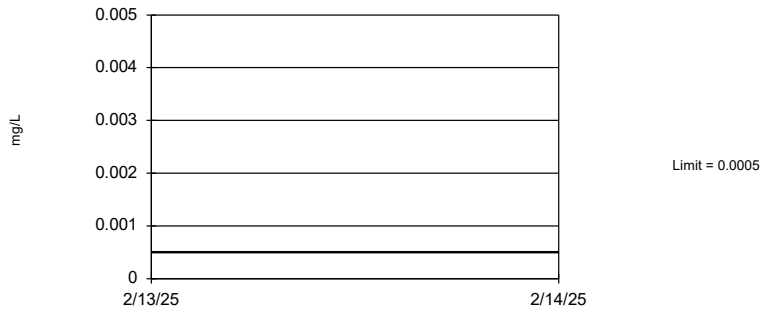
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 139 background values. 83.45% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0008009.

Constituent: Beryllium Analysis Run 4/22/2025 5:38 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

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Tolerance Limit

Interwell Non-parametric



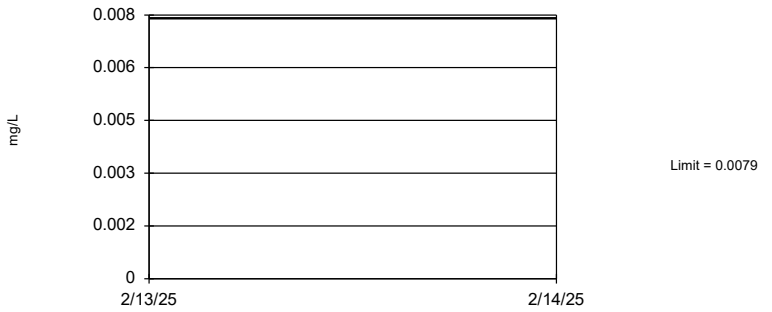
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 142 background values. 88.03% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0006867.

Constituent: Cadmium Analysis Run 4/22/2025 5:38 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



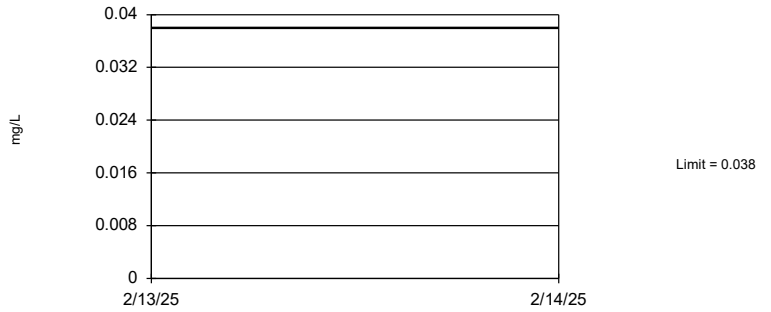
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 141 background values. 82.27% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0007228.

Constituent: Chromium Analysis Run 4/22/2025 5:38 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



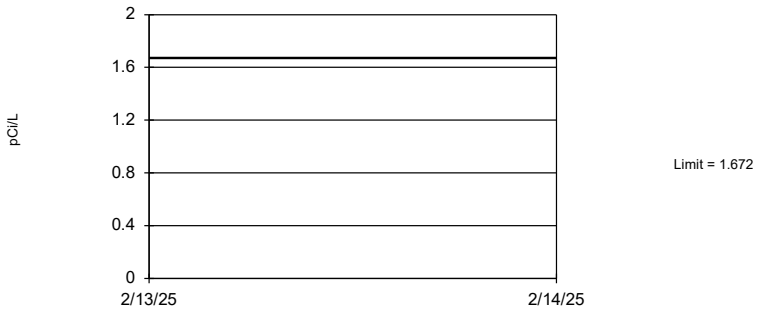
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 147 background values. 78.23% NDs. 97.07% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0005313.

Constituent: Cobalt Analysis Run 4/22/2025 5:39 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

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Tolerance Limit

Interwell Parametric



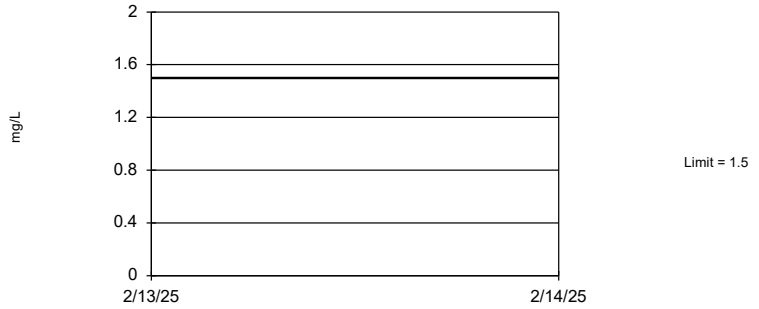
95% coverage. Background Data Summary (based on square root transformation): Mean=0.7856, Std. Dev.=0.2712, n=147. Normality test: Chi Squared @alpha = 0.01, calculated = 10.21, critical = 14.07. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 4/22/2025 5:39 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

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Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 154 background values. 19.48% NDs. 97.07% coverage at alpha=0.01; 98.24% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0003711.

Constituent: Fluoride Analysis Run 4/22/2025 5:39 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

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Tolerance Limit

Interwell Non-parametric



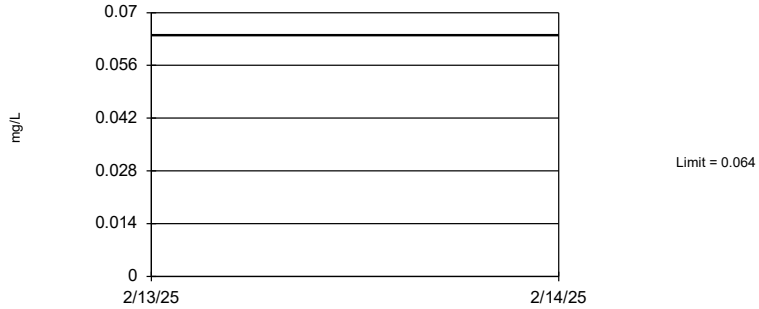
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 141 background values. 72.34% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0007228.

Constituent: Lead Analysis Run 4/22/2025 5:39 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

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Tolerance Limit

Interwell Non-parametric



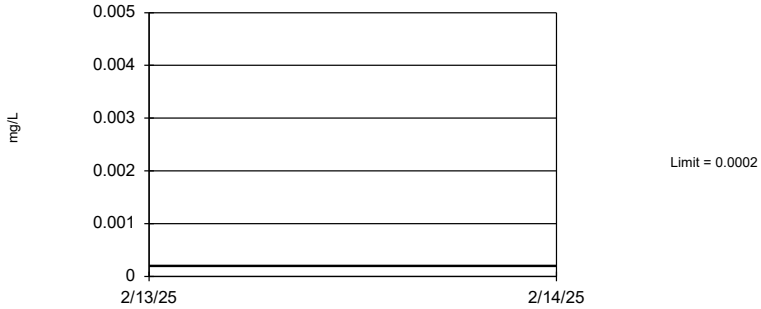
Non-parametric test used in lieu of parametric tolerance limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 143 background values. 29.37% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0006523.

