



*Prepared for*

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

# **2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT**

## **PLANT HAMMOND ASH POND 3 (AP-3)**

*Prepared by*

**Geosyntec**   
consultants

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200  
Kennesaw, Georgia 30144

Project Number GW6581

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### CERTIFICATION STATEMENT

This 2022 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 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. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management, and 40 CFR Part 258.50(g).



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Whitney Law  
Georgia Professional Engineer No. 36641

July 29, 2022  
Date

## SUMMARY

This summary of the *2022 Annual Groundwater Monitoring and Corrective Action Report* provides the status of groundwater monitoring and corrective action program for the reporting period of July 2021 through June 2022 (referred herein as the 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<sup>1</sup> 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.



Plant Hammond and Location of AP-3

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 reporting period, Geosyntec conducted groundwater sampling events in August 2021 and February 2022. Groundwater samples were submitted to Pace Analytical Services, LLC., for analysis. Groundwater data for both events were evaluated in accordance with the certified statistical methods. Statistically significant increase of Appendix III<sup>2</sup> constituents above background were observed in select monitoring wells in August 2021 and January/February 2022, as summarized in the table below. Statistically significant levels

<sup>1</sup> 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

<sup>2</sup> Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)

(SSLs) of molybdenum<sup>3</sup> were observed in excess of the state groundwater protection standard (GWPS) in August 2021 as summarized in the table below.

On February 22, 2022, GA EPD updated the Rules for Solid Waste Management 391-3-4-.10(6) to incorporate the federal GWPS for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.10 mg/L), except when site specific background concentrations of these constituents is higher. Groundwater data from the January/February 2022 event was statistically analyzed using these GWPS and no SSLs were observed. A groundwater compliance notification to remove AP-3 from Assessment of Corrective Measures was approved by GA EPD on July 15, 2022.

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 GA EPD semiannually.

<i>Appendix III Constituent<sup>2</sup></i>	<i>August 2021</i>	<i>January/February 2022</i>
Boron	HGWC-120, HGWC-121A, HGWC-124, HGWC-125	HGWC-120, HGWC-121A, HGWC-125
Calcium	HGWC-120, HGWC-121A, HGWC-125, HGWC-126	HGWC-120, HGWC-121A, HGWC-125, HGWC-126
Sulfate	HGWC-120, HGWC-121A, HGWC-125	HGWC-120, HGWC-121A, HGWC-125
Total dissolved solids (TDS)	HGWC-125	HGWC-121A, HGWC-125
<i>Appendix IV Constituent<sup>4</sup></i>	<i>August 2021</i>	<i>January/February 2022</i>
Molybdenum	<i>State only:</i> HGWC-120, MW-32, MW-39, MW-41	None

<sup>3</sup> Appendix IV constituents are antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228

<sup>4</sup> A state 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, or the calculated background interwell tolerance limit. A federal SSL-related constituent is determined by comparing the confidence intervals developed to either the constituent’s 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

ACM	assessment of corrective measures
AP-3	Ash Pond 3
CCR	coal combustion residuals
CFR	Code of Federal Regulations
cm/sec	centimeters per second
DO	dissolved oxygen
ft	feet
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
$K_h$	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
SCS	Southern Company Services
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 *2022 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 2021 through June 2022 (referred herein as the 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.

AP-3 ceased receiving waste prior to the effective date of the federal CCR Rule promulgated in April 2015. 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 annual and semiannual monitoring and reporting pursuant to § 257.90 through § 257.95 of the federal CCR Rule.

Due to a statistically significant level (SSL) of molybdenum identified in the *2020 Annual Groundwater Monitoring and Corrective Action Report* (Geosyntec, 2020a), Georgia Power initiated an assessment of corrective measures (ACM) program for AP-3 in July 2020. On February 22, 2022, the GA EPD adopted the federal GWPS for cobalt, molybdenum, lithium, and lead under § 257.95(h), which established the GWPS for these constituents as the higher of background concentrations or 0.006 milligrams per liter (mg/L), 0.10 mg/L, 0.040 mg/L, and 0.015 mg/L, respectively. No SSLs of an Appendix IV constituent above the established GWPS were identified in wells at AP-3 during the most recent semiannual assessment monitoring event conducted in January/February 2022. A groundwater compliance notification was submitted to GA EPD on June 10,



2022 and is provided in **Appendix A**. GA EPD provided concurrence with the notification on July 15, 2022, and released AP-3 from the ACM program. Groundwater at AP-3 will continue to be managed under the assessment monitoring program.

This report includes the results of the semiannual assessment monitoring events conducted in August 2021 and January/February 2022.

### **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 with 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.

### **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) – Ash Pond 3 (AP-3)* (HAR Rev 01) submitted to GA EPD in support of the AP-3 closure permit application (Geosyntec, 2020b).

### 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 lithologic 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.

As part of the assessment monitoring program, delineation wells were installed between late 2019 and August 2020 to characterize the nature and extent of molybdenum in groundwater downgradient of AP-3. Pursuant to § 257.95(g)(1)(iv), the wells classified as “delineation wells” at the time of installation were sampled concurrently with the compliance monitoring well network as part of the assessment groundwater monitoring program. Due to the adoption of the federal GWPS by the GA EPD on February 22, 2022, and the resulting cessation of efforts associated with the assessment of corrective measures program, horizontal delineation wells MW-32 and MW-41, and vertical delineation well MW-46D were reclassified as “piezometers”. Additional details are provided in Section 2.2.

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

## 2.0 GROUNDWATER MONITORING ACTIVITIES

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

### 2.1 Monitoring Well Installation and Maintenance

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

The well and piezometer networks are inspected semiannually to evaluate if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A. § 12-5-134(5)(d)(vii)). In August 2021 and January/February 2022, the networks were inspected, necessary corrective actions were identified and subsequently completed, as documented in **Appendix B**. The August 2021 documentation serves as the 5 year well network inspection. 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. Statistical analyses of the groundwater data from the August 2019, October 2019, and March 2020 assessment monitoring events identified SSLs of lithium and molybdenum in compliance well HGWC-120. A reduced lithium groundwater concentration reported in March 2020 for HGWC-120 reduced the lower confidence interval to below the state GWPS; and therefore, an SSL for lithium was no longer identified in HGWC-120. Details regarding the statistical analyses are provided in the *2020 Annual Groundwater and Corrective Action Monitoring Report* (Geosyntec, 2020a). Following the March 2020, SSLs of molybdenum were identified in wells MW- 32, MW-39, and MW-41.

Pursuant to § 257.96, an ACM was initiated for AP-3 in July 2020. An *Assessment of Corrective Measures Report – Plant Hammond Ash Pond 3 (AP-3)* (ACM Report) was subsequently prepared for AP-3 (Geosyntec, 2020c) and submitted to GA EPD in December 2020 and posted to the Georgia Power CCR compliance website. In accordance with § 257.96(b), groundwater continued to be monitored at AP-3 under the assessment monitoring program as the ACM phase was implemented.

On February 22, 2022, GA EPD adopted the federal GWPS. The updated GWPS for lithium and molybdenum are 0.040 mg/L and 0.10 mg/L, respectively; the GWPS were previously based on background concentrations of pooled upgradient well data. Confidence intervals were constructed using the updated GWPS for lithium at HGWC- 120 and for molybdenum at HGWC-120, MW-32, MW-39, and MW-41 for each sampling event beginning with the first documented SSL at each well, as identified in comparison with the prior GWPS, and through the January/February 2022 assessment monitoring event. The statistical analysis demonstrated that each of the previously identified SSLs of lithium and molybdenum have always complied with the federal GWPS adopted by GA EPD. The completed statistical analyses comply with the federal CCR Rule, the GA EPD Rules for Solid Waste Management Chapter 391-3-4-.10, and is in accordance with the USEPA document *Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance* (Unified Guidance).

Due to Georgia Power being in compliance with § 257.98(c)(1-2), the following changes will be implemented to the AP-3 groundwater compliance monitoring program as of February 22, 2022:

- Cessation of efforts associated with the ACM program, as stipulated by § 257.96 through § 257.98.
- Reclassification of horizontal delineation wells MW-32 and MW-41 and vertical delineation well MW-46D as “piezometers”. Georgia Power will discontinue the routine collection of groundwater samples from these three wells. These piezometers will be used for water level measurements during the semiannual assessment monitoring events to define groundwater flow direction and gradients downgradient of AP-3.
- Georgia Power will continue to collect groundwater samples from compliance monitoring well HGWC-120 during routine semiannual assessment monitoring events in accordance with the assessment monitoring program stipulated by § 257.95.
- Georgia Power will discontinue the routine collection of Cabin Creek surface water samples from location H-SCC E41 located downgradient of MW-41 (shown on **Figure 2** and discussed in Section 2.3).

For the current reporting period, the semiannual assessment monitoring events were conducted in August 2021 and January/February 2022. The number of groundwater samples collected for analysis and the dates the samples were collected at AP-3 during

the 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 Surface Water Sampling**

Due to the presence of surface water features in the downgradient direction of MW-41, Georgia Power collected surface water samples in September 2021 and January 2022 from three locations along Cabin Creek, two of which are applicable to evaluating the surface water conditions downgradient of AP-3 (i.e., H-SCC NBR and H-SCC E41), as shown on **Figure 2**. The analytical results are summarized in **Table 3**. The laboratory reports associated with the September 2021 and January 2022 surface water sampling events are provided in **Appendix C**. Due to the cessation of the ACM program, Georgia Power will discontinue the routine collection of Cabin Creek surface water samples.

In response to GA EPD comments received on January 26, 2021, Georgia Power added three surface water sampling locations to the stormwater outfalls at AP-3. Upon issuance of the Hammond AP-3 solid waste permit, these locations will be sampled semiannually for the full Appendix IV constituent list.

### **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 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 2021 and January/February 2022 assessment monitoring events and used to calculate corresponding groundwater elevations, which are presented in **Table 4**. The August 2021 and January/February 2022 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 4** as “Cabin Creek (Hwy 20)”, is located midway across the bridge along GA-20 Alabama Highway spanning Cabin Creek. This gauging location is co-located with the surface water sampling point, H-SCC NBR. The second Cabin Creek gauging location is along the railroad bridge southeast of AP-3; this location is referred to in **Table 4** as “Cabin Creek (Railroad bridge)”.

The groundwater and surface water elevation data presented in **Table 4** were used to prepare a potentiometric surface contour map for the August 2021 event and the January/February 2022 event, which are presented on **Figure 3** and **Figure 4**, respectively. 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 consistent with previous observations for AP- 3.

#### **3.2 Groundwater Gradient and Flow Velocity**

The horizontal groundwater hydraulic gradient within the uppermost aquifer beneath AP- 3 was calculated using the groundwater elevation data from the August 2021 and January/February 2022 events. The hydraulic gradient is 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

gradient in this report has 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 MW-21 and HGWC-121A). The hydraulic gradient calculation is presented in **Table 5**. The general trajectory of the flow paths are shown on **Figure 3** and **Figure 4**, respectively, for the August 2021 and January/February 2022 events. The average hydraulic gradient for this reporting period across AP-3 is 0.0089 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 5**.

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

where:

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

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

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

$h_1$  and  $h_2$  = Groundwater elevation at location 1 and 2

$L$  = distance between location 1 and 2

$n_e$  = Effective porosity

Aquifer testing was conducted by LETCO in 1977, Southern Company Services (SCS) in 2014, and Geosyntec in 2017 to evaluate horizontal hydraulic conductivity ( $K_h$ ) of the water bearing units in the vicinity of AP-3. Slug testing was performed to estimate the  $K_h$  for units above the top of bedrock, while single packer testing was used to estimate the  $K_h$  for the bedrock intervals. Additional details are presented in the HAR Rev 01 (Geosyntec, 2020b).

The groundwater flow velocity calculation was performed using the geometric mean value for  $K_h$  of the highly weathered/fractured rock of  $9.8 \times 10^{-4}$  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 horizontal groundwater flow velocity underneath AP-3 for this reporting period was calculated to be 0.16 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 and peristaltic pumps, the pump intake was lowered to the midpoint of the well screen (or as appropriate based on the groundwater level). Non-dedicated bladder pump and peristaltic pump samples were collected using new disposable polyethylene tubing; all non-dedicated tubing was disposed of following the sampling event. All non-disposable equipment was decontaminated before use and between well locations.

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

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

Following purging, and once stabilization was achieved, unfiltered samples were collected into appropriately preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to Pace Analytical Services, LLC. (Pace Analytical) in Peachtree Corners, Georgia, following chain-of-custody protocol. The field sampling and equipment calibration forms generated during the reporting period are provided in **Appendix C**.

### **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 C**. The groundwater analytical results from the August 2021 and January/February 2022 sampling events 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 data are considered usable for meeting project objectives and the results are considered valid. The associated data validation reports are provided in **Appendix C**, along with the laboratory reports.

## 4.0 STATISTICAL ANALYSIS

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

### 4.1 Statistical Methods

Groundwater data from the 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 determine if concentrations statistically exceeded the established state and federal GWPS<sup>5</sup>. Detailed statistical methods used for Appendix III and Appendix IV constituents are discussed in statistical analysis packages provided in **Appendix D** 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

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<sup>5</sup> Differentiation between the state and federal GWPS for evaluating Appendix IV confidence intervals is only applicable to the August 2021 data.

downgradient compliance 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 compliance and delineation 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 both the state and federal GWPS for the August 2021 data and the adopted federal GWPS for the January/February 2022 data. 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.

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

- (1) The maximum contaminant level (MCL) established under § 141.62 and § 141.66.
- (2) Where an MCL has not been established:
  - (i) Cobalt 0.006 mg/L;
  - (ii) Lead 0.015 mg/L;
  - (iii) Lithium 0.040 mg/L; and
  - (iv) Molybdenum 0.10 mg/L.
- (3) Background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

Since GA EPD adopted the federal GWPS in February 2022, the August 2021 data were compared to the former state GWPS which applied the following criteria to establish GWPS pursuant to GA EPD Rules for Solid Waste Management 391-3-4-.10:

- (1) The federally established MCL.
- (2) Where an MCL has not been established, the background concentration.
- (3) Background levels for constituents where the background level is higher than the MCL.

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

#### **4.2 Statistical Analyses Results**

Based on review of the full Appendix III statistical analysis discussion presented in **Appendix D**, groundwater conditions have not returned to background and assessment monitoring should continue. Based on the statistical analysis of Appendix IV constituents, the following constituents exceeded the GWPS established per semiannual assessment monitoring event:

##### **4.2.1 August 2021 Semiannual Event Data**

AP-3 (federal CCR Rule):

- No SSLs were reported above federal GWPS.

AP-3 (GA EPD CCR Rule):

- Molybdenum: HGWC-120, MW-32, MW-39, and MW-41

A groundwater exceedance notification acknowledging the SSLs of molybdenum was placed in the Operating Record on January 31, 2022, pursuant to § 257.95(g).

##### **4.2.2 January/February 2022 Semiannual Event Data**

No SSLs were identified for this data based on statistical comparison of the derived confidence intervals to the GWPS.

## **5.0 MONITORING PROGRAM STATUS**

Based on the statistical evaluation results presented for the 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.

On June 16, 2022, Georgia Power submitted a demonstration that Plant Hammond AP-3 no longer demonstrated statistically significant exceedances of the established GWPS as updated by GA EPD on February 22, 2022. GA EPD provided concurrence with the notification on July 15, 2022, and released AP-3 from the ACM program. Following this approval, AP-3 will no longer be in assessment of corrective measures and will continue the assessment monitoring program.

## 6.0 CONCLUSIONS AND FUTURE ACTIONS

This *2022 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.

Due to there being no SSLs within the monitoring network as of February 22, 2022, groundwater monitoring and reporting will be conducted in accordance with §257.95 Assessment Monitoring Program. The following GA EPD-approved changes will be implemented to the AP-3 groundwater compliance monitoring program:

- Georgia Power will continue to collect groundwater samples from compliance monitoring well HGWC-120 during routine semiannual assessment monitoring events in accordance with the assessment monitoring program. Georgia Power will discontinue the routine collection of groundwater samples from wells MW- 32, MW-41, and MW-46D and piezometer MW-39. Wells MW-32, MW- 41, and MW-46D will be reclassified as piezometers. The four piezometers will be used for water level measurements during the semiannual assessment monitoring events to define groundwater flow direction and gradients downgradient of AP-3.
- Georgia Power will discontinue the routine collection of Cabin Creek surface water samples.

The next routine semiannual assessment monitoring event for AP-3 is scheduled for August 2022. The August 2022 semiannual assessment monitoring event will include sampling and analysis of all Appendix III and IV constituents.

## 7.0 REFERENCES

- Geosyntec, 2020a. 2020 Annual Groundwater Monitoring and Corrective Action Report – Georgia Power Company, Plant Hammond Ash Pond 3 (AP-3). July 2020.
- Geosyntec, 2020b. Hydrogeologic Assessment Report (Revision 01) – Plant Hammond Ash Pond 3 (AP-3). November 2020.
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- Geosyntec, 2021. Groundwater Monitoring Plan – Plant Hammond Ash Pond 3 (AP-3). September 2019, revised January 2021.
- Geosyntec, 2022. 2021 Semiannual Groundwater Monitoring and Corrective Action Report – Plant Hammond Ash Pond 3 (AP-3). February 2022.
- Golder Associates, 2018. Geologic and Hydrogeologic Report – Plant Hammond. November 2018.
- Sanitas: Groundwater Statistical Software, v. 9.6.05, 2018. Sanitas Technologies<sup>®</sup>, Boulder, CO.
- USEPA, 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. Office of Resource Conservation and Recovery – Program Implementation and Information Division. March 2009.
- USEPA, 2011. *Region IV Data Validation Standard Operating Procedures*. Science and Ecosystem Support Division. Region IV. Athens, GA. September 2011.
- USEPA, 2017. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA-540-R-2017-001]. Washington, DC. January 2017.



# TABLES

**Table 1**  
Monitoring Well Network Summary  
Plant Hammond AP-3, Floyd County, Georgia

Well ID	Hydraulic Location	Installation Date	Northing <sup>(1)</sup>	Easting <sup>(1)</sup>	Top of Casing Elevation <sup>(2)</sup> (ft)	Top of Screen Elevation <sup>(2)</sup> (ft)	Bottom of Screen Elevation <sup>(2)</sup> (ft)	Well Depth (ft BTOC) <sup>(3)</sup>	Screen Interval Length (ft)
<b>Compliance Monitoring Well</b>									
HGWA-1	Upgradient	12/3/2014	1550423.32	1940770.00	595.21	573.12	563.12	32.49	10
HGWA-2	Upgradient	12/2/2015	1549796.87	1939845.15	587.92	570.29	560.29	27.95	10
HGWA-3	Upgradient	12/2/2015	1549794.41	1939833.39	587.74	553.23	543.23	44.51	10
HGWA-43D	Upgradient	8/26/2020	1550422.85	1940753.80	595.08	544.08	534.08	61.25	10
HGWA-44D	Upgradient	8/25/2020	1550409.13	1940756.18	594.79	491.76	481.76	113.28	10
HGWA-45D	Upgradient	8/19/2020	1551157.68	1941907.54	586.95	535.23	525.23	62.87	10
HGWA-122	Upgradient	11/20/2014	1551251.42	1941887.11	587.90	570.54	560.54	27.76	10
HGWC-120	Downgradient	6/27/2016	1551067.24	1942926.62	605.82	548.83	538.83	67.00	10
HGWC-121A	Downgradient	7/17/2017	1550607.97	1943030.44	584.69	556.71	546.71	37.98	10
HGWC-124	Downgradient	11/13/2014	1551624.93	1942781.05	582.52	557.80	547.80	35.12	10
HGWC-125	Downgradient	5/4/2020	1550821.41	1942962.87	608.89	556.03	546.03	63.19	10
HGWC-126 <sup>(4)</sup>	Downgradient	11/25/2019	1550422.03	1942689.40	611.24	552.72	542.72	68.52	10
<b>Piezometer</b>									
MW-21	Upgradient	12/3/2014	1550270.15	1941809.76	586.27	570.40	560.40	26.28	10
MW-23	Downgradient	11/24/2014	1551641.44	1942496.83	584.91	563.03	553.03	32.28	10
MW-32 <sup>(5)</sup>	Downgradient	11/22/2019	1551092.83	1943021.47	585.46	559.30	549.30	36.16	10
MW-39	Downgradient	3/16/2020	1551111.45	1943089.26	580.42	564.93	554.93	25.82	10
MW-41 <sup>(5)</sup>	Downgradient	5/18/2020	1551158.16	1943196.47	577.25	563.20	553.20	24.38	10
MW-46D <sup>(5)</sup>	Downgradient	8/18/2020	1551056.478	1942929.101	605.72	513.92	503.92	102.05	10

Notes:

ft = feet

ft BTOC = feet below top of casing

(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Survey data certified by GEL Solutions May 19, 2020. Survey data for HGWA-43D, HGWA-44D, HGWA-45D, and MW-46D certified by GEL Solutions September 10, 2020.

(2) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey completed by GEL Solutions May 19, 2020. Survey data for HGWA-43D, HGWA-44D, HGWA-45D, and MW-46D certified by GEL Solutions September 10, 2020.

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

(4) HGWC-126 was originally installed as piezometer MW-31 but reclassified as a compliance monitoring well in May 2020.

(5) MW-32, MW-41 and MW-46D were originally installed as delineation wells but reclassified as piezometers following the January/February 2022 semiannual sampling event.

**Table 2**  
Groundwater Sampling Event Summary  
Plant Hammond AP-3, Floyd County, Georgia

Well ID	Hydraulic Location	August 11-19, 2021	February 1-3, 2022	Status of Monitoring Well
Purpose of Sampling Event:		Assessment	Assessment	
<b><i>Compliance Monitoring Well</i></b>				
HGWA-1	Upgradient	X	X	Assessment
HGWA-2	Upgradient	X	X	Assessment
HGWA-3	Upgradient	X	X	Assessment
HGWA-43D	Upgradient	X	X	Assessment
HGWA-44D	Upgradient	X	X	Assessment
HGWA-45D	Upgradient	X	X	Assessment
HGWA-122	Upgradient	X	X	Assessment
HGWC-120	Downgradient	X	X	Assessment
HGWC-121A	Downgradient	X	X	Assessment
HGWC-124	Downgradient	X	X	Assessment
HGWC-125	Downgradient	X	X	Assessment
HGWC-126	Downgradient	X	X	Assessment
<b><i>Piezometer</i></b>				
MW-32 <sup>(1)</sup>	Downgradient	X	X	Assessment
MW-39	Downgradient	X	X	Assessment
MW-41 <sup>(1)</sup>	Downgradient	X	X	Assessment
MW-46D <sup>(1)</sup>	Downgradient	X	X	Assessment

Note:

(1) MW-32, MW-41, and MW-46D were originally installed as delineation wells but reclassified as piezometers following the January/February 2022 semiannual sampling event.

**Table 3**  
 Summary of Surface Water Analytical Data  
 Plant Hammond AP-3, Floyd County, Georgia

Sample ID <sup>(1)</sup> :		H-SCC NBR	H-SCC E41	H-SCC NBR	H-SCC E41
Sample Date:		9/13/2021	9/13/2021	1/24/2022	1/24/2022
Parameter <sup>(2,3)</sup>					
APP. III	Boron	0.081	0.15	0.044	0.047
	Calcium	27.8	38.8	19.4	17.1
	Chloride	1.5	1.7	1.4	1.4
	Fluoride	<0.10	<0.10	<0.10	<0.10
	Sulfate	9.7	19.5	10	10
	TDS	123	173	77.0	71.0
APP. IV	Arsenic	--	--	<0.0050	--
	Fluoride	<0.10	<0.10	<0.10	<0.10
	Molybdenum	<0.010	<0.010	<0.010	<0.010
GEOCHEM	Bicarbonate Alkalinity	94.5	117	--	--
	Magnesium	5.6	6.8	3.6	3.3
	Potassium	0.92	1.3	0.77	0.72
	Sodium	1.8	2.5	2.0	1.9

Notes:

-- = Indicates the parameter was not analyzed.

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

TDS = Total dissolved solids

(1) Refer to Figure 2 for locations.

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

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

**Table 4**  
 Summary of Groundwater and Surface Water Elevations  
 Plant Hammond AP-3, Floyd County, Georgia

Well ID	Top of Casing Elevation (ft) <sup>(1)</sup>	August 11, 2021		January 31, 2022	
		Depth to Water (ft BTOC)	Groundwater Elevation (ft) <sup>(1)</sup>	Depth to Water (ft BTOC)	Groundwater Elevation (ft) <sup>(1)</sup>
<b>Compliance Monitoring Well</b>					
HGWA-1	595.21	18.86	576.35	13.02	582.19
HGWA-2	587.92	10.72	577.20	8.18	579.74
HGWA-3	587.74	10.41	577.33	7.73	580.01
HGWA-43D	595.08	18.66	576.42	12.97	582.11
HGWA-44D	594.79	18.12	576.67	13.05	581.74
HGWA-45D	586.95	12.05	574.90	8.14	578.81
HGWA-122	587.90	13.09	574.81	9.24	578.66
HGWC-120	605.82	40.60	565.22	40.66	565.16
HGWC-121A	584.69	17.92	566.77	17.88	566.81
HGWC-124	582.52	16.10	566.42	14.64	567.88
HGWC-125	608.89	43.97	564.92	44.03	564.86
HGWC-126	611.24	41.26	569.98	40.72	570.52
<b>Piezometer</b>					
MW-21	586.27	9.50	576.77	6.80	579.47
MW-23	584.91	13.80	571.11	10.82	574.09
MW-32 <sup>(3)</sup>	585.46	20.21	565.25	20.32	565.14
MW-39	580.42	15.22	565.20	15.33	565.09
MW-41 <sup>(3)</sup>	577.25	12.21	565.04	12.31	564.94
MW-46D <sup>(3)</sup>	605.72	40.49	565.23	40.36	565.36
<b>Surface Water Gauging Location</b>					
Cabin Creek (Hwy 20)	594.46	28.87	565.59	30.10	564.36
Cabin Creek (Railroad bridge)	586.60	22.00	564.60	25.50 <sup>(2)</sup>	561.10 <sup>(2)</sup>

Notes:

ft = feet

ft BTOC = feet below top of casing

(1) Elevations referenced to the North American Vertical Datum of 1988 (ft NAVD88). Survey data certified on May 19, 2020. Survey data for HGWA-43D, HGWA-44D, HGWA-45D, and MW-46D certified on September 10, 2020.

(2) Due to low water levels in Cabin Creek on January 31, 2022, the location was gauged approximately 15 ft to the northeast of the surveyed gauge point, at a similar reference elevation.

(3) MW-32, MW-41, and MW-46D were originally installed as delineation wells but reclassified as piezometers following the January/February 2022 semiannual sampling event.

**Table 5**  
Horizontal Groundwater Gradient and Flow Velocity Calculations  
Plant Hammond AP-3, Floyd County, Georgia

Flow Path Direction <sup>(1)</sup>	August 11, 2021				January 31, 2022				Average i (ft/ft)
	h <sub>1</sub> (ft)	h <sub>2</sub> (ft)	L (ft)	i (ft/ft)	h <sub>1</sub> (ft)	h <sub>2</sub> (ft)	L (ft)	i (ft/ft)	
Easterly Flow Path (MW-21 to HGWC-121A)	576.77	566.77	1,278	0.0078	579.47	566.81	1,278	0.0099	0.0089

Flow Path Direction <sup>(1)</sup>	K <sub>h</sub> (ft/day)	n <sub>e</sub>	Average i (ft/ft)	V (ft/day) <sup>(2)</sup>
Easterly Flow Path (MW-21 to HGWC-121A)	2.76	0.15	0.0089	0.16

Notes:

ft = feet

ft/day = feet per day

ft/ft = feet per foot

h<sub>1</sub>, h<sub>2</sub> = groundwater elevation at location 1 and 2

i = h<sub>1</sub>-h<sub>2</sub>/L = horizontal hydraulic gradient

K<sub>h</sub> = horizontal hydraulic conductivity

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

n<sub>e</sub> = effective porosity

V = groundwater flow velocity

(1) Flow path direction relative to the orientation of AP-3 and illustrated on Figure 3 and Figure 4 of associated report.

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

**Table 6**  
Summary of Groundwater Analytical Data  
Plant Hammond AP-3, Floyd County, Georgia

Well ID:	HGWA-1	HGWA-1	HGWA-2	HGWA-2	HGWA-3	HGWA-3	HGWA-43D	HGWA-43D	HGWA-44D	HGWA-44D	HGWA-45D	HGWA-45D	
Sample Date:	8/11/2021	2/1/2022	8/12/2021	2/1/2022	8/12/2021	2/1/2022	8/11/2021	2/1/2022	8/13/2021	2/1/2022	8/13/2021	2/1/2022	
Parameter <sup>(1,2)</sup>													
APPENDIX III	Boron	0.020 J	0.016 J	0.044	0.056	<0.0086	0.011 J	0.042	0.050	0.31	0.44	0.15	0.14
	Calcium	113	106	21.9	27.2	84.0	85.1	61.0	55.9	28.9	24.8	53.0	51.3
	Chloride	9.6	7.5	5.2	7.0	4.8	5.7	3.5	4.1	39.9	44.8	3.3	3.5
	Fluoride	0.058 J	0.064 J	<0.050	<0.050	<0.050	<0.050	0.15	0.19	0.87	0.96	0.20	0.15
	pH <sup>(3)</sup>	6.98	7.19	5.05	5.24	7.31	7.45	7.40	7.52	7.77	8.25	7.42	7.45
	Sulfate	48.9	43.7	47.4	67.1	38.6	46	30.5	37.5	56.1	56.3	8.1	2.5
	TDS	366	270	118	156	265	350	277	156	436	444	272	268
APPENDIX IV	Antimony	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	0.0013 J	<0.00078	0.0018 J
	Arsenic	<0.0011	0.0016	<0.0011	0.0023 J	<0.0011	0.0024 J	0.0015 J	0.0036 J	<0.0011	0.0025 J	0.0012 J	<0.0011
	Barium	0.030	0.031	0.12	0.13	0.11	0.12	0.28	0.29	0.22	0.23	0.51	0.57
	Beryllium	<0.000054	<0.000054	0.00014 J	0.00020 J	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054
	Cadmium	<0.00011	<0.00011	0.00014 J	0.00017	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0016 J	0.0013 J	<0.0011	<0.0011
	Cobalt	<0.00039	<0.00039	0.022	0.025	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039
	Fluoride	0.058 J	0.064 J	<0.050	<0.050	<0.050	<0.050	0.15	0.19	0.87	0.96	0.20	0.15
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089
	Lithium	0.00078 J	0.0011 J	0.0012 J	0.0017 J	0.0028 J	0.0037 J	0.0024 J	0.0024 J	0.032	0.048	0.0044 J	0.0055 J
	Mercury	<0.000078	<0.00013	<0.000078	<0.00013	<0.000078	<0.00013	<0.000078	<0.00013	<0.000078	<0.00013	<0.000078	<0.00013
	Molybdenum	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	0.0034 J	0.0036 J	0.0051 J	0.0055 J	<0.00074	<0.00074
	Comb. Radium 226/228	0.115 U	0.143 U	0.746 U	0.588 U	0.498 U	0.266 U	0.394 U	1.12	0.959 U	0.665 U	1.20	0.895
Selenium	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	
Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	

Notes:

< = Indicates the parameter was not detected above the analytical method detection limit (MDL).

J = Indicates the parameter was estimated and detected between the MDL and the reporting limit (RL).

TDS = Total dissolved solids

U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228).

(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).

(2) Metals were analyzed by EPA Method 6010D, 6020B and 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540C, and combined radium by EPA Methods 9315/9320.

(3) The pH value presented was recorded at the time of sample collection in the field.

**Table 6**  
Summary of Groundwater Analytical Data  
Plant Hammond AP-3, Floyd County, Georgia

Well ID:		HGWA-122	HGWA-122	HGWC-120	HGWC-120	HGWC-121A	HGWC-121A	HGWC-124	HGWC-124	HGWC-125	HGWC-125	HGWC-126	HGWC-126
Sample Date:		8/13/2021	2/1/2022	8/16/2021	2/2/2022	8/16/2021	2/2/2022	8/16/2021	2/2/2022	8/19/2021	2/3/2022	8/19/2021	2/3/2022
Parameter <sup>(1,2)</sup>													
APPENDIX III	Boron	0.19	0.17	1.1	0.91	2.0	1.6	0.44	0.33	1.5	1.6	0.011 J	0.016 J
	Calcium	62.9	57.5	171	159	162	148	106	95.9	196	175	139	157
	Chloride	2.6	2.2	2.4	2.5	18.0	16.8	2.6	2.6	4.5	8.1	7.8	8.5
	Fluoride	0.065 J	0.062 J	0.39	0.36	0.15	0.15	<0.050	<0.050	0.17	0.18	0.43	0.51
	pH <sup>(3)</sup>	6.56	6.57	6.92	7.00	6.74	6.92	7.09	7.28	7.24	6.56	7.32	7.01
	Sulfate	42.1	41.1	211	201	158	147	74.0	70.7	264	304	64.4	66.8
	TDS	201	203	632	612	626	638	352	347	732	726	488	466
APPENDIX IV	Antimony	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078
	Arsenic	<0.0011	<0.0011	0.0015 J	0.0014 J	0.0014 J	<0.0011	<0.0011	<0.0011	<0.0011	0.0032 J	<0.0011	0.0026 J
	Barium	0.033	0.035	0.052	0.054	0.060	0.064	0.069	0.072	0.044	0.043	0.27	0.24
	Beryllium	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054
	Cadmium	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
	Cobalt	<0.00039	<0.00039	0.0037 J	0.0072	<0.00039	<0.00039	<0.00039	<0.00039	0.0054	0.0086	<0.00039	<0.00039
	Fluoride	0.065 J	0.062 J	0.39	0.36	0.15	0.15	<0.050	<0.050	0.17	0.18	0.43	0.51
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089
	Lithium	<0.00073	<0.00073	0.025 J	0.025 J	0.0075 J	0.0082 J	0.0011 J	0.0012 J	0.0074 J	0.0057 J	0.0032 J	0.0038 J
	Mercury	<0.000078	<0.00013	<0.000078	<0.00013	<0.000078	<0.00013	<0.000078	<0.00013	<0.000078	<0.00013	<0.000078	<0.00013
	Molybdenum	0.0022 J	0.0020 J	0.035	0.034	<0.00074	<0.00074	0.00091 J	0.0010 J	0.021	0.0067 J	<0.00074	<0.00074
	Comb. Radium 226/228	0.914 U	0.276 U	1.25	0.816 U	0.192 U	0.254 U	0.734 U	0.564 U	0.721 U	0.257 U	1.11	1.51
Selenium	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	
Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	



**Table 6**  
 Summary of Groundwater Analytical Data  
 Plant Hammond AP-3, Floyd County, Georgia

Well ID:		MW-32	MW-32	MW-39	MW-39	MW-41	MW-41	MW-46D	MW-46D
Sample Date:		8/18/2021	2/3/2022	8/19/2021	2/2/2022	8/18/2021	2/2/2022	8/16/2021	2/3/2022
Parameter <sup>(1,2)</sup>									
APPENDIX III	Boron	1.2	1.2	1.2	1.2	1.1	1.3	0.87	0.95
	Calcium	155	157	171	163	175	159	45.8	44.4
	Chloride	2.2	2.4	2.3	2.5	2.8	2.4	3.7	3.5
	Fluoride	0.24	0.32	0.25	0.29	0.20	0.23	1.0	1.1
	pH <sup>(3)</sup>	6.89	6.95	6.90	6.96	6.93	6.98	7.65	7.69
	Sulfate	162	206	173	201	180	193	144	164
	TDS	554	600	628	608	602	594	516	588
APPENDIX IV	Antimony	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078
	Arsenic	<0.0011	0.0026 J	<0.0011	0.0022 J	<0.0011	0.0023 J	0.0032 J	0.0049 J
	Barium	0.054	0.055	0.060	0.059	0.064	0.070	0.026	0.025
	Beryllium	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054
	Cadmium	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
	Cobalt	0.0036 J	0.0036 J	0.0025 J	0.0028 J	0.00064 J	0.00056 J	<0.00039	<0.00039
	Fluoride	0.24	0.32	0.25	0.29	0.20	0.23	1.0	1.1
	Lead	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089
	Lithium	0.031	0.033	0.032	0.034	0.029 J	0.033	0.0062 J	0.0065 J
	Mercury	<0.000078	<0.00013	<0.000078	<0.00013	<0.000078	<0.00013	<0.000078	<0.00013
	Molybdenum	0.061	0.058	0.063	0.062	0.042	0.047	0.0012 J	<0.00074
	Comb. Radium 226/228	1.14	0.511 U	0.619 U	0.456 U	1.18	0.430 U	0.625 U	0.372 U
	Selenium	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Thallium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	