Constituent: Lithium Analysis Run 4/22/2025 5:39 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 119 background values. 95.8% NDs. 96.29% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.002234.

Constituent: Mercury Analysis Run 4/22/2025 5:39 PM View: UTLs
Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 149 background values. 65.1% NDs. 97.07% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0004795.

Constituent: Molybdenum Analysis Run 4/22/2025 5:39 PM View: UTLs

Plant Hammond Client: Southern Company Data: Hammond AP3

Sanitas™ v.10.0.24 Software licensed to Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 142 background values. 92.96% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0006867.

Constituent: Selenium Analysis Run 4/22/2025 5:39 PM View: UTLs

Plant Hammond Client: Southern Company Data: Hammond AP3

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Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 142 background values. 99.3% NDs. 96.68% coverage at alpha=0.01; 97.85% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.0006867.

Constituent: Thallium Analysis Run 4/22/2025 5:39 PM View: UTLs

Plant Hammond Client: Southern Company Data: Hammond AP3

FIGURE G.

PLANT HAMMOND AP-3 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		0.64	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.0079	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		1.67	5
Fluoride, Total (mg/L)	4		1.5	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.040	0.064	0.064
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

**Grey cell indidcates background is higher than MCL or CCR-Rule*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Statard*

FIGURE H.

Appendix IV Confidence Intervals - All Results (No Significant)

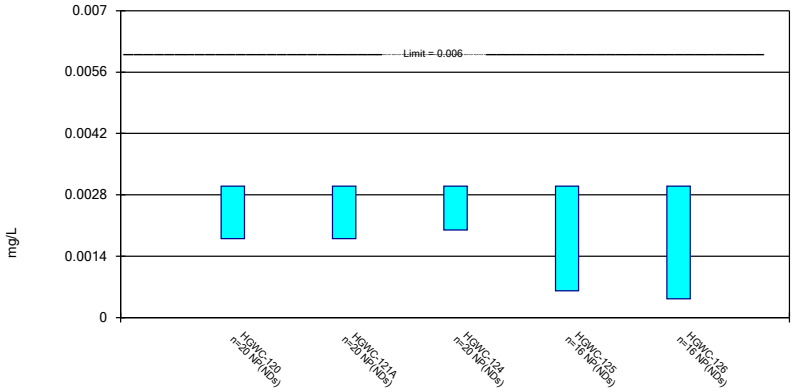
Plant Hammond Client: Southern Company Data: Hammond AP3 Printed 4/22/2025, 7:09 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-120	0.003	0.0018	0.006	No	20	0.00294	0.0002683	95	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-121A	0.003	0.0018	0.006	No	20	0.00287	0.0004014	90	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-124	0.003	0.002	0.006	No	20	0.00289	0.0003401	90	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-125	0.003	0.00061	0.006	No	16	0.002693	0.0008406	87.5	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-126	0.003	0.00043	0.006	No	16	0.002677	0.000883	87.5	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-120	0.005	0.0014	0.01	No	18	0.003714	0.001879	66.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-121A	0.005	0.0014	0.01	No	18	0.004378	0.001434	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-124	0.005	0.0006	0.01	No	18	0.004756	0.001037	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-125	0.005	0.0014	0.01	No	15	0.004087	0.001649	73.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-126	0.005	0.0026	0.01	No	15	0.004281	0.001539	80	None	No	0.01	NP (NDs)
Barium (mg/L)	HGWC-120	0.05106	0.04694	2	No	22	0.049	0.003832	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-121A	0.07516	0.0588	2	No	22	0.06698	0.01524	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-124	0.07122	0.06499	2	No	22	0.0681	0.0058	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-125	0.04442	0.03921	2	No	16	0.04181	0.004004	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-126	0.2486	0.2287	2	No	16	0.2388	0.01544	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	HGWC-120	0.005	0.0015	0.1	No	22	0.004449	0.001428	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-121A	0.005	0.0005	0.1	No	22	0.004795	0.0009594	95.45	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-124	0.005	0.00051	0.1	No	22	0.00459	0.001329	90.91	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-125	0.005	0.00081	0.1	No	16	0.004182	0.00176	81.25	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-126	0.005	0.0014	0.1	No	16	0.004522	0.001307	87.5	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-120	0.004806	0.003394	0.038	No	22	0.0041	0.001314	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-121A	0.005	0.0005	0.038	No	22	0.004368	0.001628	86.36	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-125	0.01178	0.007285	0.038	No	16	0.009531	0.003452	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-120	0.986	0.6511	5	No	22	0.8185	0.312	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-121A	1.07	0.5523	5	No	22	0.8112	0.4823	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-124	0.7993	0.5052	5	No	22	0.6522	0.274	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-125	1.226	0.6848	5	No	16	0.9556	0.4161	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-126	1.604	1.063	5	No	16	1.333	0.4153	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-120	0.6	0.35	4	No	25	0.5776	0.3436	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-121A	0.19	0.15	4	No	23	0.2311	0.2313	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-124	0.11	0.078	4	No	23	0.1117	0.06232	47.83	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-125	0.1709	0.1278	4	No	16	0.1494	0.03316	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-126	0.5041	0.4546	4	No	16	0.4794	0.03803	0	None	No	0.01	Param.
Lead (mg/L)	HGWC-120	0.001	0.0002	0.015	No	22	0.0008805	0.0003086	86.36	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-121A	0.001	0.00036	0.015	No	22	0.00089	0.0002871	86.36	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-124	0.001	0.000094	0.015	No	22	0.0007885	0.0003993	77.27	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-125	0.001	0.000092	0.015	No	16	0.0007158	0.000436	68.75	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-126	0.001	0.000046	0.015	No	16	0.0008208	0.0003852	81.25	None	No	0.01	NP (NDs)
Lithium (mg/L)	HGWC-120	0.03019	0.02422	0.064	No	22	0.0272	0.005556	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-121A	0.008549	0.007031	0.064	No	22	0.00779	0.001414	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-124	0.03	0.00104	0.064	No	22	0.01029	0.01378	31.82	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-125	0.0074	0.0038	0.064	No	16	0.005089	0.001599	0	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-126	0.004171	0.003505	0.064	No	16	0.003838	0.0005113	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-120	0.0002	0.00007	0.002	No	18	0.0001839	0.00004717	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-124	0.0002	0.000051	0.002	No	18	0.0001917	0.00003512	94.44	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-120	0.03645	0.02817	0.1	No	22	0.03231	0.007716	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-124	0.01	0.00092	0.1	No	22	0.004712	0.004506	40.91	None	No	0.01	NP (normality)
Molybdenum (mg/L)	HGWC-125	0.01092	0.002048	0.1	No	16	0.009024	0.008932	18.75	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	HGWC-120	0.005	0.002	0.05	No	18	0.004833	0.0007071	94.44	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-121A	0.005	0.0011	0.05	No	18	0.004783	0.0009192	94.44	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-124	0.005	0.0014	0.05	No	18	0.0048	0.0008485	94.44	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-126	0.005	0.0013	0.05	No	15	0.004753	0.0009553	93.33	None	No	0.01	NP (NDs)