**Table 7**  
 Summary of Background Concentrations and Groundwater Protection Standards  
 Plant Hammond AP-3, Floyd County, Georgia

Analyte	Units	MCL	CCR-Rule Specified	Background <sup>(1)</sup>	Federal GWPS <sup>(2)</sup>	State GWPS <sup>(3)</sup>
Antimony	mg/L	0.006		0.003	0.006	0.006
Arsenic	mg/L	0.01		0.005	0.01	0.01
Barium	mg/L	2		0.54, 0.57	2	2
Beryllium	mg/L	0.004		0.0005	0.004	0.004
Cadmium	mg/L	0.005		0.0005	0.005	0.005
Chromium	mg/L	0.1		0.0079	0.1	0.1
Cobalt	mg/L	N/A	0.006	0.038	0.038 <sup>(4)</sup>	0.038
Fluoride	mg/L	4		0.87, 0.96	4	4
Lead	mg/L	N/A	0.015	0.001	0.015 <sup>(4)</sup>	0.001
Lithium	mg/L	N/A	0.04	0.032, 0.048	0.04, 0.048 <sup>(4)</sup>	0.032
Mercury	mg/L	0.002		0.0002	0.002	0.002
Molybdenum	mg/L	N/A	0.1	0.01	0.1 <sup>(4)</sup>	0.01
Selenium	mg/L	0.05		0.005	0.05	0.05
Thallium	mg/L	0.002		0.001	0.002	0.002
Combined Radium-226/228	pCi/L	5		4.36	5	5

Notes:

mg/L = milligrams per liter

pCi/L = picocuries per liter

MCL = Maximum Contaminant Level

CCR = Coal Combustion Residuals

GWPS = Groundwater Protection Standard

N/A = Not Applicable

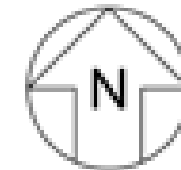
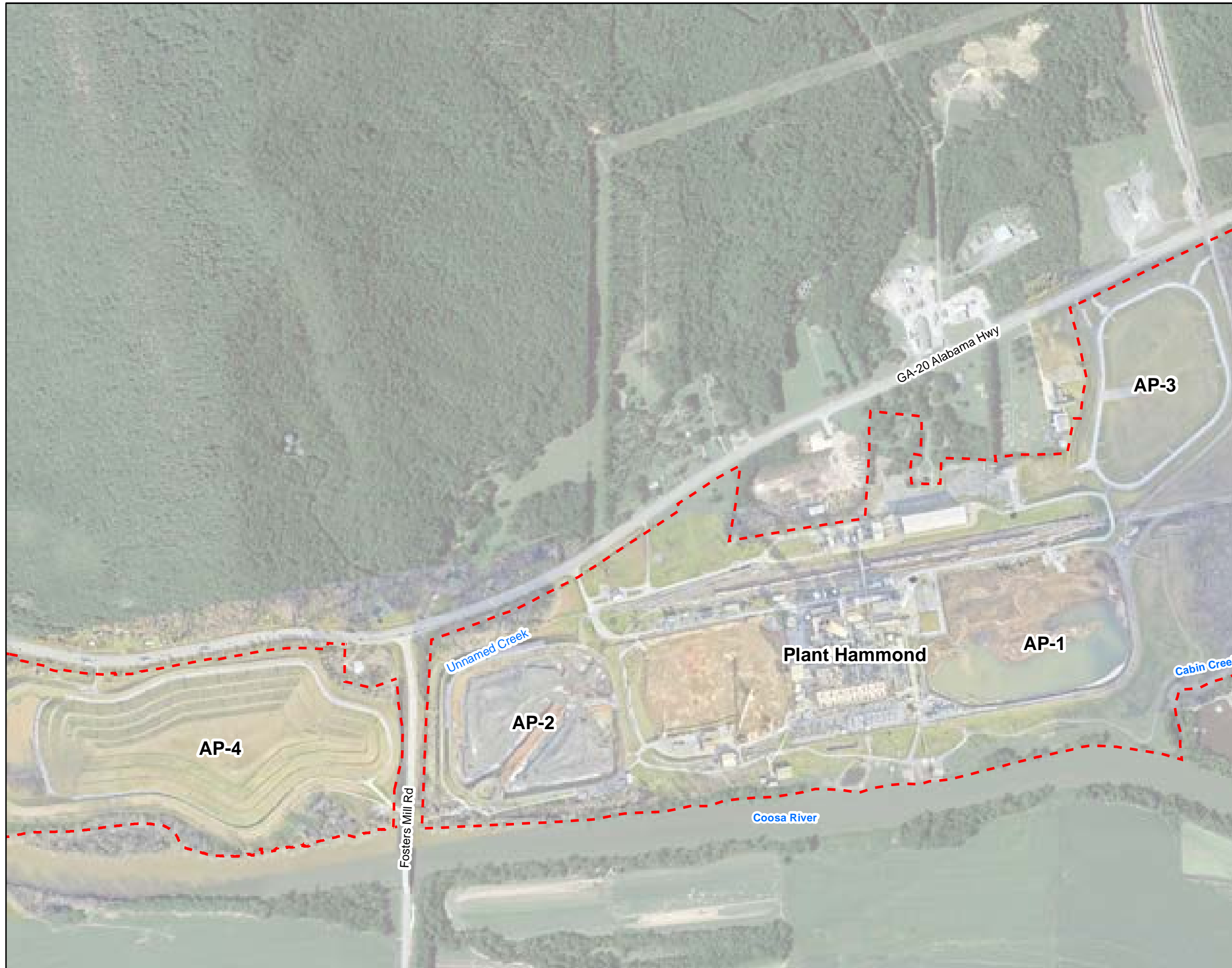
(1) The background limits were used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia Environmental Protection Division (GA EPD) Rule 391-3-4-.10(6)(a). Where two numbers are present, they denote the different background levels for each of the two semiannual monitoring events in the order that they were determined.

(2) 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 is used; or (iii) background concentrations for constituents where the background level is higher than the MCL or rule-specified GWPS. Where two numbers are present, they denote the different GWPS for each of the two semiannual monitoring events in the order they were determined.

(3) Under the existing GA EPD rules, the GWPS is: (i) the maximum MCL; (ii) where the MCL is not established, the background concentration; or (iii) background concentrations for constituents where the background level is higher than the MCL. State GWPS values are only applicable to the August 2021 semiannual sampling event.

(4) On February 22, 2022, GA EPD adopted the federally promulgated GWPS for cobalt, lithium, lead, and molybdenum.

# FIGURES



**LEGEND**

Plant Hammond Property Boundary



Note:  
1. Aerial photograph source: Google Earth Pro, August 2019 and Georgia Power Company, January 2022.



**SITE LOCATION MAP**

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

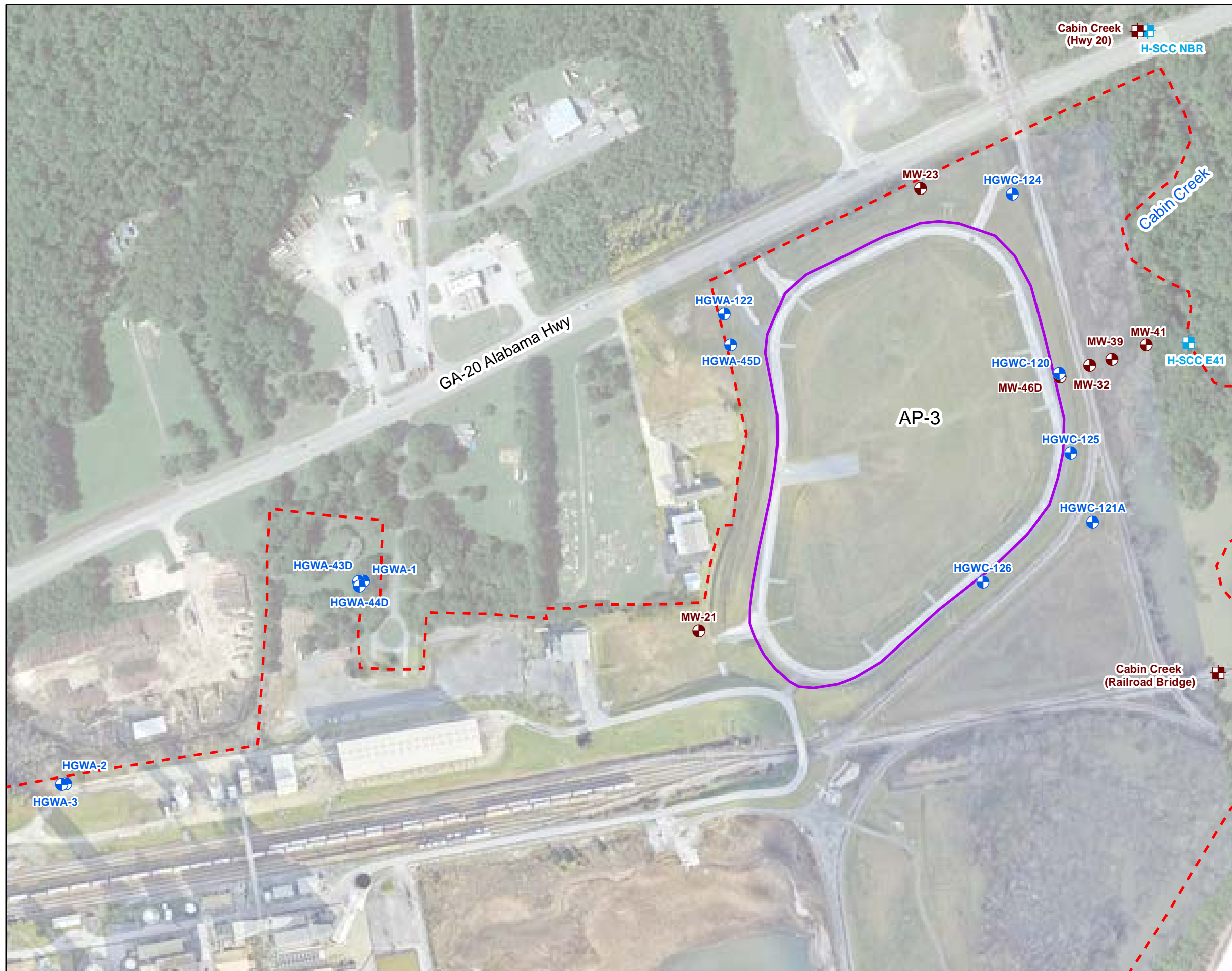
Prepared For: Georgia Power

Prepared By: Geosyntec  
consultants

KENNESAW, GA

JULY 2022

**FIGURE**  
**1**



**LEGEND**

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

**Notes:**

1. Aerial photograph source: Google Earth Pro, August 2019 and Georgia Power Company, January 2022.
2. Surface water sample point H-SCC NBR and Cabin Creek (Hwy 20) surface water level gauge point are co-located.
3. Due to the adoption of the federal GWPS by the GA EPD on February 22, 2022, and the resulting cessation of efforts associated with the assessment of corrective measures program, delineation wells MW-32, MW-41, and MW-46D were reclassified as piezometers.

0 150 300 600



**SCALE IN FEET**

**MONITORING WELL NETWORK AND SAMPLING LOCATION MAP**

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

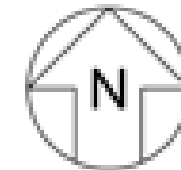
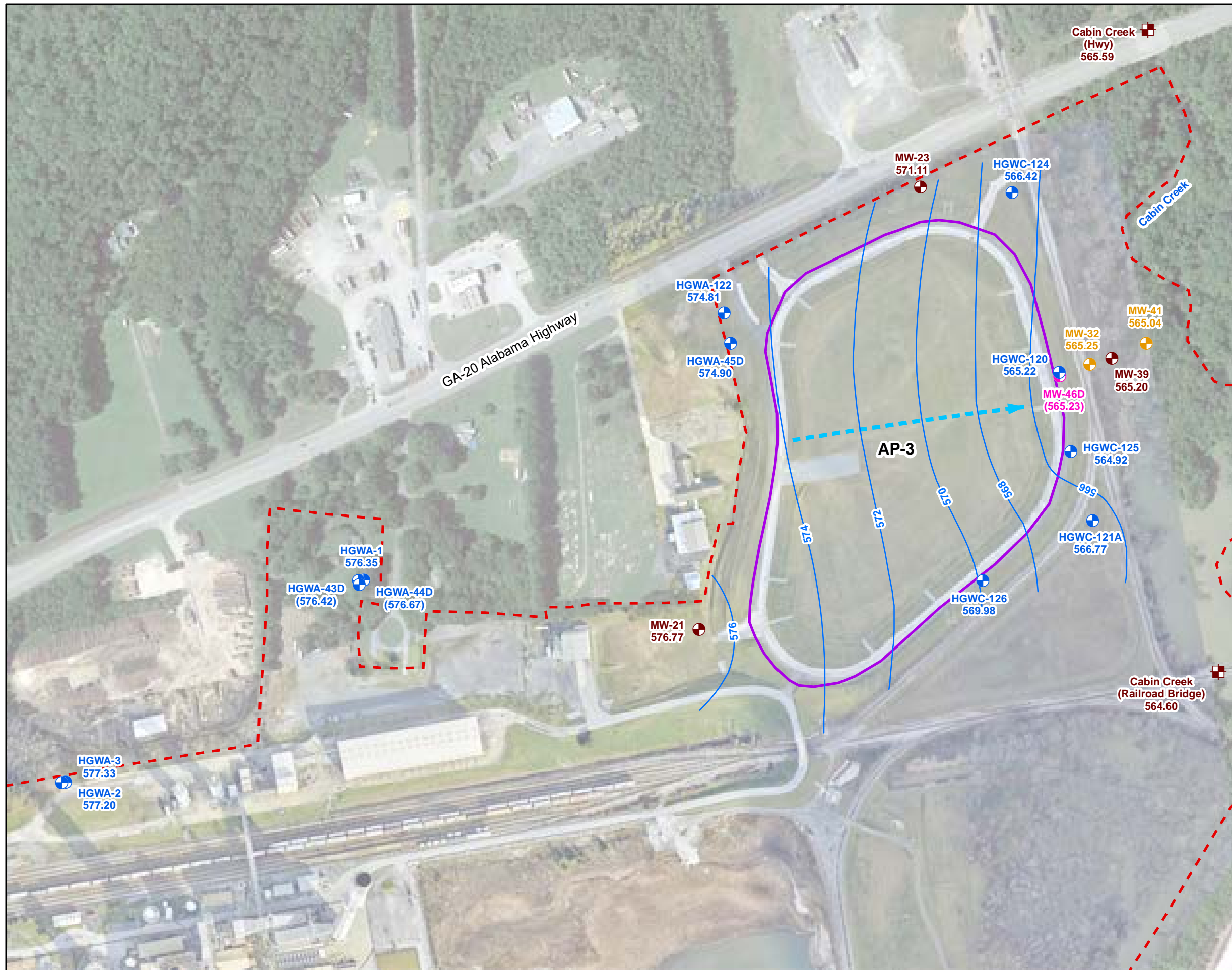
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

**FIGURE 2**

KENNESAW, GA

JULY 2022



**LEGEND**

- Compliance Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Surface Water Level Gauge Point
- Groundwater Elevation Iso-Contour
- Approximate Groundwater Flow Direction
- Approximate AP-3 Boundary
- Plant Hammond Property Boundary



- Notes:
1. Water level elevation recorded on August 11, 2021. 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 2022.