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

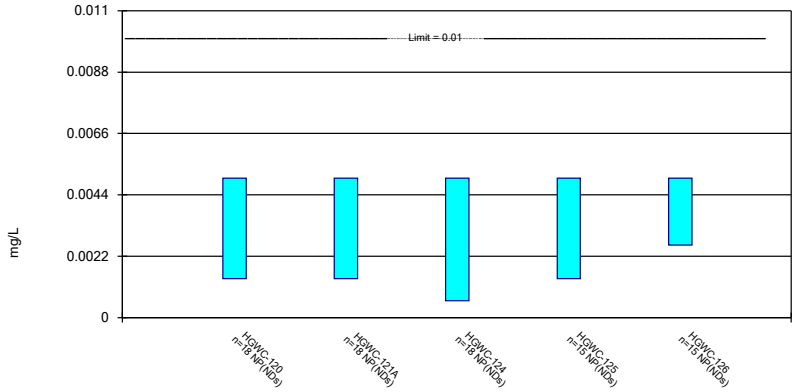


Constituent: Antimony Analysis Run 4/22/2025 7:07 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

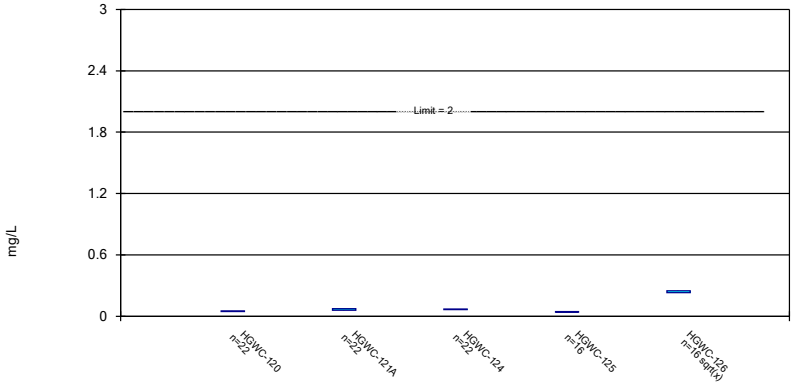


Constituent: Arsenic Analysis Run 4/22/2025 7:07 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

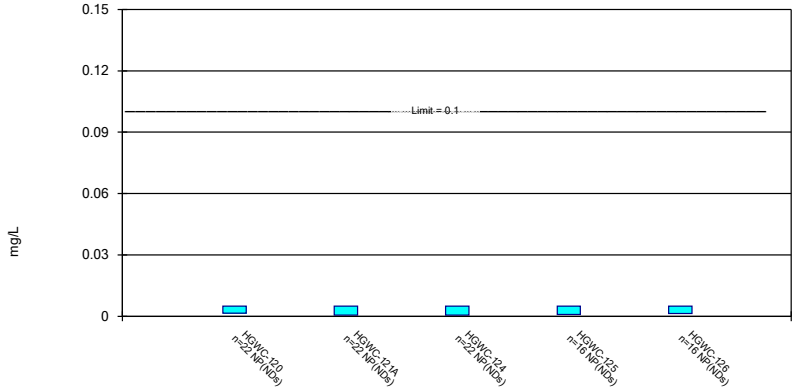


Constituent: Barium Analysis Run 4/22/2025 7:07 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

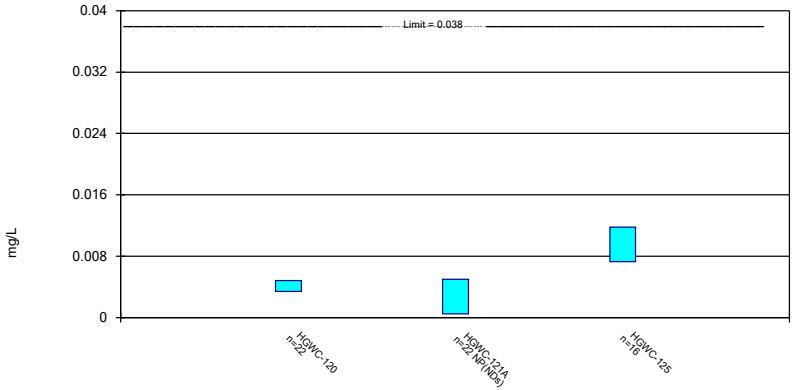


Constituent: Chromium Analysis Run 4/22/2025 7:07 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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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.

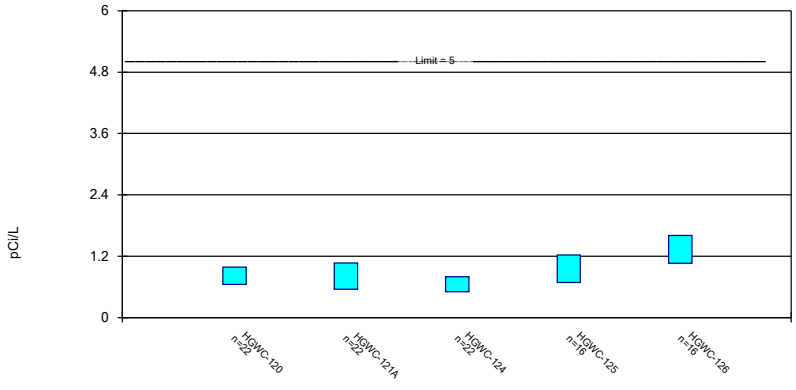


Constituent: Cobalt Analysis Run 4/22/2025 7:07 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

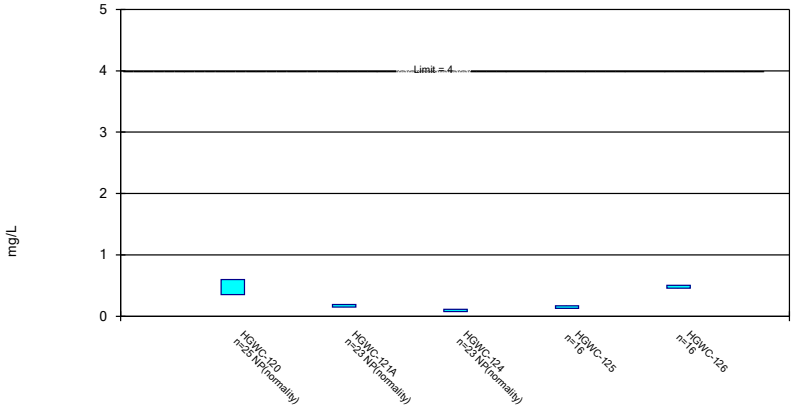


Constituent: Combined Radium 226 + 228 Analysis Run 4/22/2025 7:07 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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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.