**POTENTIOMETRIC SURFACE CONTOUR MAP - AUGUST 2021**

GEORGIA POWER COMPANY  
PLANT HAMMOND  
FLOYD COUNTY, GEORGIA

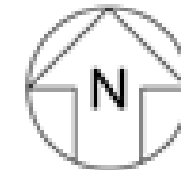
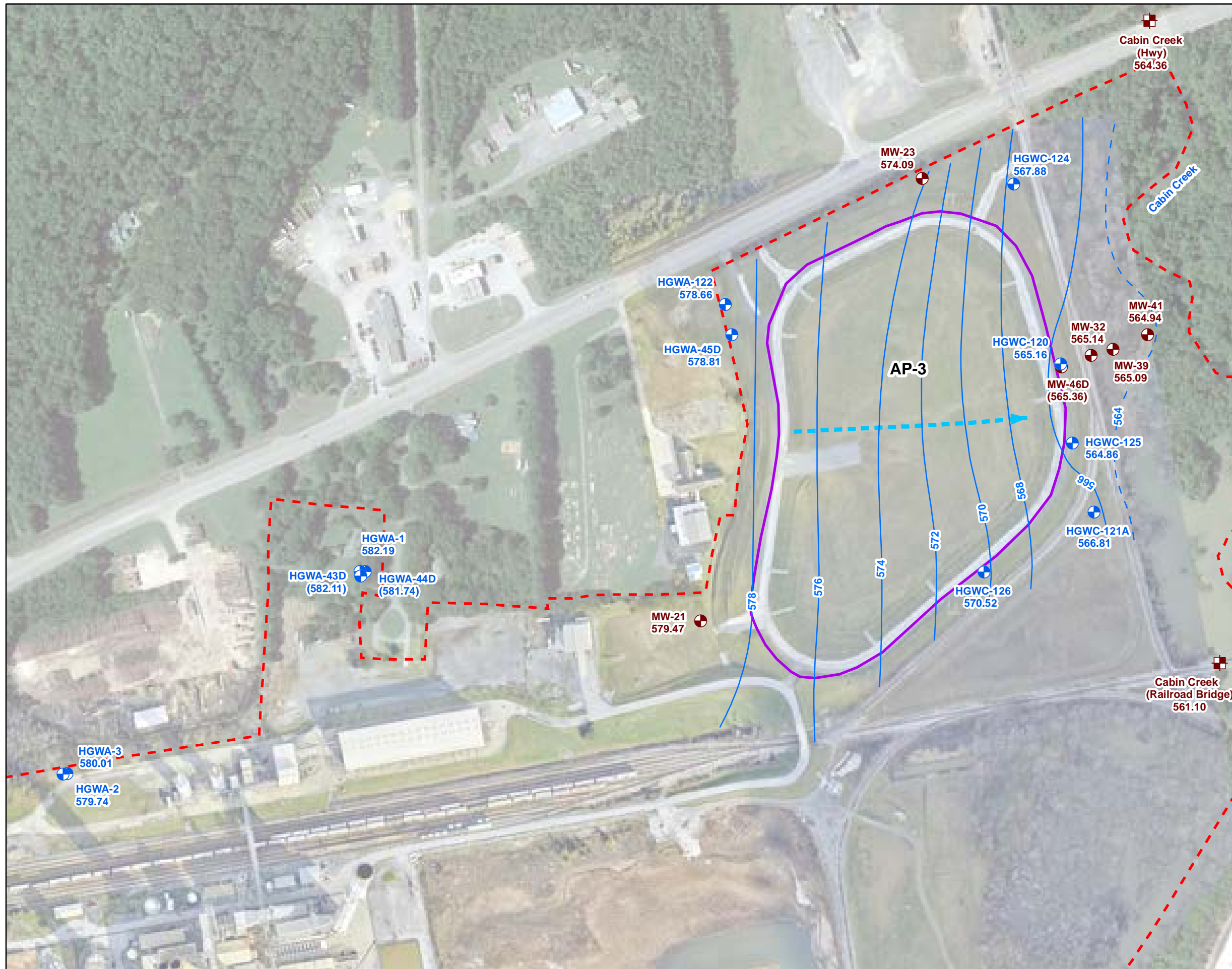
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA

JULY 2022

**FIGURE 3**



- LEGEND**
- Compliance Monitoring Well
  - Piezometer
  - Surface Water Level Gauge Point
  - Groundwater Elevation Iso-Contour (dashed where inferred)
  - Approximate Groundwater Flow Direction
  - Approximate AP-3 Boundary
  - Plant Hammond Property Boundary



- Notes:**
1. Water level elevation recorded on January 31, 2022. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
  2. Groundwater elevations in parentheses were not used in the development of groundwater contours due to wells being screened at a different elevation in the formation/aquifer.
  3. Due to the adoption of the federal GWPS by the GA EPD on February 22, 2022, and the resulting cessation of efforts associated with the assessment of corrective measures program, delineation wells MW-32, MW-41, and MW-46D were reclassified as piezometers.
  3. Aerial photograph source: Google Earth Pro, August 2019 and Georgia Power Company, January 2022.



**POTENTIOMETRIC SURFACE CONTOUR  
MAP - JANUARY 2022**

GEORGIA POWER COMPANY  
PLANT HAMMOND  
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec  
consultants

KENNESAW, GA      JULY 2022

**FIGURE  
4**

# APPENDIX A

## Groundwater Compliance Notification and GA EPD Approval



**GROUNDWATER COMPLIANCE NOTIFICATION**  
**40 CFR §257.95**  
**PLANT HAMMOND ASH POND 3 (AP-3)**  
**GEORGIA POWER COMPANY**

**Explanation of Notification**

This notification is due to the adoption of the United States Environmental Protection Agency's (USEPA's) federal groundwater protection standards (GWPS) for cobalt, lithium, lead, and molybdenum by the Georgia Environmental Protection Division (Georgia EPD) on February 22, 2022, and the results the GWPS have on the status of the Georgia Power Company (Georgia Power) Plant Hammond AP-3 groundwater monitoring program. The statistical analysis presented in **Attachment A** demonstrates that all previously identified statistically significant levels (SSLs) of lithium and molybdenum have at all times complied with the GWPS.

The GWPS for lithium and molybdenum are 0.040 milligrams per liter (mg/L) and 0.10 mg/L, respectively. As presented in **Attachment A**, confidence intervals were constructed using the GWPS for lithium at HGWC-120 and for molybdenum at HGWC-120, MW-32, MW-39, and MW-41 for each sampling event beginning with the first documented SSL at each well, as identified in comparison with the prior GWPS, and through the February 2022 assessment monitoring event. The complete set of lithium and molybdenum groundwater data reported for the four wells is presented in **Table 1** provided in the attachments. The completed statistical analyses comply with the USEPA Coal Combustion Residual Rule (CCR Rule) [40 Code of Federal Regulations (CFR) Part 257, Subpart D], the Georgia EPD Rules for Solid Waste Management Chapter 391-3-4-.10, and is in accordance with the USEPA document *Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance* (Unified Guidance).

**Modifications to the AP-3 Groundwater Compliance Monitoring Program**

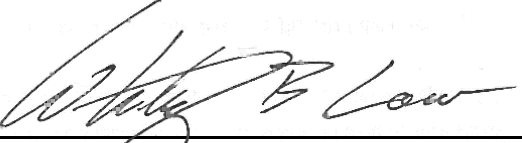
Due to there being no SSLs within the monitoring network as of February 22, 2022, groundwater monitoring and reporting will be conducted in accordance with §257.95 Assessment Monitoring Program. The following changes will be implemented to the AP-3 groundwater compliance monitoring program:

- Georgia Power will continue to collect groundwater samples from compliance monitoring well HGWC-120 (shown on **Figure 1**) during routine semiannual assessment monitoring events in accordance with the assessment monitoring program.

- Georgia Power will discontinue the routine collection of groundwater samples from wells MW-32, MW-41, and MW-46D and piezometer MW-39. Wells MW-32, MW-41, and MW-46D will be reclassified as piezometers (shown on **Figure 1**). The four piezometers will be used for water level measurements during the semiannual assessment monitoring events to define groundwater flow direction and gradients downgradient of AP-3. The Groundwater Monitoring Plan (GWMP) for Hammond AP-3 shows MW-32, MW-39, MW-41, and MW-46D as piezometers. No changes are recommended to the GWMP.
- Georgia Power will discontinue the routine collection of Cabin Creek surface water samples from location H-SCC E41 located downgradient of MW-41 (shown on **Figure 1**).

### CERTIFICATION

I hereby certify to the best of my knowledge, information, and belief, that the information provided herein demonstrates that current groundwater quality conditions associated with Georgia Power's Plant Hammond Ash Pond 3 are in compliance with the GWPS established under §257.95(h), the site is in Assessment Monitoring, and that efforts associated with the assessment of corrective measures, as stipulated by §257.96 through §257.98, are no longer required.

  
\_\_\_\_\_  
Whitney B. Law, PE  
Licensed Professional Engineer, No. PE036641

6/10/2022  
Date

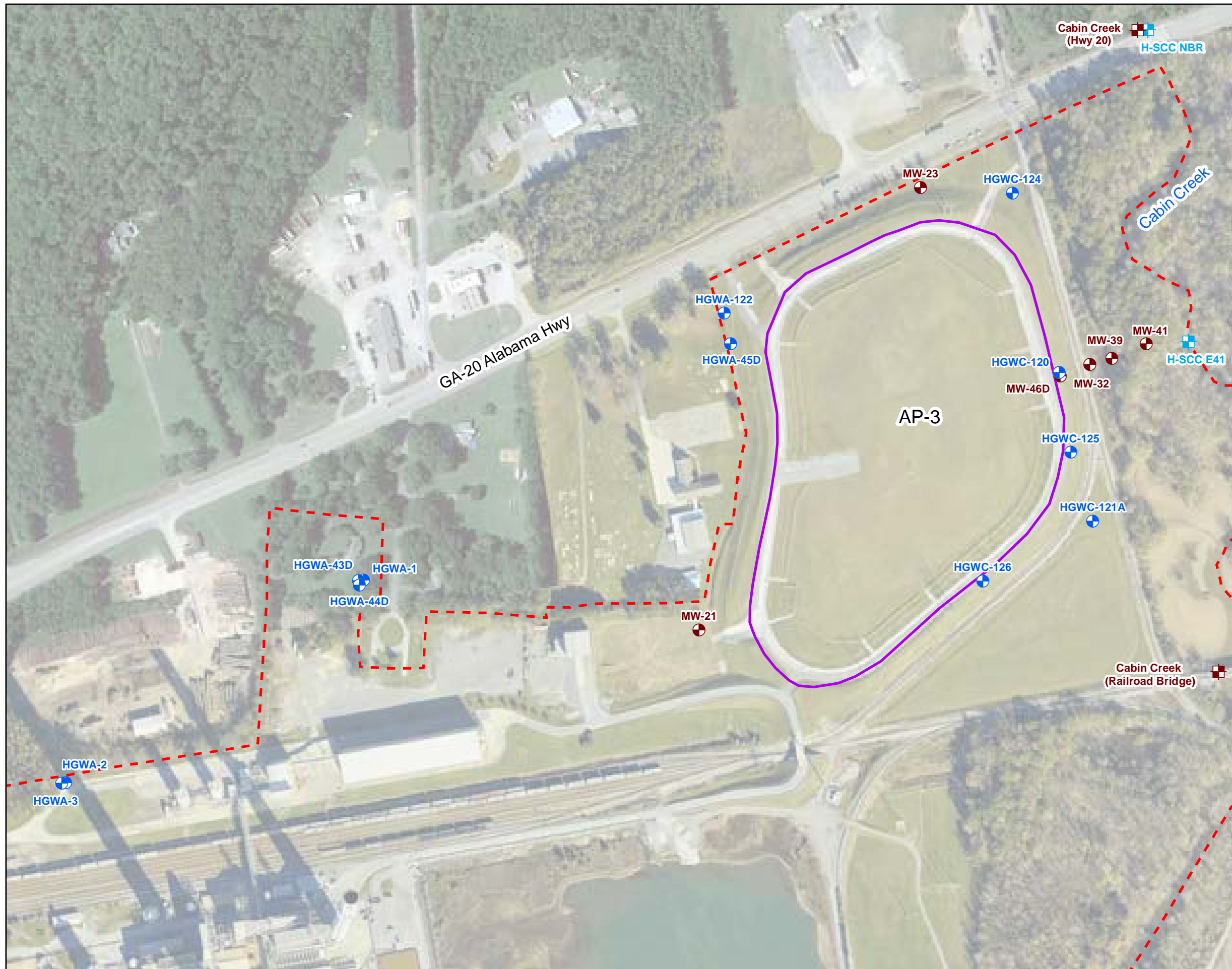


### Attachment

Figure 1: Monitoring Well and Sampling Location Map

Table 1: Summary of Groundwater Data – HGWC-120, MW-32, MW-39, MW-41

Attachment A: *Statistical Analysis of Groundwater Protection Standards for Georgia Power Company Plant Hammond Ash Pond 3*



**LEGEND**

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

**Notes:**

1. Aerial photograph source: Google Earth Pro, August 2019 and GPC, December 2020.
2. Surface water sample point H-SCC NBR and Cabin Creek (Hwy 20) surface water level gauge point are co-located.

0 150 300 600



SCALE IN FEET

**MONITORING WELL NETWORK AND SAMPLING LOCATION MAP**

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

Prepared For: Georgia Power

Prepared By: Geosyntec  
consultants

**FIGURE**  
**1**

KENNESAW, GA

JUNE 2022

**Table 1**  
 Summary of Groundwater Data - HGWC-120, MW-32, MW-39, and MW-41  
 Plant Hammond AP-3, Floyd County, Georgia

Well ID:	HGWC-120															
Date:	08/31/2016	10/26/2016	01/27/2017	05/25/2017	10/02/2017	11/15/2017	06/05/2018	10/02/2018	8/22/2019	10/22/2019	3/25/2020	8/26/2020	9/21/2020	3/12/2021	8/16/2021	2/2/2022
Parameter <sup>(1)</sup>																
Lithium	0.0333 J	0.0352 J	0.0329 J	0.0347 J	0.0337 J	0.0347 J	0.033 J	0.031 J	0.029 J	0.030 J	0.024 J	0.023 J	0.023 J	0.023 J	0.025 J	0.025 J
Molybdenum	0.0176	0.0187	0.0214	0.0231	0.0259	0.0281	0.033	0.036	0.039	0.040	0.034	0.050	0.043	0.033	0.035	0.034

Well ID:	MW-32							
Date:	1/3/2020	1/22/2020	3/25/2020	8/26/2020	9/28/2020	3/15/2021	8/18/2021	2/3/2022
Parameter <sup>(1)</sup>								
Molybdenum	0.060	0.059	0.062	0.065	0.062	0.061	0.061	0.058

Well ID:	MW-39						
Date:	3/27/2020	4/24/2020	8/26/2020	9/28/2020	3/15/2021	8/18/2021	2/2/2022
Parameter <sup>(1)</sup>							
Molybdenum	0.012	0.062	0.064	0.062	0.062	0.063	0.062

Well ID:	MW-41					
Date:	6/15/2020	8/26/2020	9/28/2020	3/15/2021	8/18/2021	2/2/2022
Parameter <sup>(1)</sup>						
Molybdenum	0.035	0.039	0.036	0.046	0.042	0.047

Notes:  
 -- = Parameter not analyzed  
 J = Indicates the parameter was estimated and detected between the analytical method detection limit (MDL) and the reporting limit (RL).  
 (1) Metals were analyzed by EPA Method 6020B.

March 2022

STATISTICAL ANALYSIS OF  
GROUNDWATER PROTECTION  
STANDARDS  
FOR  
GEORGIA POWER COMPANY  
PLANT HAMMOND ASH POND 3

Prepared by:

Groundwater Stats Consulting LLC



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# GROUNDWATER STATS CONSULTING



May 25, 2022

Southern Company Services  
Attn: Ms. Kristen Jurinko  
241 Ralph McGill Blvd. NE, Bin 10160  
Atlanta, Georgia 30308

Re: Georgia Power Company Plant Hammond Ash Pond 3  
Statistical Analysis of Refined Groundwater Protection Standard

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide confidence interval comparisons for those well/constituent pairs at Georgia Power Company Plant Hammond Ash Pond 3 (AP-3) that historically contained statistically significant levels (SSLs) of Appendix IV parameters. Specifically, lithium at downgradient well HGWC-120 and molybdenum at downgradient wells HGWC-120, MW-32, and MW-41 as well as at piezometer MW-39 were analyzed to demonstrate compliance with federal Groundwater Protection Standards (GWPS) adopted by Georgia Environmental Protection Division (EPD) on February 22, 2022. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia EPD Rules for Solid Waste Management Chapter 391-3-4-.10, and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Coal Combustion Residuals (CCR) program began in 2016. The monitoring well network, as certified by Geosyntec Consultants and provided by Southern Company Services, consists of the following monitoring wells and piezometers:

- **Upgradient Compliance Monitoring Wells:** HGWA-1, HGWA-2, HGWA-3, HGWA-43D, HGWA-44D, HGWA-45D, and HGWA-122
- **Downgradient Compliance Monitoring Wells:** HGWC-120, HGWC-121A, HGWC-124, HGWC-125, and HGWC-126
- **Downgradient Delineation Wells:** MW-32, MW-41, and MW-46D
- **Downgradient Piezometer:** MW-39

## **Summary of Statistical Evaluation of Appendix IV Constituents**

To statistically compare groundwater data to GWPS, confidence intervals are constructed for each of the detected Appendix IV constituents in each applicable downgradient well or piezometer 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.

### **Confidence Intervals – Lithium and Molybdenum**

Using the GWPS of 0.1 mg/L for molybdenum and 0.04 mg/L for lithium, confidence intervals were constructed for molybdenum at downgradient wells HGWC-120, MW-32, and MW-41 and piezometer MW-39, and for lithium at downgradient well HGWC-120 for each sampling event beginning with the first apparent SSL of the State-established GWPS through the February 2022 sample event. The confidence intervals and summary tables follow this letter.

The statistical analysis herein demonstrates that all previously identified SSLs of lithium and molybdenum, which were based on background limits, have always complied with the Federal GWPS (lithium is 0.040 milligrams per liter (mg/L) and molybdenum is 0.1 mg/L) adopted by Georgia EPD on February 22, 2022.



## Demonstration of Compliance with GWPS

A well/parameter pair is not or no longer declared an SSL over the GWPS when the entire confidence interval falls below a specified limit (i.e., the Upper Confidence Limit [UCL] falls below the limit) and the unit is monitored in accordance with the assessment monitoring program.

As mentioned above, the following apparent SSLs were historically recorded during Assessment Monitoring when confidence intervals (in particular the LCLs) were compared to the previously established State GWPS based on background limits:

<b>Well</b>	<b>Constituent</b>	<b>Date of 1<sup>st</sup> SSL</b>	<b>LCL – UCL (mg/L)</b>	<b>STATE GWPS (mg/L)</b>	<b>FEDERAL GWPS (mg/L)</b>
HGWC-120	Lithium	Fall 2019	0.031-0.035	0.03	0.04
HGWC-120	Molybdenum	Fall 2019	0.021-0.036	0.01	0.1
MW-32	Molybdenum	Fall 2020	0.058-0.065	0.01	0.1
MW-39	Molybdenum	Fall 2020	0.012-0.064	0.01	0.1
MW-41	Molybdenum	Spring 2021	0.028-0.050	0.01	0.1

## Conclusion

The statistical analysis presented herein demonstrates that SSLs documented at Plant Hammond AP-3 for lithium and molybdenum have always complied with the Federal GWPS adopted by Georgia EPD on February 22, 2022. Furthermore, the groundwater data at the unit meet the criteria to remain in assessment monitoring under the federal and Georgia EPD CCR Rules.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality data for Hammond AP-3. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

A handwritten signature in black ink that reads "Kristina Rayner". The signature is written in a cursive, flowing style.

Kristina Rayner  
Senior Statistician

## Confidence Interval Summary

Date	Well	Constituent	UCL (mg/L)	LCL (mg/L)	CCR-Rule Specified Limit (mg/L)	Exceeds	Samples
8/22/2019	HGWC-120	Lithium	0.035	0.031	0.04	No	9
10/22/2019	HGWC-120	Lithium	0.035	0.031	0.04	No	10
3/25/2020	HGWC-120	Lithium	0.035	0.029	0.04	No	11
8/26/2020	HGWC-120	Lithium	0.035	0.028	0.04	No	12
9/21/2020	HGWC-120	Lithium	0.034	0.028	0.04	No	13
3/12/2021	HGWC-120	Lithium	0.034	0.028	0.04	No	14
8/16/2021	HGWC-120	Lithium	0.033	0.028	0.04	No	15
2/2/2022	HGWC-120	Lithium	0.034	0.024	0.04	No	16
8/22/2019	HGWC-120	Molybdenum	0.034	0.0196	0.1	No	9
10/22/2019	HGWC-120	Molybdenum	0.036	0.021	0.1	No	10
3/25/2020	HGWC-120	Molybdenum	0.036	0.022	0.1	No	11
8/26/2020	HGWC-120	Molybdenum	0.038	0.023	0.1	No	12
9/21/2020	HGWC-120	Molybdenum	0.039	0.024	0.1	No	13
3/12/2021	HGWC-120	Molybdenum	0.038	0.025	0.1	No	14
8/16/2021	HGWC-120	Molybdenum	0.038	0.026	0.1	No	15
2/2/2022	HGWC-120	Molybdenum	0.038	0.026	0.1	No	16
8/26/2020	MW-32	Molybdenum	0.068	0.055	0.1	No	4
9/28/2020	MW-32	Molybdenum	0.066	0.058	0.1	No	5
3/15/2021	MW-32	Molybdenum	0.064	0.059	0.1	No	6
8/18/2021	MW-32	Molybdenum	0.064	0.059	0.1	No	7
2/3/2022	MW-32	Molybdenum	0.063	0.059	0.1	No	8
9/28/2020	MW-39	Molybdenum	0.064	0.012	0.1	No	4
3/15/2021	MW-39	Molybdenum	0.064	0.012	0.1	No	5
8/18/2021	MW-39	Molybdenum	0.064	0.012	0.1	No	6
2/2/2022	MW-39	Molybdenum	0.064	0.012	0.1	No	7
3/15/2021	MW-41	Molybdenum	0.05	0.028	0.1	No	4
8/18/2021	MW-41	Molybdenum	0.047	0.0032	0.1	No	5
2/2/2022	MW-41	Molybdenum	0.048	0.034	0.1	No	6

## Confidence Intervals - Well HGWC-120 (Lithium)

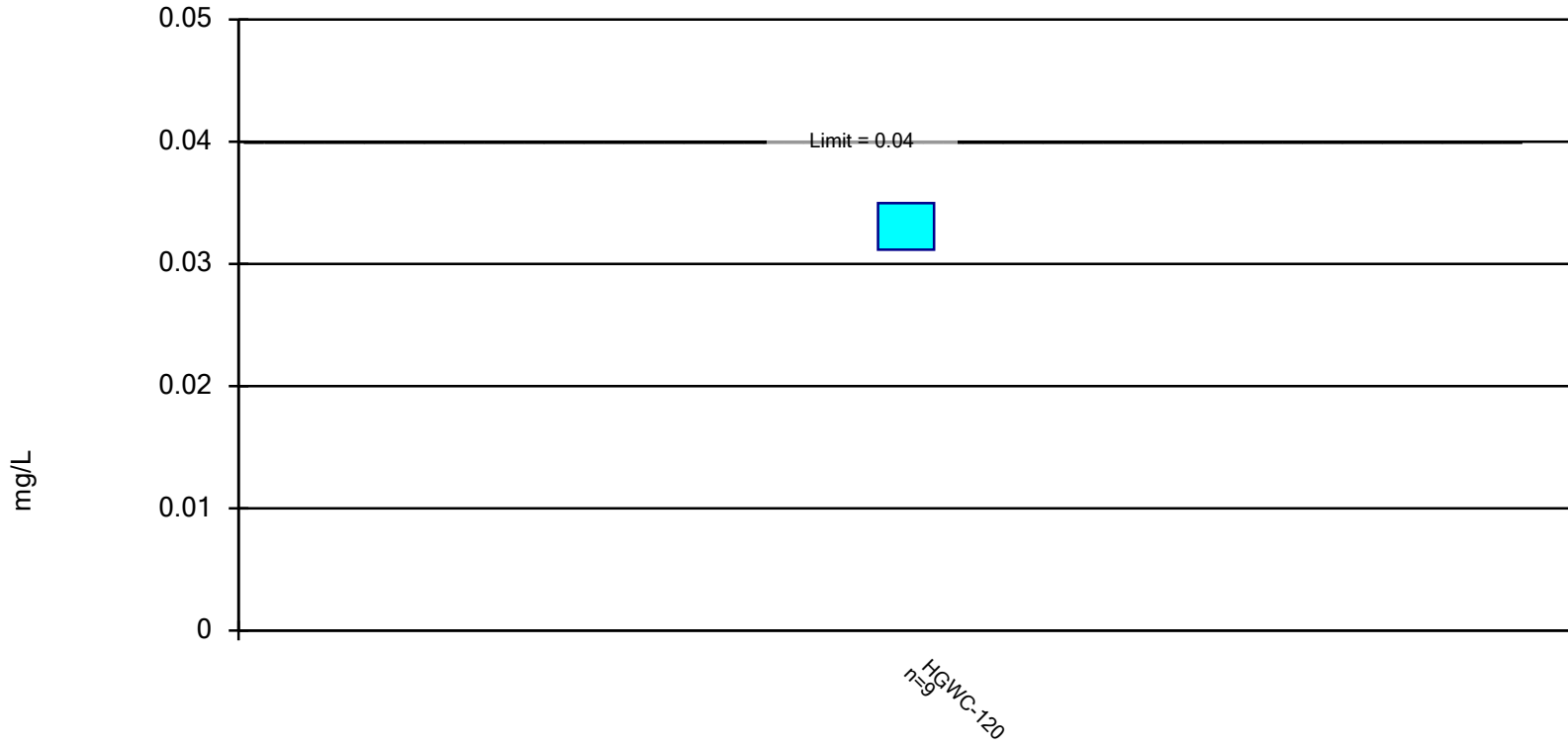
# August 2019 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:57 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	HGWC-120	0.03496	0.03115	0.04	No	9	0.03306	0.001974	0	None	No	0.01	Param.

### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/29/2022 2:54 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/29/2022 2:57 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0333 (J)
10/26/2016	0.0352 (J)
1/27/2017	0.0329 (J)
5/25/2017	0.0347 (J)
10/2/2017	0.0337 (J)
11/15/2017	0.0347 (J)
6/5/2018	0.033 (J)
10/2/2018	0.031 (J)
8/22/2019	0.029 (J)
Mean	0.03306
Std. Dev.	0.001974
Upper Lim.	0.03496
Lower Lim.	0.03115

# October 2019 Confidence Interval - HGWC-120

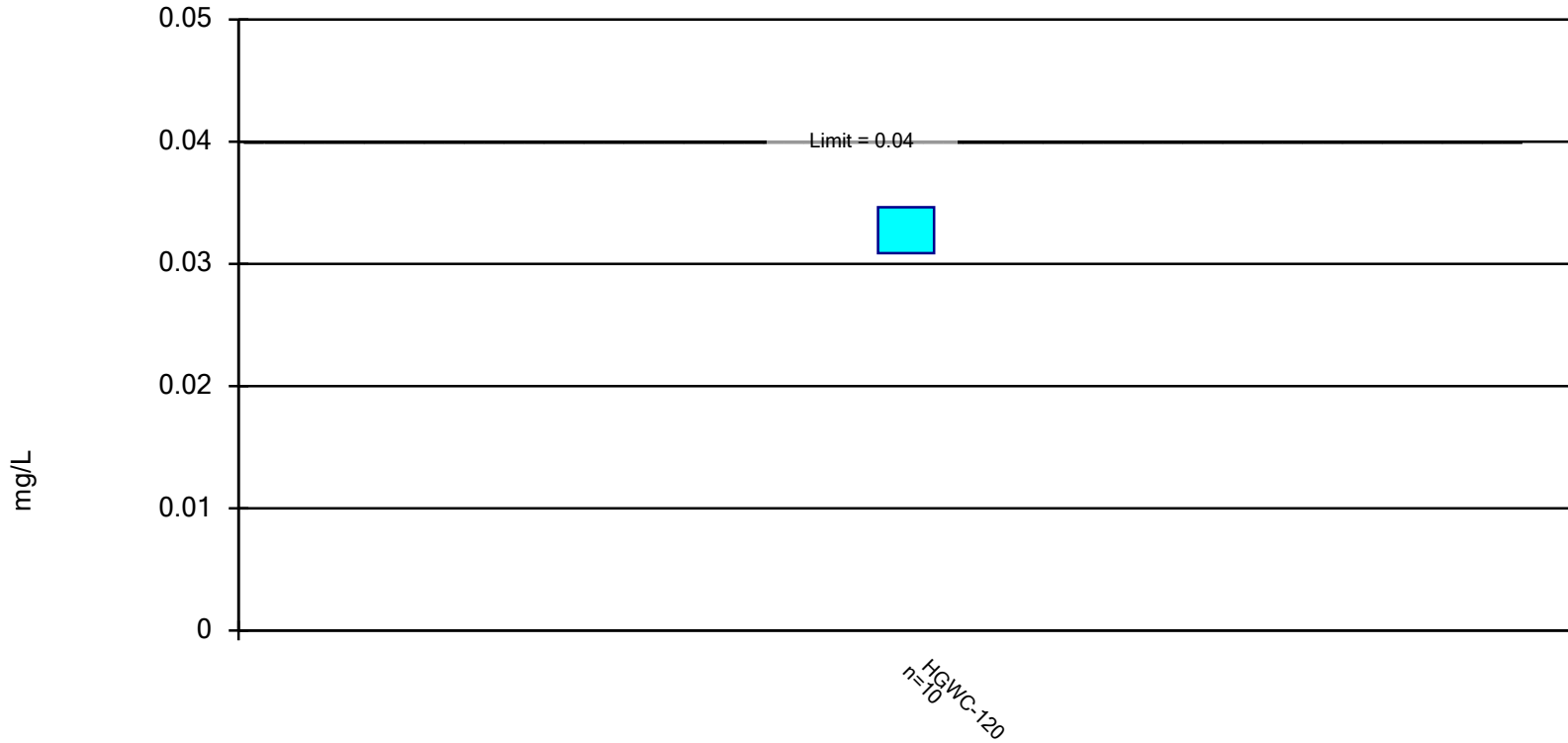
Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:58 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	HGWC-120	0.03462	0.03088	0.04	No	10	0.03275	0.002097	0	None	No	0.01	Param.



### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/29/2022 2:57 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/29/2022 2:58 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0333 (J)
10/26/2016	0.0352 (J)
1/27/2017	0.0329 (J)
5/25/2017	0.0347 (J)
10/2/2017	0.0337 (J)
11/15/2017	0.0347 (J)
6/5/2018	0.033 (J)
10/2/2018	0.031 (J)
8/22/2019	0.029 (J)
10/22/2019	0.03 (J)
Mean	0.03275
Std. Dev.	0.002097
Upper Lim.	0.03462
Lower Lim.	0.03088

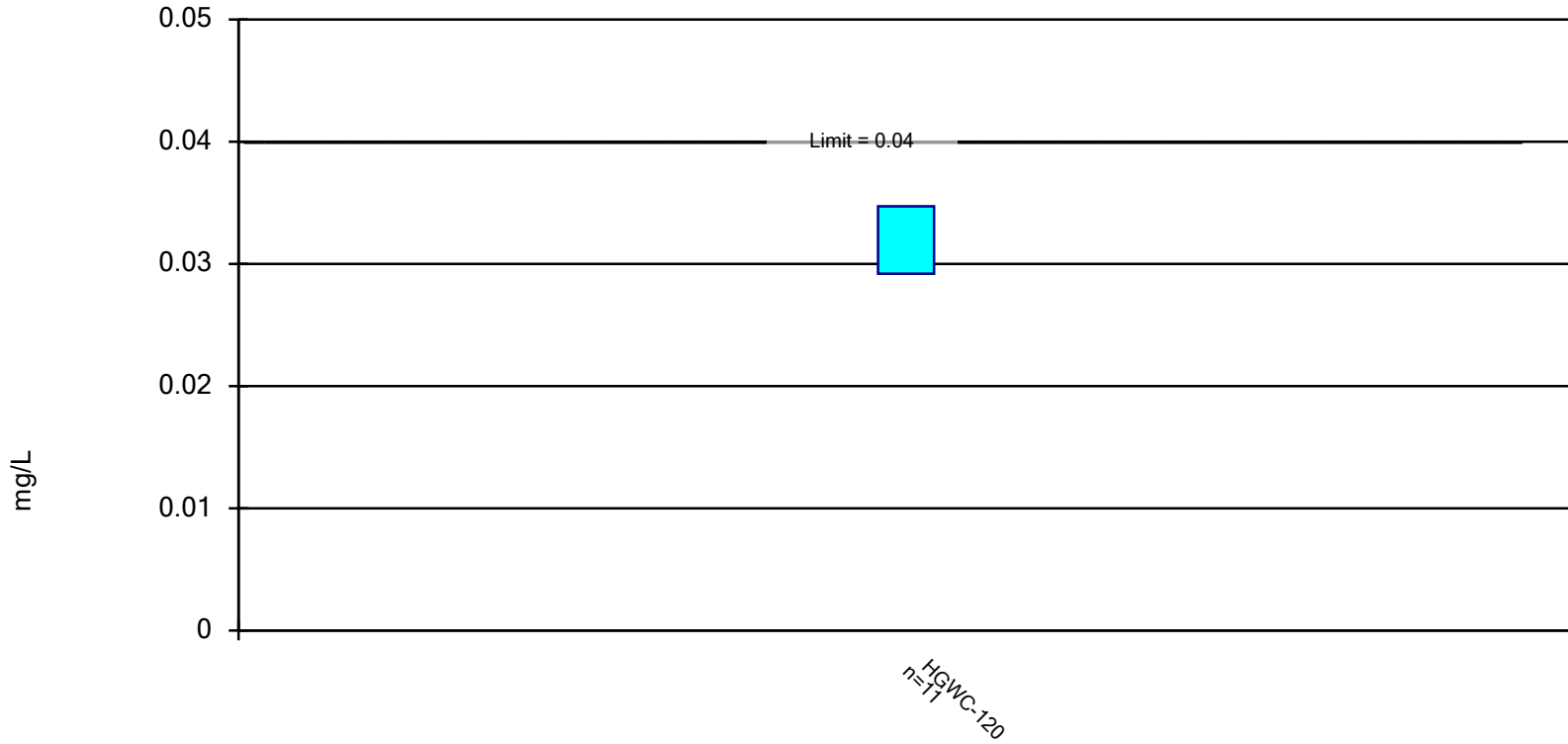
# March 2020 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 3:04 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	HGWC-120	0.03471	0.0292	0.04	No	11	0.03195	0.003304	0	None	No	0.01	Param.

### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/29/2022 3:03 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/29/2022 3:04 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0333 (J)
10/26/2016	0.0352 (J)
1/27/2017	0.0329 (J)
5/25/2017	0.0347 (J)
10/2/2017	0.0337 (J)
11/15/2017	0.0347 (J)
6/5/2018	0.033 (J)
10/2/2018	0.031 (J)
8/22/2019	0.029 (J)
10/22/2019	0.03 (J)
3/25/2020	0.024 (J)
Mean	0.03195
Std. Dev.	0.003304
Upper Lim.	0.03471
Lower Lim.	0.0292

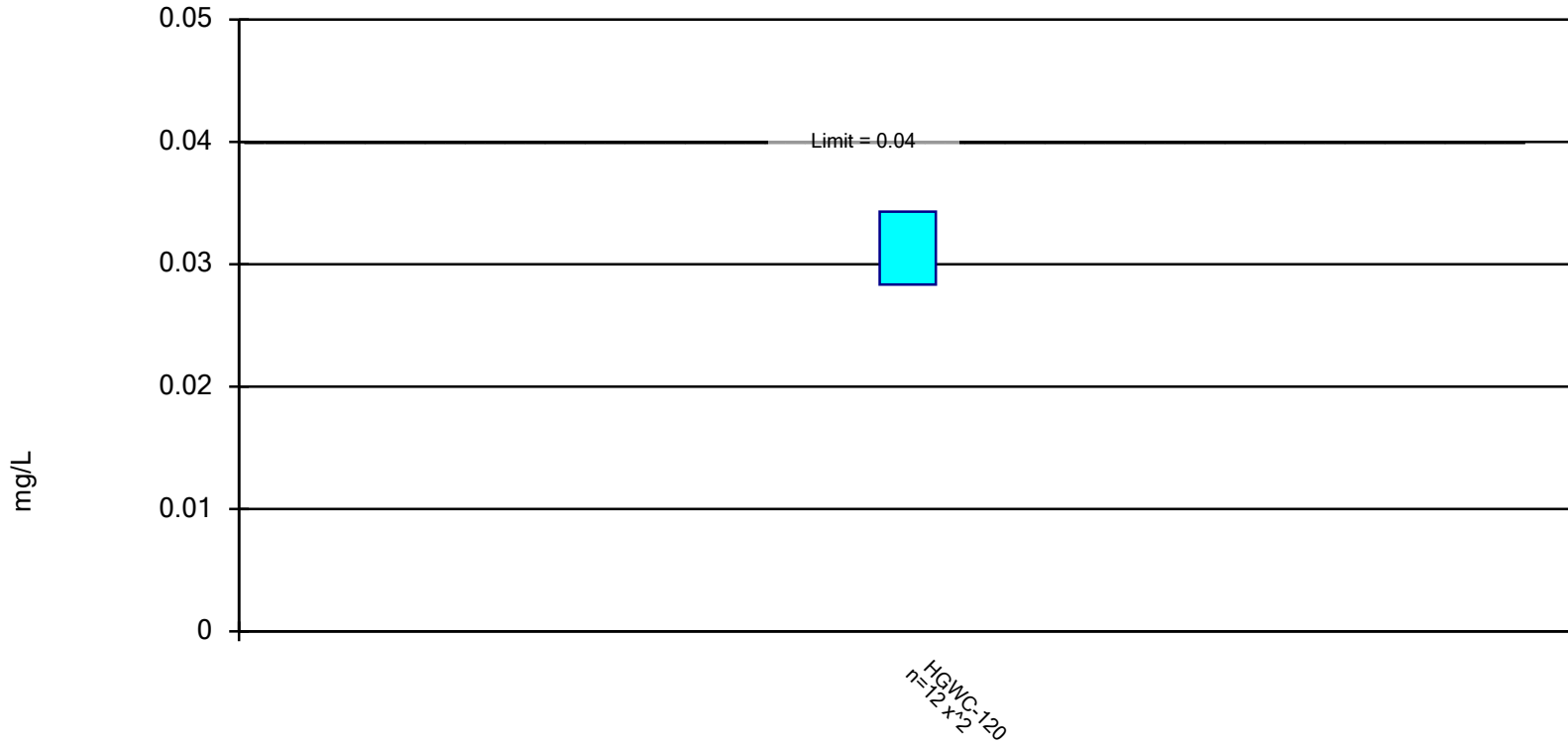
# August 2020 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 3:05 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	HGWC-120	0.03429	0.02833	0.04	No	12	0.03121	0.004075	0	None	x^2	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/29/2022 3:05 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/29/2022 3:05 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0333 (J)
10/26/2016	0.0352 (J)
1/27/2017	0.0329 (J)
5/25/2017	0.0347 (J)
10/2/2017	0.0337 (J)
11/15/2017	0.0347 (J)
6/5/2018	0.033 (J)
10/2/2018	0.031 (J)
8/22/2019	0.029 (J)
10/22/2019	0.03 (J)
3/25/2020	0.024 (J)
8/26/2020	0.023 (J)
Mean	0.03121
Std. Dev.	0.004075
Upper Lim.	0.03429
Lower Lim.	0.02833