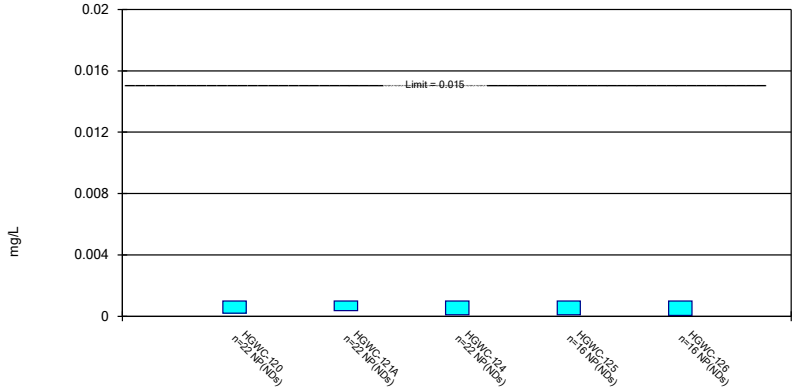


Constituent: Fluoride Analysis Run 4/22/2025 7:07 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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Non-Parametric Confidence Interval

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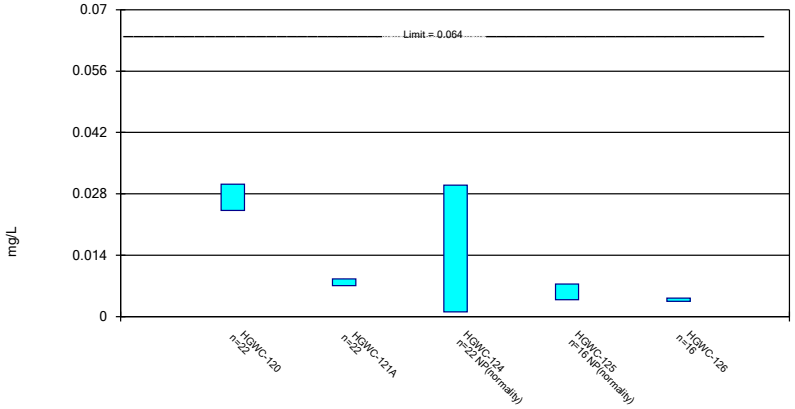


Constituent: Lead Analysis Run 4/22/2025 7:07 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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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.

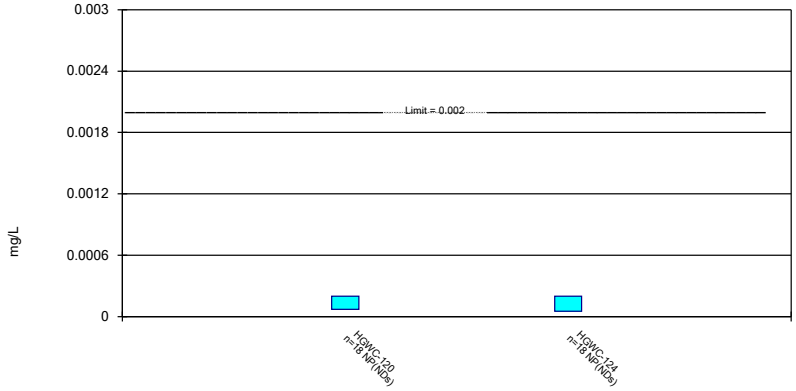


Constituent: Lithium Analysis Run 4/22/2025 7:08 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

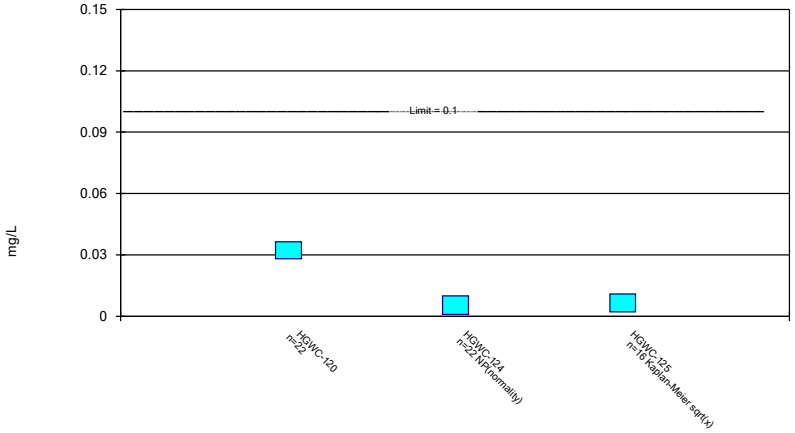


Constituent: Mercury Analysis Run 4/22/2025 7:08 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

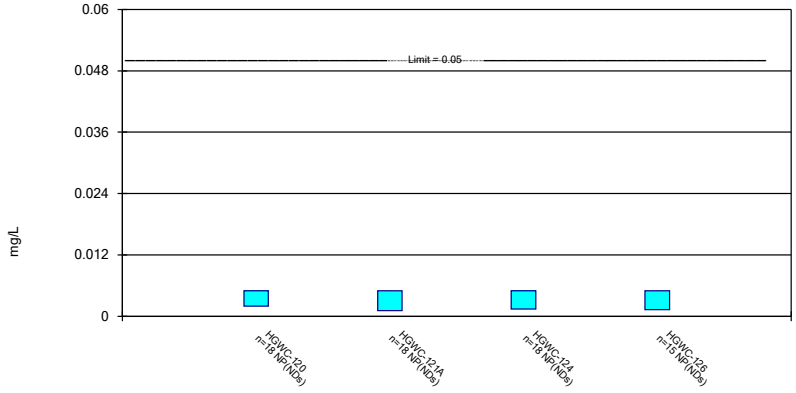


Constituent: Molybdenum Analysis Run 4/22/2025 7:08 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 4/22/2025 7:08 PM View: Confidence Intervals
Plant Hammond Client: Southern Company Data: Hammond AP3

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.003	<0.003	<0.003		
10/26/2016	<0.003		<0.003		
11/7/2016		<0.003			
1/13/2017		<0.003			
1/27/2017	<0.003		<0.003		
5/25/2017	<0.003		<0.003		
6/3/2017		<0.003			
8/11/2017			<0.003		
10/2/2017	<0.003	<0.003			
11/15/2017	<0.003	<0.003	<0.003		
6/5/2018	<0.003	<0.003	<0.003		
10/2/2018	<0.003		<0.003		
10/5/2018		<0.003			
8/22/2019	<0.003	<0.003			
8/23/2019			<0.003		
5/22/2020				0.00047 (J)	<0.003
6/16/2020				<0.003	<0.003
8/25/2020				<0.003	<0.003
8/26/2020	<0.003	<0.003			
8/27/2020			<0.003		
9/18/2020					<0.003
9/21/2020	<0.003			<0.003	
9/28/2020		<0.003	<0.003		
11/11/2020					0.0004 (J)
11/12/2020				<0.003	
12/16/2020				<0.003	<0.003
1/20/2021				<0.003	<0.003
3/12/2021	0.0018 (J)			0.00061 (J)	0.00043 (J)
3/15/2021		<0.003	<0.003		
8/16/2021	<0.003	<0.003	<0.003		
8/19/2021				<0.003	<0.003
2/2/2022	<0.003	<0.003	<0.003		
2/3/2022				<0.003	<0.003
8/4/2022	<0.003	0.0016 (J)	<0.003	<0.003	<0.003
1/24/2023		<0.003	0.0018 (J)		
1/25/2023	<0.003			<0.003	<0.003
8/10/2023	<0.003	<0.003		<0.003	
8/11/2023			<0.003		<0.003
2/14/2024				<0.003	<0.003
2/15/2024	<0.003	<0.003			
2/16/2024			<0.003		
8/6/2024		0.0018 (J)			
8/7/2024	<0.003		0.002 (J)	<0.003	<0.003
2/14/2025			<0.003		
2/15/2025	<0.003	<0.003		<0.003	<0.003
Mean	0.00294	0.00287	0.00289	0.002693	0.002677
Std. Dev.	0.0002683	0.0004014	0.0003401	0.0008406	0.000883
Upper Lim.	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.0018	0.0018	0.002	0.00061	0.00043

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005	<0.005		
10/26/2016	<0.005		<0.005		
11/7/2016		<0.005			
1/13/2017		<0.005			
1/27/2017	<0.005		<0.005		
5/25/2017	0.0014 (J)		0.0006 (J)		
6/3/2017		0.001 (J)			
8/11/2017			<0.005		
10/2/2017	0.0007 (J)	<0.005			
11/15/2017	<0.005	<0.005	<0.005		
6/5/2018	0.001 (J)	0.0014 (J)	<0.005		
10/2/2018	<0.005		<0.005		
10/5/2018		<0.005			
8/22/2019	<0.005	<0.005			
8/23/2019			<0.005		
5/22/2020				0.00081 (J)	0.00071 (J)
6/16/2020				0.0014 (J)	0.00091 (J)
8/25/2020				<0.005	<0.005
8/26/2020	<0.005	<0.005			
8/27/2020			<0.005		
9/18/2020					<0.005
9/21/2020				<0.005	
11/11/2020					<0.005
11/12/2020				<0.005	
12/16/2020				<0.005	<0.005
1/20/2021				<0.005	<0.005
8/16/2021	0.0015 (J)	0.0014 (J)	<0.005		
8/19/2021				<0.005	<0.005
2/2/2022	0.0014 (J)	<0.005	<0.005		
2/3/2022				0.0032 (J)	0.0026 (J)
8/4/2022	<0.005	<0.005	<0.005	<0.005	<0.005
1/24/2023		<0.005	<0.005		
1/25/2023	<0.005			<0.005	<0.005
8/10/2023	<0.005	<0.005		<0.005	
8/11/2023			<0.005		<0.005
2/14/2024				<0.005	<0.005
2/15/2024	0.00086 (J)	<0.005			
2/16/2024			<0.005		
8/6/2024		<0.005			
8/7/2024	<0.005		<0.005	0.0009 (J)	<0.005
2/14/2025			<0.005		
2/15/2025	<0.005	<0.005		<0.005	<0.005
Mean	0.003714	0.004378	0.004756	0.004087	0.004281
Std. Dev.	0.001879	0.001434	0.001037	0.001649	0.001539
Upper Lim.	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0014	0.0014	0.0006	0.0014	0.0026

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.045	0.0782	0.0744		
10/26/2016	0.0462		0.0735		
11/7/2016		0.0764			
1/13/2017		0.0744			
1/27/2017	0.0451		0.0632		
5/25/2017	0.0488		0.0773		
6/3/2017		0.0933			
8/11/2017			0.0672		
10/2/2017	0.0479	0.0815			
11/15/2017	0.051	0.0807	0.0707		
6/5/2018	0.051	0.078	0.07		
10/2/2018	0.059		0.067		
10/5/2018		0.074			
8/22/2019	0.05	0.066			
8/23/2019			0.066		
10/21/2019		0.074	0.075		
10/22/2019	0.051				
3/24/2020			0.075		
3/25/2020	0.052	0.099			
5/22/2020				0.048	0.24
6/16/2020				0.049	0.24
8/25/2020				0.045	0.23
8/26/2020	0.041	0.057			
8/27/2020			0.062		
9/18/2020					0.21
9/21/2020	0.046			0.042	
9/28/2020		0.056	0.071		
11/11/2020					0.23
11/12/2020				0.042	
12/16/2020				0.041	0.24
1/20/2021				0.045	0.25
3/12/2021	0.047			0.043	0.27
3/15/2021		0.059	0.071		
8/16/2021	0.052	0.06	0.069		
8/19/2021				0.044	0.27
2/2/2022	0.054	0.064	0.072		
2/3/2022				0.043	0.24
8/4/2022	0.048	0.06	0.068	0.037	0.24
1/24/2023		0.059	0.068		
1/25/2023	0.051			0.042	0.24
8/10/2023	0.045	0.048		0.038	
8/11/2023			0.06		0.22
2/14/2024				0.037	0.23
2/15/2024	0.046	0.047			
2/16/2024			0.054		
8/6/2024		0.044			
8/7/2024	0.051		0.064	0.035	0.23
2/14/2025			0.06		
2/15/2025	0.05	0.044		0.038	0.24
Mean	0.049	0.06698	0.0681	0.04181	0.2388
Std. Dev.	0.003832	0.01524	0.0058	0.004004	0.01544
Upper Lim.	0.05106	0.07516	0.07122	0.04442	0.2486

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
Lower Lim.	0.04694	0.0588	0.06499	0.03921	0.2287