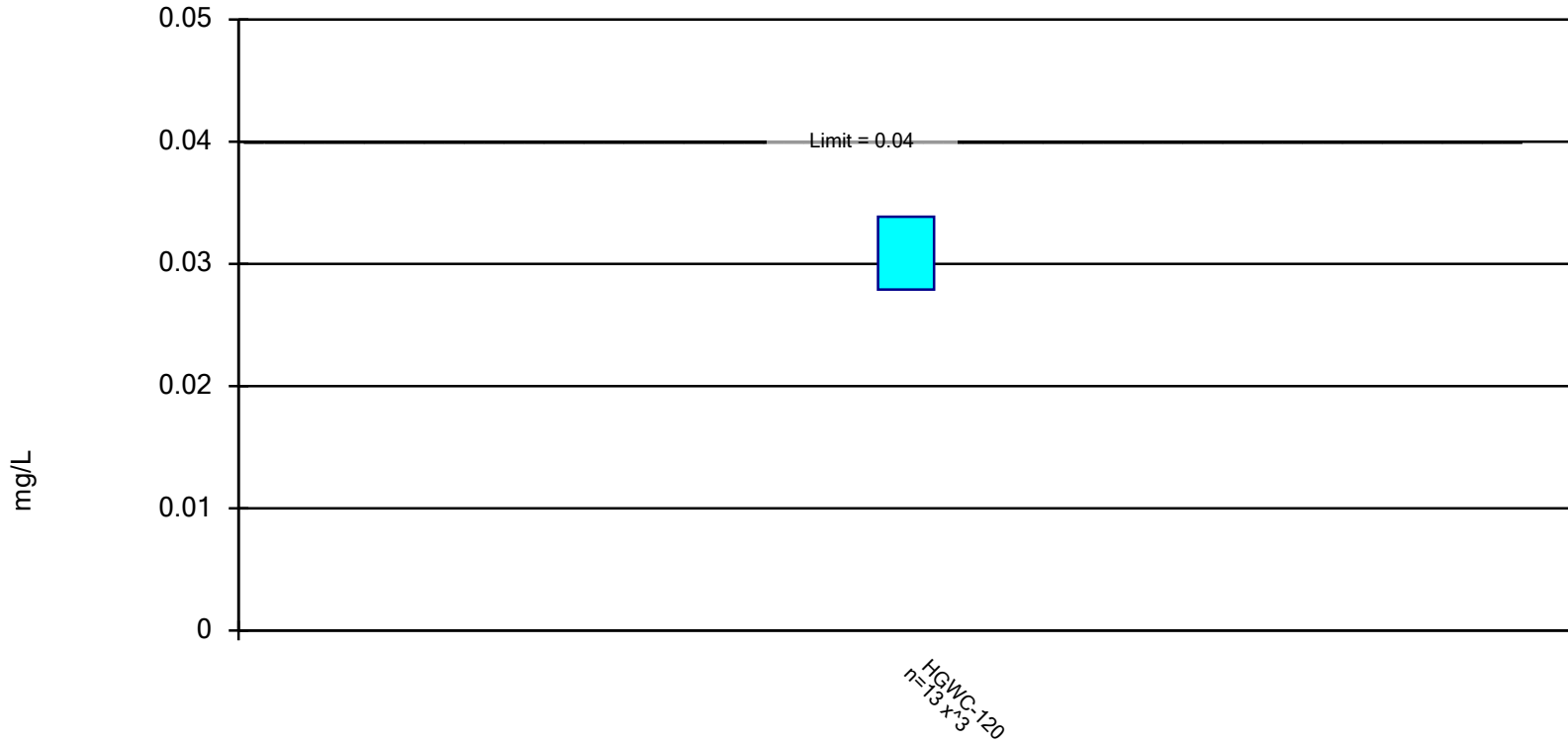
# September 2020 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 3:07 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	HGWC-120	0.03385	0.0279	0.04	No	13	0.03058	0.004517	0	None	x^3	0.01	Param.

### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/29/2022 3:06 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/29/2022 3:07 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0333 (J)
10/26/2016	0.0352 (J)
1/27/2017	0.0329 (J)
5/25/2017	0.0347 (J)
10/2/2017	0.0337 (J)
11/15/2017	0.0347 (J)
6/5/2018	0.033 (J)
10/2/2018	0.031 (J)
8/22/2019	0.029 (J)
10/22/2019	0.03 (J)
3/25/2020	0.024 (J)
8/26/2020	0.023 (J)
9/21/2020	0.023 (J)
Mean	0.03058
Std. Dev.	0.004517
Upper Lim.	0.03385
Lower Lim.	0.0279

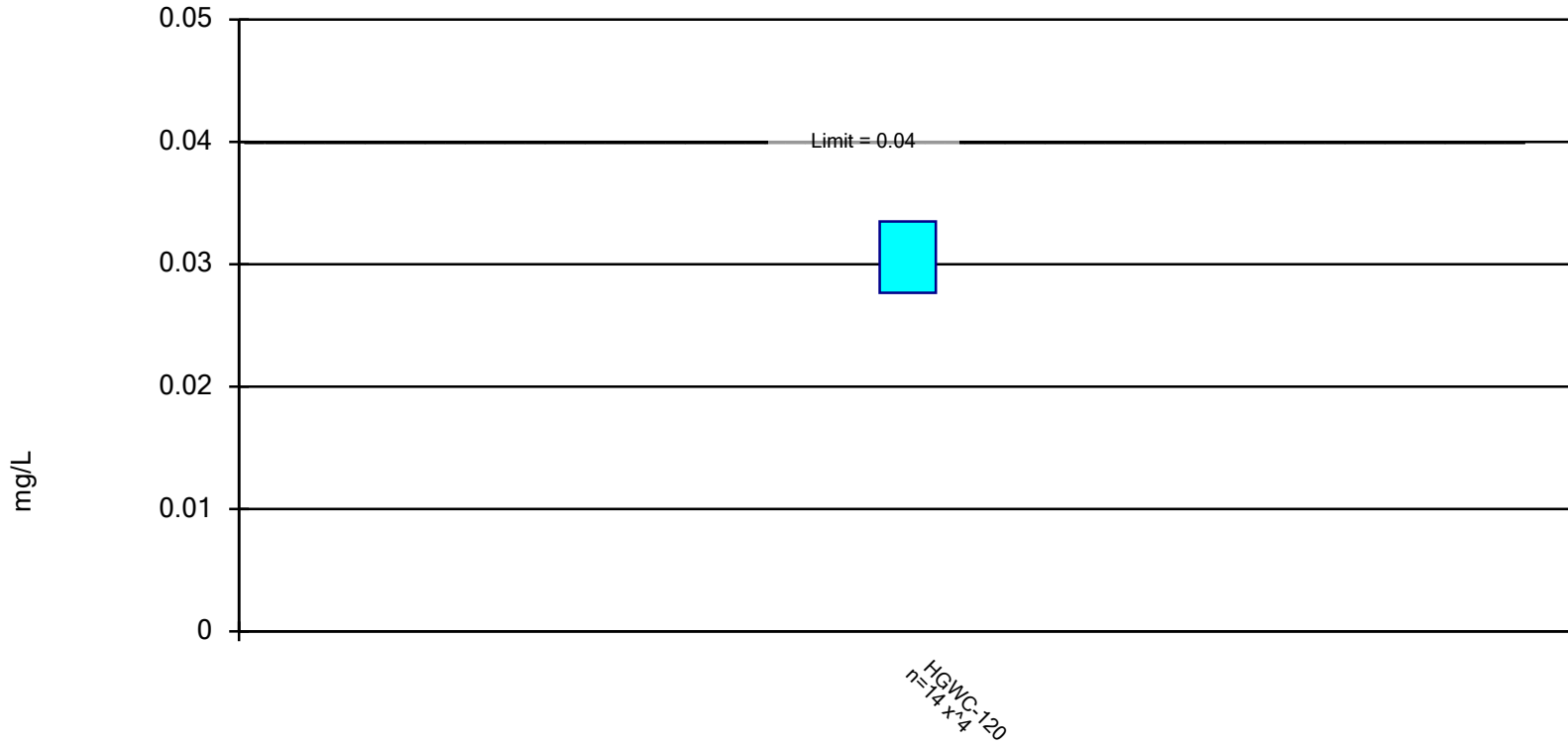
# March 2021 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 3:09 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	HGWC-120	0.0335	0.02767	0.04	No	14	0.03004	0.004789	0	None	x^4	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/29/2022 3:07 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/29/2022 3:09 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0333 (J)
10/26/2016	0.0352 (J)
1/27/2017	0.0329 (J)
5/25/2017	0.0347 (J)
10/2/2017	0.0337 (J)
11/15/2017	0.0347 (J)
6/5/2018	0.033 (J)
10/2/2018	0.031 (J)
8/22/2019	0.029 (J)
10/22/2019	0.03 (J)
3/25/2020	0.024 (J)
8/26/2020	0.023 (J)
9/21/2020	0.023 (J)
3/12/2021	0.023 (J)
Mean	0.03004
Std. Dev.	0.004789
Upper Lim.	0.0335
Lower Lim.	0.02767

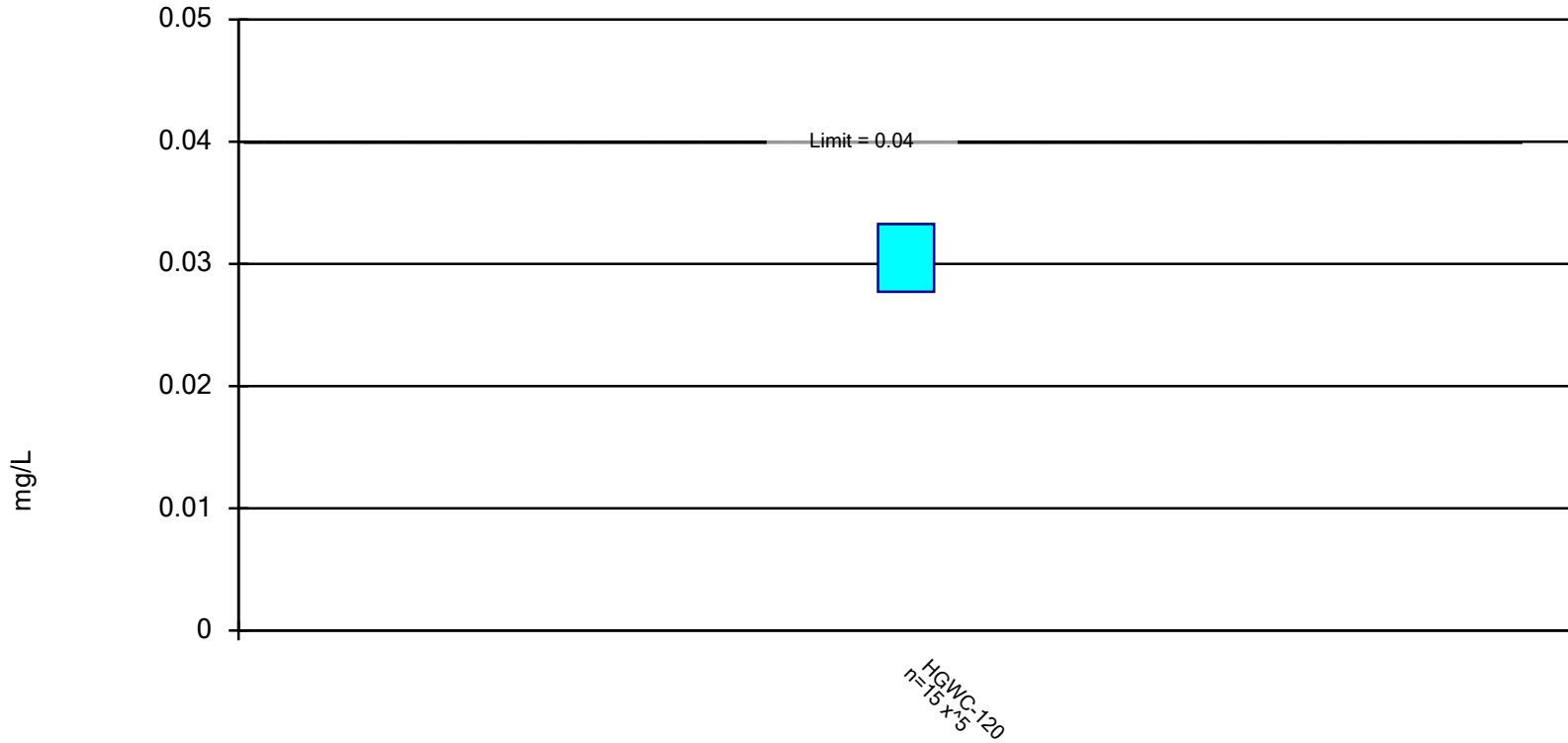
# August 2021 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 3:10 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	HGWC-120	0.03325	0.0277	0.04	No	15	0.0297	0.004795	0	None	x^5	0.01	Param.

### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/29/2022 3:10 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3



# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/29/2022 3:10 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0333 (J)
10/26/2016	0.0352 (J)
1/27/2017	0.0329 (J)
5/25/2017	0.0347 (J)
10/2/2017	0.0337 (J)
11/15/2017	0.0347 (J)
6/5/2018	0.033 (J)
10/2/2018	0.031 (J)
8/22/2019	0.029 (J)
10/22/2019	0.03 (J)
3/25/2020	0.024 (J)
8/26/2020	0.023 (J)
9/21/2020	0.023 (J)
3/12/2021	0.023 (J)
8/16/2021	0.025 (J)
Mean	0.0297
Std. Dev.	0.004795
Upper Lim.	0.03325
Lower Lim.	0.0277

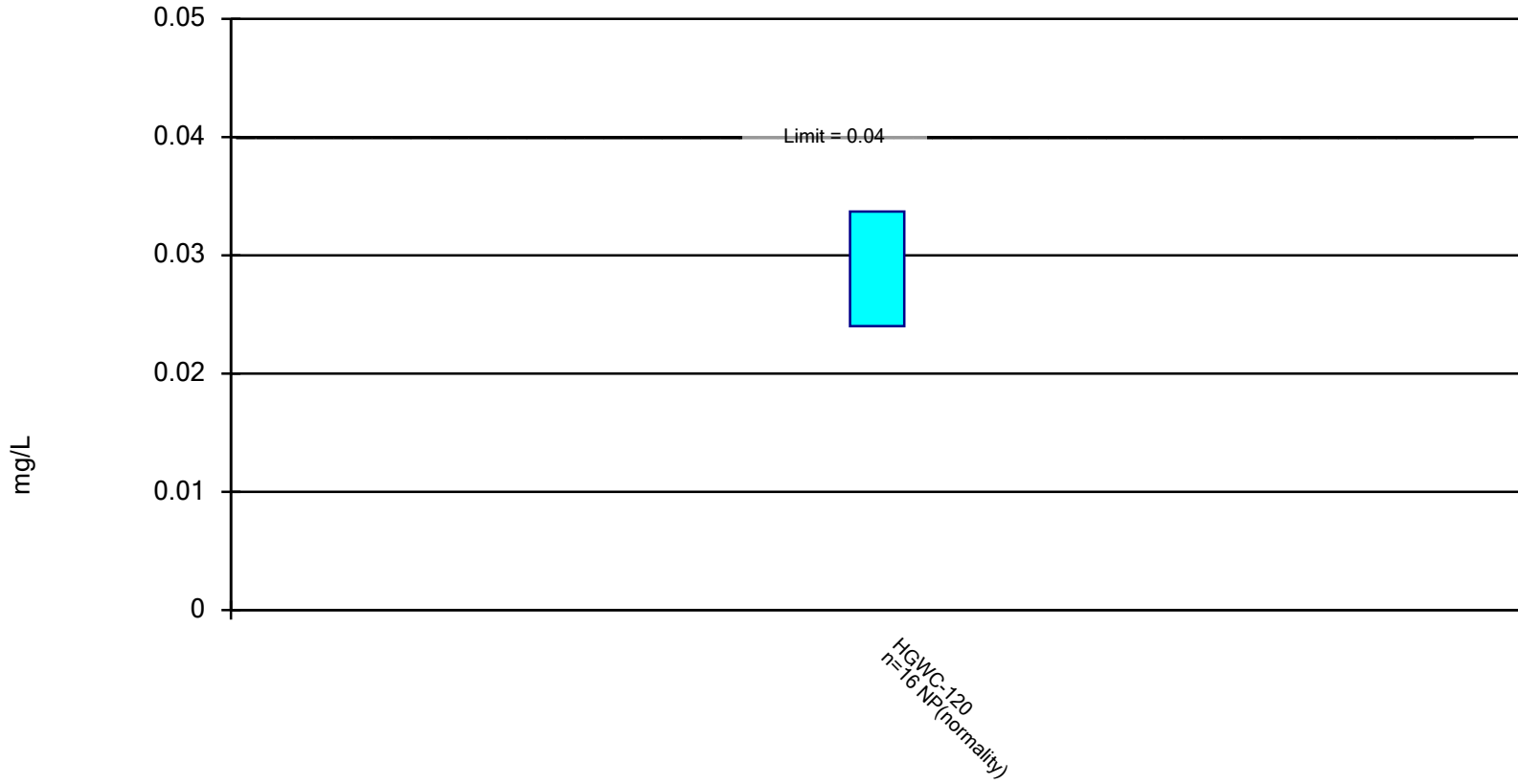
# February 2022 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 3:12 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	HGWC-120	0.0337	0.024	0.04	No	16	0.02941	0.004779	0	None	No	0.01	NP (normality)