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005	<0.005		
10/26/2016	<0.005		<0.005		
11/7/2016		<0.005			
1/13/2017		<0.005			
1/27/2017	<0.005		<0.005		
5/25/2017	<0.005		<0.005		
6/3/2017		<0.005			
8/11/2017			<0.005		
10/2/2017	<0.005	<0.005			
11/15/2017	<0.005	<0.005	<0.005		
6/5/2018	<0.005	<0.005	<0.005		
10/2/2018	<0.005		<0.005		
10/5/2018		<0.005			
8/22/2019	0.00072 (J)	<0.005			
8/23/2019			<0.005		
10/21/2019		<0.005	0.00046 (J)		
10/22/2019	<0.005				
3/24/2020			0.00051 (J)		
3/25/2020	0.0015 (J)	0.0005 (J)			
5/22/2020				0.00058 (J)	<0.005
6/16/2020				0.00052 (J)	<0.005
8/25/2020				<0.005	0.00096 (J)
8/26/2020	<0.005	<0.005			
8/27/2020			<0.005		
9/18/2020					<0.005
9/21/2020	0.00065 (J)			<0.005	
9/28/2020		<0.005	<0.005		
11/11/2020					<0.005
11/12/2020				<0.005	
12/16/2020				<0.005	<0.005
1/20/2021				0.00081 (J)	<0.005
3/12/2021	<0.005			<0.005	<0.005
3/15/2021		<0.005	<0.005		
8/16/2021	<0.005	<0.005	<0.005		
8/19/2021				<0.005	<0.005
2/2/2022	<0.005	<0.005	<0.005		
2/3/2022				<0.005	<0.005
8/4/2022	<0.005	<0.005	<0.005	<0.005	<0.005
1/24/2023		<0.005	<0.005		
1/25/2023	<0.005			<0.005	0.0014 (J)
8/10/2023	<0.005	<0.005		<0.005	
8/11/2023			<0.005		<0.005
2/14/2024				<0.005	<0.005
2/15/2024	<0.005	<0.005			
2/16/2024			<0.005		
8/6/2024		<0.005			
8/7/2024	<0.005		<0.005	<0.005	<0.005
2/14/2025			<0.005		
2/15/2025	<0.005	<0.005		<0.005	<0.005
Mean	0.004449	0.004795	0.00459	0.004182	0.004522
Std. Dev.	0.001428	0.0009594	0.001329	0.00176	0.001307
Upper Lim.	0.005	0.005	0.005	0.005	0.005

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
Lower Lim.	0.0015	0.0005	0.00051	0.00081	0.0014

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-125
8/31/2016	0.0052 (J)	<0.005	
10/26/2016	0.0041 (J)		
11/7/2016		<0.005	
1/13/2017		<0.005	
1/27/2017	0.0034 (J)		
5/25/2017	0.0035 (J)		
6/3/2017		0.0005 (J)	
10/2/2017	0.0036 (J)	0.0003 (J)	
11/15/2017	0.0032 (J)	0.0003 (J)	
6/5/2018	0.0031 (J)	<0.005	
10/2/2018	0.0025 (J)		
10/5/2018		<0.005	
8/22/2019	0.0028 (J)	<0.005	
10/21/2019		<0.005	
10/22/2019	0.0031 (J)		
3/25/2020	0.0036 (J)	<0.005	
5/22/2020			0.01
6/16/2020			0.0096
8/25/2020			0.0087
8/26/2020	0.0023 (J)	<0.005	
9/21/2020	0.0041 (J)		0.012
9/28/2020		<0.005	
11/12/2020			0.012
12/16/2020			0.0055
1/20/2021			0.012
3/12/2021	0.0027 (J)		0.014
3/15/2021		<0.005	
8/16/2021	0.0037 (J)	<0.005	
8/19/2021			0.0054
2/2/2022	0.0072	<0.005	
2/3/2022			0.0086
8/4/2022	0.0058	<0.005	0.014
1/24/2023		<0.005	
1/25/2023	0.0055		0.0097
8/10/2023	0.0048 (J)	<0.005	0.012
2/14/2024			0.004 (J)
2/15/2024	0.005 (J)	<0.005	
8/6/2024		<0.005	
8/7/2024	0.0064		0.012
2/15/2025	0.0046 (J)	<0.005	0.003 (J)
Mean	0.0041	0.004368	0.009531
Std. Dev.	0.001314	0.001628	0.003452
Upper Lim.	0.004806	0.005	0.01178
Lower Lim.	0.003394	0.0005	0.007285

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	1.47	1.57	1.22		
10/26/2016	0.864 (U)		0.637 (U)		
11/7/2016		0.739 (U)			
1/13/2017		0.744 (U)			
1/27/2017	0.521 (U)		0.795 (U)		
5/25/2017	0.681		0.896		
6/3/2017		0 (U)			
8/11/2017			0.828 (U)		
10/2/2017	0.632 (U)	0.68 (U)			
11/15/2017	1.3	0.911 (U)	0.478 (U)		
6/5/2018	1.26	0.948 (U)	0.947 (U)		
10/2/2018	0.572 (U)		0.617 (U)		
10/5/2018		1.17 (U)			
8/22/2019	1.35	1.3			
8/23/2019			0.834		
10/21/2019		0.393 (U)	1.11 (U)		
10/22/2019	0.76 (U)				
3/24/2020			0.796 (U)		
3/25/2020	0.696 (U)	0.505 (U)			
5/22/2020				1.1 (U)	1.82
6/16/2020				1.62	1.82
8/25/2020				1.65	1.82
8/26/2020	0.357 (U)	1.96			
8/27/2020			0.494 (U)		
9/18/2020					0.841 (U)
9/21/2020	0.553 (U)			1.45	
9/28/2020		0.761 (U)	0.477 (U)		
11/11/2020					0.837 (U)
11/12/2020				0.633 (U)	
12/16/2020				0.818 (U)	1.26 (U)
1/20/2021				1.01 (U)	0.985 (U)
3/12/2021	0.711 (U)			0.828 (U)	1.86
3/15/2021		0.985 (U)	0.74 (U)		
8/16/2021	1.25	0.192 (U)	0.734 (U)		
8/19/2021				0.721 (U)	1.11
2/2/2022	0.816 (U)	0.254 (U)	0.564 (U)		
2/3/2022				0.257 (U)	1.51
8/4/2022	0.687 (U)	1.16 (U)	0.16 (U)	0.971 (U)	1.34 (U)
1/24/2023		0.757 (U)	0.601 (U)		
1/25/2023	0.992			1.11	1.91
8/10/2023	0.682 (U)	0.585 (U)		0.953 (U)	
8/11/2023			0.449 (U)		1.34
2/14/2024				0.275 (U)	1.01 (U)
2/15/2024	0.669 (U)	0.0885 (U)			
2/16/2024			0.448 (U)		
8/6/2024		1.27			
8/7/2024	0.679 (U)		0.422 (U)	0.603 (U)	0.662 (U)
2/14/2025			0.102 (U)		
2/15/2025	0.506 (U)	0.874 (U)		1.29 (U)	1.21 (U)
Mean	0.8185	0.8112	0.6522	0.9556	1.333
Std. Dev.	0.312	0.4823	0.274	0.4161	0.4153
Upper Lim.	0.986	1.07	0.7993	1.226	1.604

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
Lower Lim.	0.6511	0.5523	0.5052	0.6848	1.063

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.65	0.14 (J)	0.15 (J)		
10/26/2016	0.6		0.3		
11/7/2016		0.18 (J)			
1/13/2017		0.14 (J)			
1/27/2017	1.2		0.3		
5/25/2017	1.4		0.05 (J)		
6/3/2017		0.15 (J)			
8/11/2017			0.1 (J)		
10/2/2017	1	1.2			
11/15/2017	1.3	0.6	<0.1		
6/5/2018	0.48	0.19 (J)	0.078 (J)		
10/2/2018	0.34		0.078 (J)		
10/5/2018		0.23 (J)			
4/2/2019	0.47				
4/3/2019		0.14 (J)	0.089 (J)		
6/17/2019	1.2				
8/22/2019	0.3 (J)	0.2 (J)			
8/23/2019			0.11 (J)		
10/21/2019		0.18 (J)	0.073 (J)		
10/22/2019	0.53				
3/24/2020			<0.1		
3/25/2020	0.43	0.095 (J)			
5/22/2020				0.1 (J)	0.46
6/15/2020	0.37				
6/16/2020				0.12	0.44
8/25/2020				0.16	0.52
8/26/2020	0.48	0.16			
8/27/2020			<0.1		
9/18/2020					0.43
9/21/2020	0.33			0.11	
9/28/2020		0.15	<0.1		
11/11/2020					0.45
11/12/2020				0.12	
12/16/2020				0.2	0.49
1/20/2021				0.13	0.44
3/12/2021	0.42			0.12	0.46
3/15/2021		0.16	<0.1		
8/16/2021	0.39	0.15	<0.1		
8/19/2021				0.17	0.43
2/2/2022	0.36	0.15	<0.1		
2/3/2022				0.18	0.51
8/4/2022	0.38	0.18	0.074 (J)	0.15	0.5
1/24/2023		0.18	0.068 (J)		
1/25/2023	0.42			0.17	0.57
8/10/2023	0.36	0.18		0.15	
8/11/2023			<0.1		0.49
2/14/2024				0.2	0.49
2/15/2024	0.35	0.18			
2/16/2024			<0.1		
8/6/2024		0.2			
8/7/2024	0.34		<0.1	0.12	0.5
2/14/2025			<0.1		

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
2/15/2025	0.34	0.18		0.19	0.49
Mean	0.5776	0.2311	0.1117	0.1494	0.4794
Std. Dev.	0.3436	0.2313	0.06232	0.03316	0.03803
Upper Lim.	0.6	0.19	0.11	0.1709	0.5041
Lower Lim.	0.35	0.15	0.078	0.1278	0.4546

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.001	<0.001	<0.001		
10/26/2016	0.0002 (J)		<0.001		
11/7/2016		<0.001			
1/13/2017		<0.001			
1/27/2017	<0.001		<0.001		
5/25/2017	9E-05 (J)		<0.001		
6/3/2017		7E-05 (J)			
8/11/2017			8E-05 (J)		
10/2/2017	8E-05 (J)	<0.001			
11/15/2017	<0.001	<0.001	<0.001		
6/5/2018	<0.001	0.00036 (J)	<0.001		
10/2/2018	<0.001		<0.001		
10/5/2018		<0.001			
8/22/2019	<0.001	<0.001			
8/23/2019			4.9E-05 (J)		
10/21/2019		<0.001	4.9E-05 (J)		
10/22/2019	<0.001				
3/24/2020			9.4E-05 (J)		
3/25/2020	<0.001	<0.001			
5/22/2020				0.00014 (J)	<0.001
6/16/2020				0.00013 (J)	<0.001
8/25/2020				<0.001	4.5E-05 (J)
8/26/2020	<0.001	<0.001			
8/27/2020			<0.001		
9/18/2020					<0.001
9/21/2020	<0.001			<0.001	
9/28/2020		<0.001	7.5E-05 (J)		
11/11/2020					4.2E-05 (J)
11/12/2020				4.7E-05 (J)	
12/16/2020				<0.001	<0.001
1/20/2021				9.2E-05 (J)	<0.001
3/12/2021	<0.001			4.4E-05 (J)	4.6E-05 (J)
3/15/2021		0.00015 (J)	<0.001		
8/16/2021	<0.001	<0.001	<0.001		
8/19/2021				<0.001	<0.001
2/2/2022	<0.001	<0.001	<0.001		
2/3/2022				<0.001	<0.001
8/4/2022	<0.001	<0.001	<0.001	<0.001	<0.001
1/24/2023		<0.001	<0.001		
1/25/2023	<0.001			<0.001	<0.001
8/10/2023	<0.001	<0.001		<0.001	
8/11/2023			<0.001		<0.001
2/14/2024				<0.001	<0.001
2/15/2024	<0.001	<0.001			
2/16/2024			<0.001		
8/6/2024		<0.001			
8/7/2024	<0.001		<0.001	<0.001	<0.001
2/14/2025			<0.001		
2/15/2025	<0.001	<0.001		<0.001	<0.001
Mean	0.0008805	0.00089	0.0007885	0.0007158	0.0008208
Std. Dev.	0.0003086	0.0002871	0.0003993	0.000436	0.0003852
Upper Lim.	0.001	0.001	0.001	0.001	0.001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
Lower Lim.	0.0002	0.00036	9.4E-05	9.2E-05	4.6E-05

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.0333 (J)	0.0077 (J)	<0.03		
10/26/2016	0.0352 (J)		<0.03		
11/7/2016		0.0089 (J)			
1/13/2017		0.0091 (J)			
1/27/2017	0.0329 (J)		<0.03		
5/25/2017	0.0347 (J)		0.0011 (J)		
6/3/2017		0.0104 (J)			
8/11/2017			<0.03		
10/2/2017	0.0337 (J)	0.0095 (J)			
11/15/2017	0.0347 (J)	0.0086 (J)	<0.03		
6/5/2018	0.033 (J)	0.0092 (J)	0.0012 (J)		
10/2/2018	0.031 (J)		0.0012 (J)		
10/5/2018		0.0091 (J)			
8/22/2019	0.029 (J)	0.0084 (J)			
8/23/2019			0.0011 (J)		
10/21/2019		0.009 (J)	0.0011 (J)		
10/22/2019	0.03 (J)				
3/24/2020			0.0012 (J)		
3/25/2020	0.024 (J)	0.0066 (J)			
5/22/2020				0.0052 (J)	0.0046 (J)
6/16/2020				0.0053 (J)	0.0045 (J)
8/25/2020				0.0037 (J)	0.0037 (J)
8/26/2020	0.023 (J)	0.0071 (J)			
8/27/2020			0.00091 (J)		
9/18/2020					0.0035 (J)
9/21/2020	0.023 (J)			0.0038 (J)	
9/28/2020		0.0076 (J)	0.0011 (J)		
11/11/2020					0.0032 (J)
11/12/2020				0.0038 (J)	
12/16/2020				0.0055 (J)	0.0029 (J)
1/20/2021				0.0046 (J)	0.0038 (J)
3/12/2021	0.023 (J)			0.0039 (J)	0.0038 (J)
3/15/2021		0.0077 (J)	0.001 (J)		
8/16/2021	0.025 (J)	0.0075 (J)	0.0011 (J)		
8/19/2021				0.0074 (J)	0.0032 (J)
2/2/2022	0.025 (J)	0.0082 (J)	0.0012 (J)		
2/3/2022				0.0057 (J)	0.0038 (J)
8/4/2022	0.023 (J)	0.0069 (J)	0.0011 (J)	0.0035 (J)	0.0034 (J)
1/24/2023		0.0066 (J)	0.0011 (J)		
1/25/2023	0.018 (J)			0.0045 (J)	0.0046 (J)
8/10/2023	0.023 (J)	0.0069 (J)		0.0042 (J)	
8/11/2023			0.00097 (J)		0.0041 (J)
2/14/2024				0.0083 (J)	0.0041 (J)
2/15/2024	0.021 (J)	0.0056 (J)			
2/16/2024			<0.03		
8/6/2024		0.0063 (J)			
8/7/2024	0.023 (J)		<0.03	0.0038 (J)	0.0042 (J)
2/14/2025			0.00104 (J)		
2/15/2025	0.02 (J)	0.00449 (J)		0.00823 (J)	0.00401 (J)
Mean	0.0272	0.00779	0.01029	0.005089	0.003838
Std. Dev.	0.005556	0.001414	0.01378	0.001599	0.0005113
Upper Lim.	0.03019	0.008549	0.03	0.0074	0.004171

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
Lower Lim.	0.02422	0.007031	0.00104	0.0038	0.003505

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-124
8/31/2016	4E-05 (J)	<0.0002
10/26/2016	<0.0002	<0.0002
1/27/2017	<0.0002	<0.0002
5/25/2017	7E-05 (J)	5.1E-05 (J)
8/11/2017		<0.0002
10/2/2017	<0.0002	
11/15/2017	<0.0002	<0.0002
6/5/2018	<0.0002	<0.0002
10/2/2018	<0.0002	<0.0002
8/22/2019	<0.0002	
8/23/2019		<0.0002
8/26/2020	<0.0002	
8/27/2020		<0.0002
8/16/2021	<0.0002	<0.0002
2/2/2022	<0.0002	<0.0002
8/4/2022	<0.0002	<0.0002
1/24/2023		<0.0002
1/25/2023	<0.0002	
8/10/2023	<0.0002	
8/11/2023		<0.0002
2/15/2024	<0.0002	
2/16/2024		<0.0002
8/7/2024	<0.0002	<0.0002
2/14/2025		<0.0002
2/15/2025	<0.0002	
Mean	0.0001839	0.0001917
Std. Dev.	4.717E-05	3.512E-05
Upper Lim.	0.0002	0.0002
Lower Lim.	7E-05	5.1E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-124	HGWC-125
8/31/2016	0.0176	<0.01	
10/26/2016	0.0187	<0.01	
1/27/2017	0.0214	<0.01	
5/25/2017	0.0231	0.0009 (J)	
8/11/2017		0.0013 (J)	
10/2/2017	0.0259		
11/15/2017	0.0281	0.0012 (J)	
6/5/2018	0.033	<0.01	
10/2/2018	0.036	<0.01	
8/22/2019	0.039		
8/23/2019		0.0014 (J)	
10/21/2019		0.0013 (J)	
10/22/2019	0.04		
3/24/2020		0.001 (J)	
3/25/2020	0.034		
5/22/2020			<0.01
6/16/2020			<0.01
8/25/2020			0.00099 (J)
8/26/2020	0.05		
8/27/2020		0.00091 (J)	
9/21/2020	0.043		<0.01
9/28/2020		0.0009 (J)	
11/12/2020			0.0017 (J)
12/16/2020			0.014
1/20/2021			0.0013 (J)
3/12/2021	0.033		0.0012 (J)
3/15/2021		0.00092 (J)	
8/16/2021	0.035	0.00091 (J)	
8/19/2021			0.021
2/2/2022	0.034	0.001 (J)	
2/3/2022			0.0067 (J)
8/4/2022	0.032	<0.01	0.0023 (J)
1/24/2023		<0.01	
1/25/2023	0.03		0.0053 (J)
8/10/2023	0.035		0.0031 (J)
8/11/2023		<0.01	
2/14/2024			0.026
2/15/2024	0.033		
2/16/2024		0.00072 (J)	
8/7/2024	0.036	0.0012 (J)	0.0028 (J)
2/14/2025		<0.01	
2/15/2025	0.033		0.028
Mean	0.03231	0.004712	0.009024
Std. Dev.	0.007716	0.004506	0.008932
Upper Lim.	0.03645	0.01	0.01092
Lower Lim.	0.02817	0.00092	0.002048

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 4/22/2025 7:09 PM View: Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-126
8/31/2016	<0.005	<0.005	<0.005	
10/26/2016	<0.005		<0.005	
11/7/2016		<0.005		
1/13/2017		0.0011 (J)		
1/27/2017	<0.005		<0.005	
5/25/2017	<0.005		<0.005	
6/3/2017		<0.005		
8/11/2017			<0.005	
10/2/2017	0.002 (J)	<0.005		
11/15/2017	<0.005	<0.005	<0.005	
6/5/2018	<0.005	<0.005	<0.005	
10/2/2018	<0.005		0.0014 (J)	
10/5/2018		<0.005		
8/22/2019	<0.005	<0.005		
8/23/2019			<0.005	
5/22/2020				<0.005
6/16/2020				<0.005
8/25/2020				<0.005
8/26/2020	<0.005	<0.005		
8/27/2020			<0.005	
9/18/2020				<0.005
11/11/2020				<0.005
12/16/2020				<0.005
1/20/2021				<0.005
8/16/2021	<0.005	<0.005	<0.005	
8/19/2021				<0.005
2/2/2022	<0.005	<0.005	<0.005	
2/3/2022				<0.005
8/4/2022	<0.005	<0.005	<0.005	<0.005
1/24/2023		<0.005	<0.005	
1/25/2023	<0.005			<0.005
8/10/2023	<0.005	<0.005		
8/11/2023			<0.005	<0.005
2/14/2024				<0.005
2/15/2024	<0.005	<0.005		
2/16/2024			<0.005	
8/6/2024		<0.005		
8/7/2024	<0.005		<0.005	<0.005
2/14/2025			<0.005	
2/15/2025	<0.005	<0.005		0.0013 (J)
Mean	0.004833	0.004783	0.0048	0.004753
Std. Dev.	0.0007071	0.0009192	0.0008485	0.0009553
Upper Lim.	0.005	0.005	0.005	0.005
Lower Lim.	0.002	0.0011	0.0014	0.0013

ND substitution: RL or RL/2 if <15% NDs.