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium    Analysis Run 3/29/2022 3:11 PM    View: CI - Lithium  
Plant Hammond    Client: Southern Company    Data: Hammond AP-3

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/29/2022 3:12 PM View: CI - Lithium  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0333 (J)
10/26/2016	0.0352 (J)
1/27/2017	0.0329 (J)
5/25/2017	0.0347 (J)
10/2/2017	0.0337 (J)
11/15/2017	0.0347 (J)
6/5/2018	0.033 (J)
10/2/2018	0.031 (J)
8/22/2019	0.029 (J)
10/22/2019	0.03 (J)
3/25/2020	0.024 (J)
8/26/2020	0.023 (J)
9/21/2020	0.023 (J)
3/12/2021	0.023 (J)
8/16/2021	0.025 (J)
2/2/2022	0.025 (J)
Mean	0.02941
Std. Dev.	0.004779
Upper Lim.	0.0337
Lower Lim.	0.024

## Confidence Intervals - Well HGWC-120 (Molybdenum)

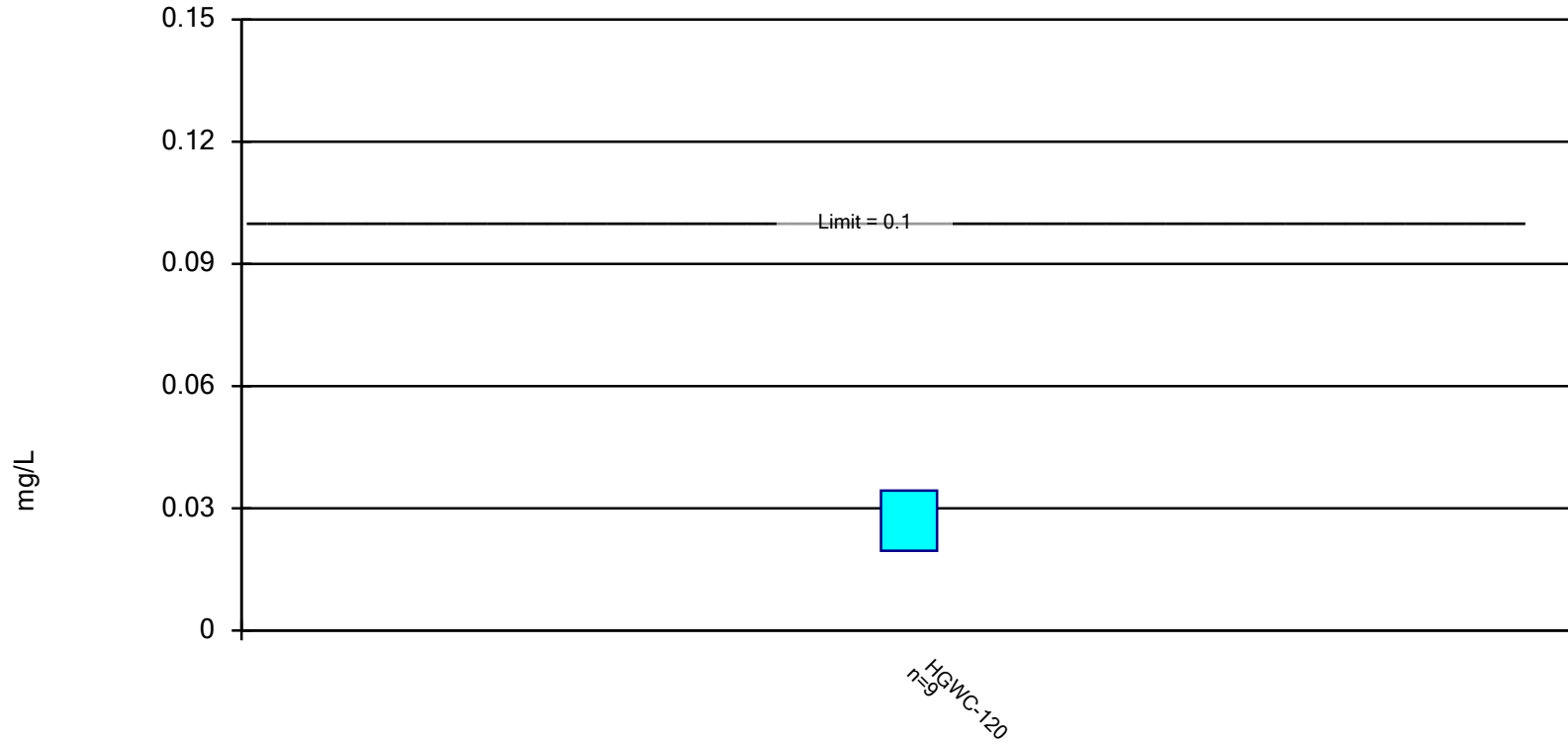
# August 2019 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 11:21 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	HGWC-120	0.03436	0.0196	0.1	No	9	0.02698	0.007642	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 11:20 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 11:21 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0176
10/26/2016	0.0187
1/27/2017	0.0214
5/25/2017	0.0231
10/2/2017	0.0259
11/15/2017	0.0281
6/5/2018	0.033
10/2/2018	0.036
8/22/2019	0.039
Mean	0.02698
Std. Dev.	0.007642
Upper Lim.	0.03436
Lower Lim.	0.0196



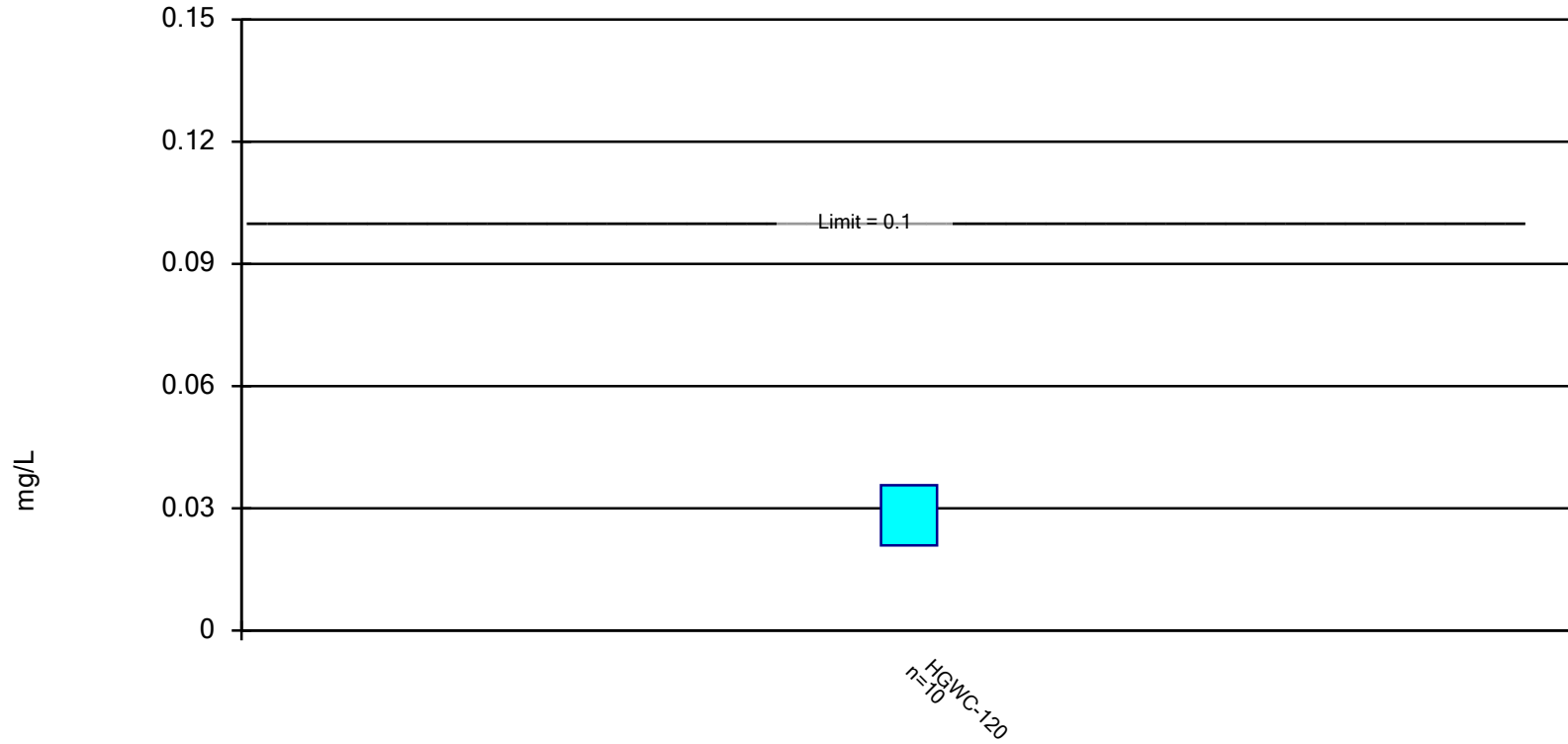
# October 2019 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 11:15 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	HGWC-120	0.03568	0.02088	0.1	No	10	0.02828	0.008299	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 11:14 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 11:15 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0176
10/26/2016	0.0187
1/27/2017	0.0214
5/25/2017	0.0231
10/2/2017	0.0259
11/15/2017	0.0281
6/5/2018	0.033
10/2/2018	0.036
8/22/2019	0.039
10/22/2019	0.04
Mean	0.02828
Std. Dev.	0.008299
Upper Lim.	0.03568
Lower Lim.	0.02088

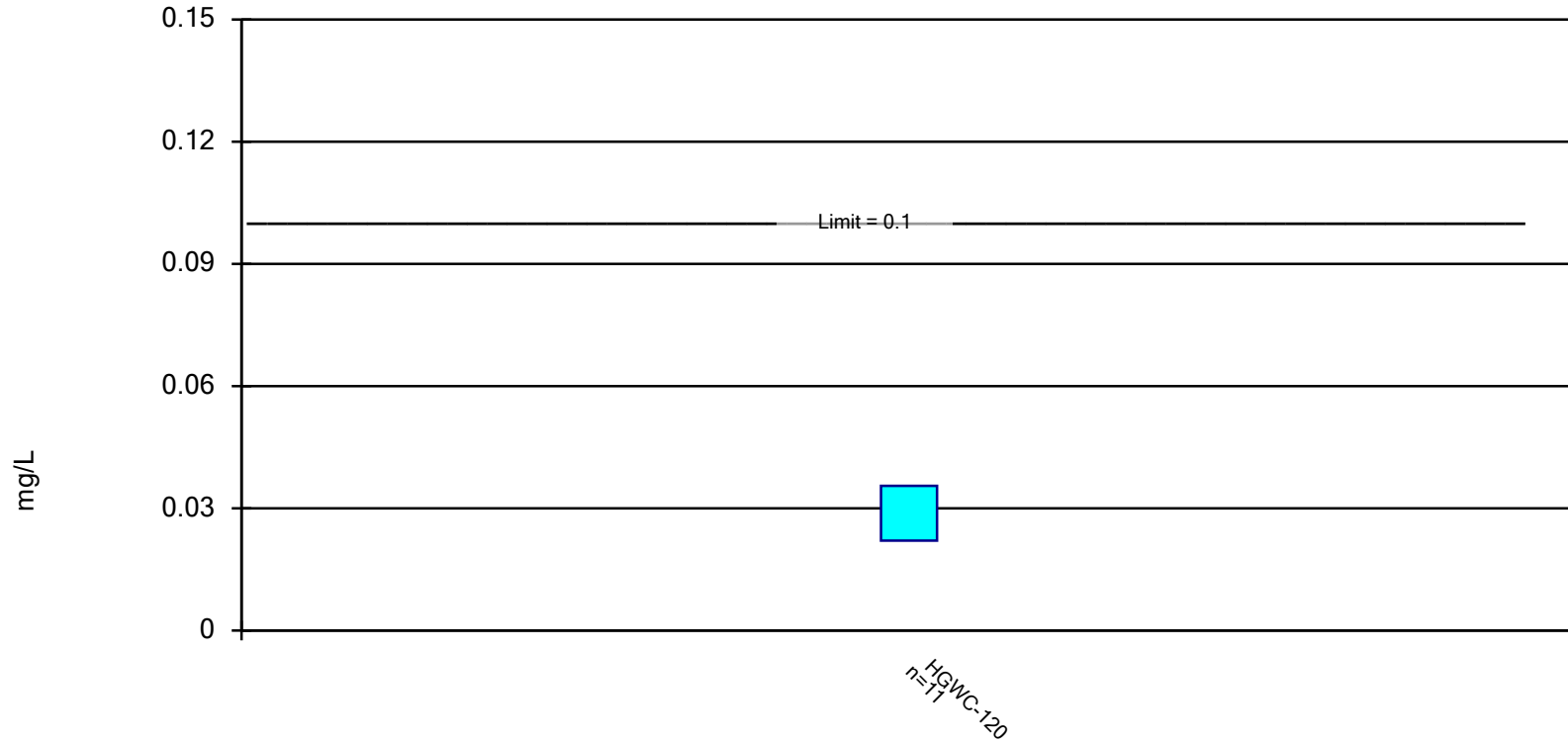
# March 2020 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 11:15 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	HGWC-120	0.03552	0.02208	0.1	No	11	0.0288	0.00806	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 11:15 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 11:15 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0176
10/26/2016	0.0187
1/27/2017	0.0214
5/25/2017	0.0231
10/2/2017	0.0259
11/15/2017	0.0281
6/5/2018	0.033
10/2/2018	0.036
8/22/2019	0.039
10/22/2019	0.04
3/25/2020	0.034
Mean	0.0288
Std. Dev.	0.00806
Upper Lim.	0.03552
Lower Lim.	0.02208

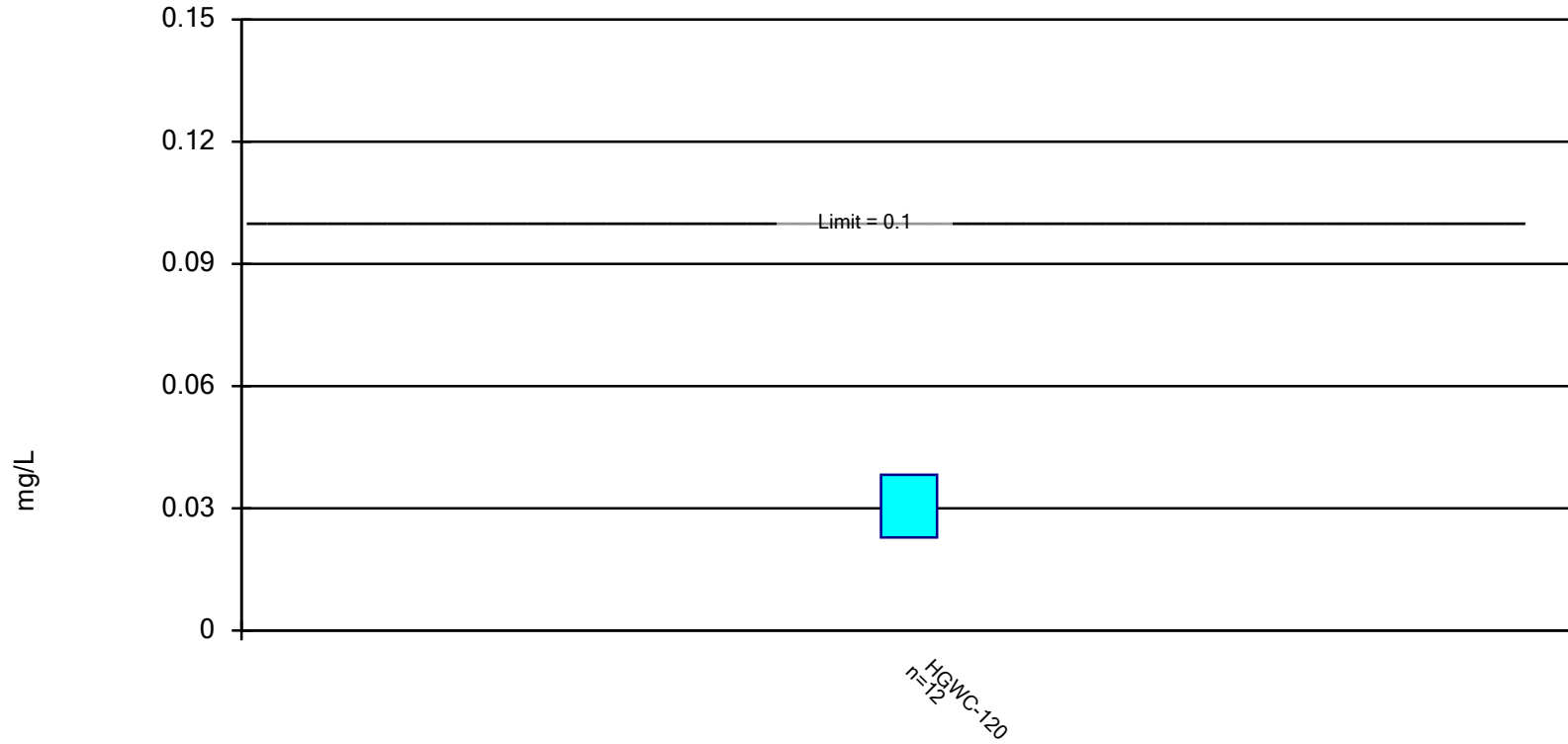
# August 2020 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 1:58 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	HGWC-120	0.03827	0.02286	0.1	No	12	0.03057	0.009824	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 1:58 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3



# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 1:58 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0176
10/26/2016	0.0187
1/27/2017	0.0214
5/25/2017	0.0231
10/2/2017	0.0259
11/15/2017	0.0281
6/5/2018	0.033
10/2/2018	0.036
8/22/2019	0.039
10/22/2019	0.04
3/25/2020	0.034
8/26/2020	0.05
Mean	0.03057
Std. Dev.	0.009824
Upper Lim.	0.03827
Lower Lim.	0.02286

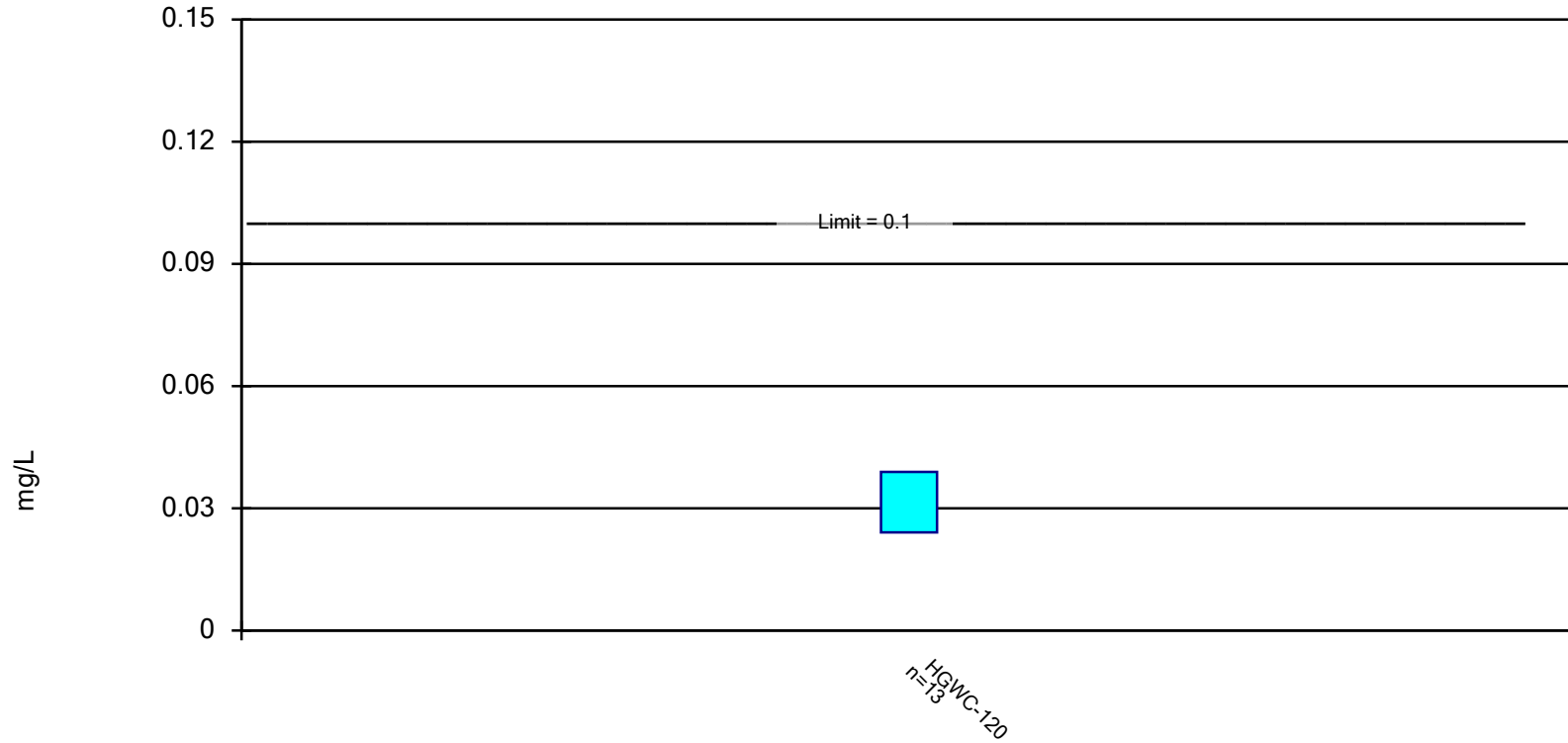
# September 2020 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 11:16 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	HGWC-120	0.03897	0.02407	0.1	No	13	0.03152	0.01002	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 11:16 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 11:16 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0176
10/26/2016	0.0187
1/27/2017	0.0214
5/25/2017	0.0231
10/2/2017	0.0259
11/15/2017	0.0281
6/5/2018	0.033
10/2/2018	0.036
8/22/2019	0.039
10/22/2019	0.04
3/25/2020	0.034
8/26/2020	0.05
9/21/2020	0.043
Mean	0.03152
Std. Dev.	0.01002
Upper Lim.	0.03897
Lower Lim.	0.02407

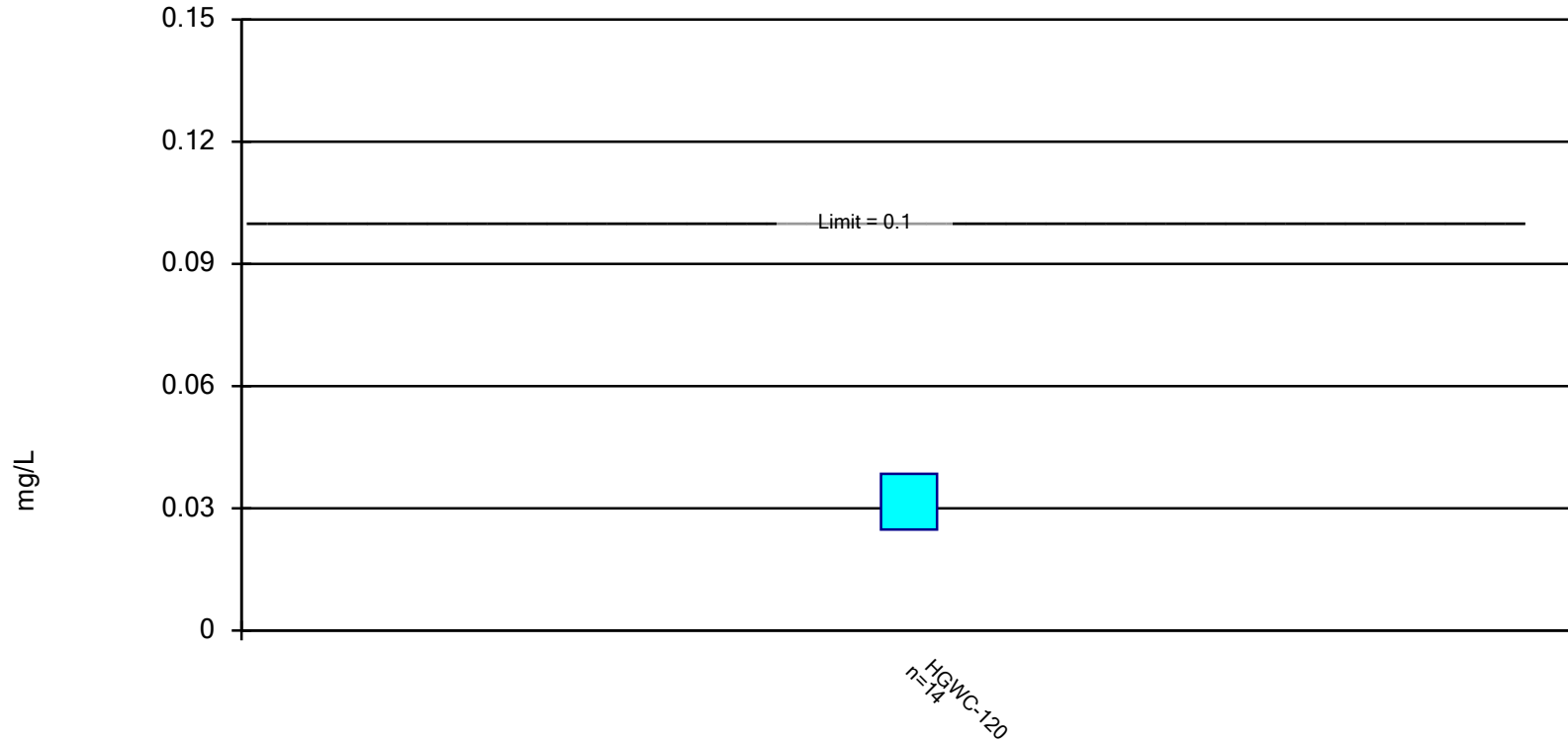
# March 2021 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 11:17 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	HGWC-120	0.03845	0.02481	0.1	No	14	0.03163	0.009633	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 11:17 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 11:17 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0176
10/26/2016	0.0187
1/27/2017	0.0214
5/25/2017	0.0231
10/2/2017	0.0259
11/15/2017	0.0281
6/5/2018	0.033
10/2/2018	0.036
8/22/2019	0.039
10/22/2019	0.04
3/25/2020	0.034
8/26/2020	0.05
9/21/2020	0.043
3/12/2021	0.033
Mean	0.03163
Std. Dev.	0.009633
Upper Lim.	0.03845
Lower Lim.	0.02481

# August 2021 Confidence Interval - HGWC-120

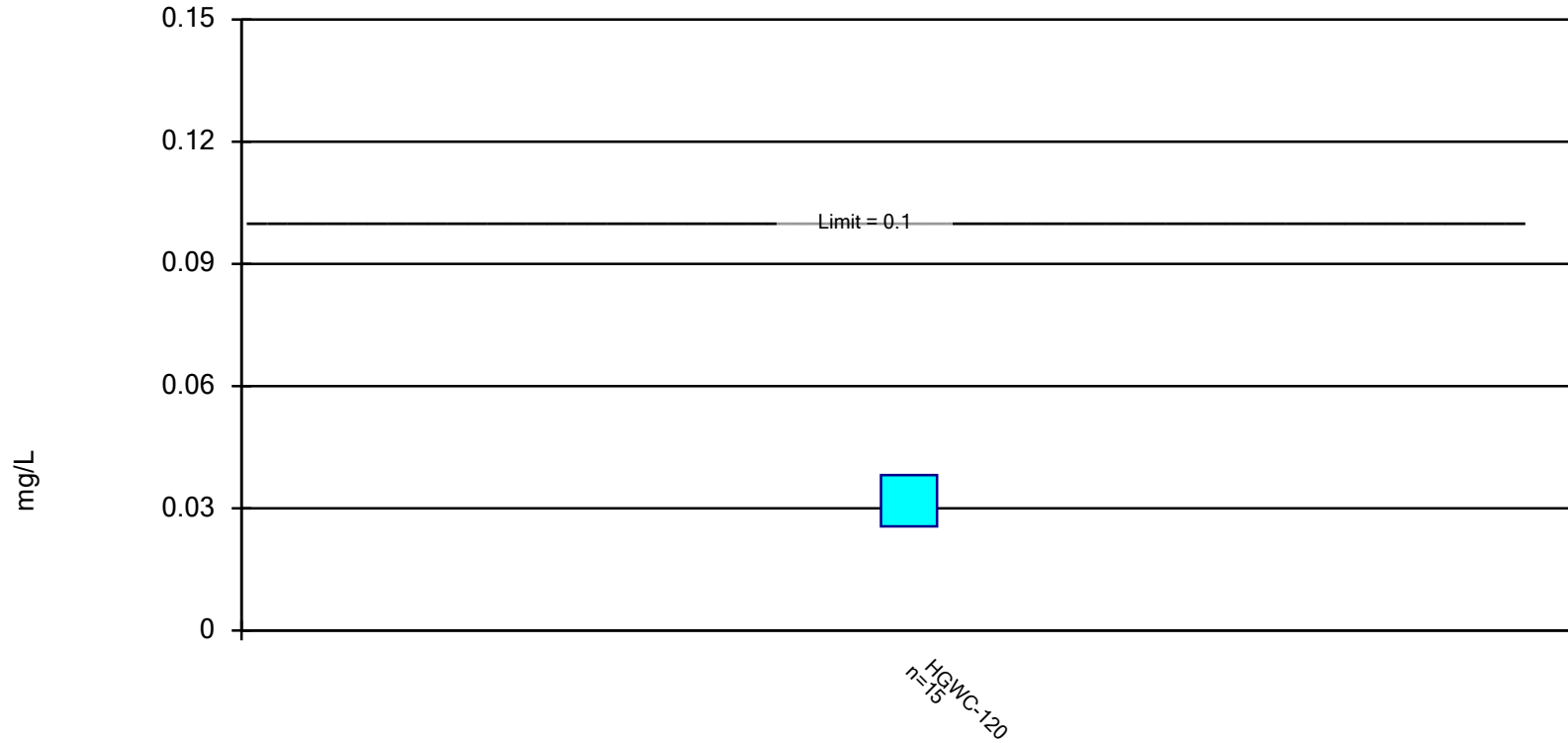
Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 11:18 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	HGWC-120	0.03817	0.02554	0.1	No	15	0.03185	0.009323	0	None	No	0.01	Param.



## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 11:18 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 11:18 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0176
10/26/2016	0.0187
1/27/2017	0.0214
5/25/2017	0.0231
10/2/2017	0.0259
11/15/2017	0.0281
6/5/2018	0.033
10/2/2018	0.036
8/22/2019	0.039
10/22/2019	0.04
3/25/2020	0.034
8/26/2020	0.05
9/21/2020	0.043
3/12/2021	0.033
8/16/2021	0.035
Mean	0.03185
Std. Dev.	0.009323
Upper Lim.	0.03817
Lower Lim.	0.02554

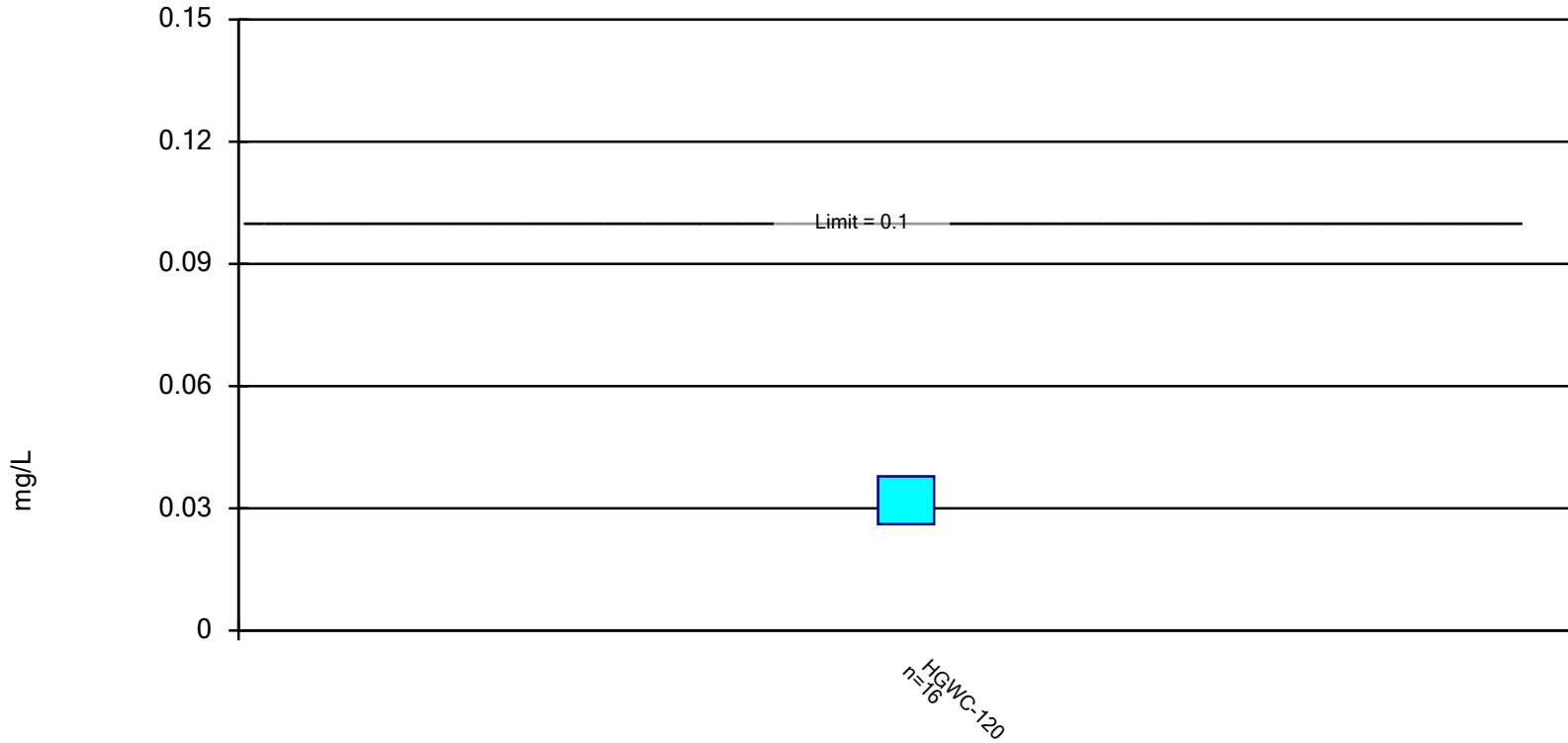
# February 2022 Confidence Interval - HGWC-120

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 11:19 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	HGWC-120	0.03786	0.02612	0.1	No	16	0.03199	0.009023	0	None	No	0.01	Param.

### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 11:18 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 11:19 AM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	HGWC-120
8/31/2016	0.0176
10/26/2016	0.0187
1/27/2017	0.0214
5/25/2017	0.0231
10/2/2017	0.0259
11/15/2017	0.0281
6/5/2018	0.033
10/2/2018	0.036
8/22/2019	0.039
10/22/2019	0.04
3/25/2020	0.034
8/26/2020	0.05
9/21/2020	0.043
3/12/2021	0.033
8/16/2021	0.035
2/2/2022	0.034
Mean	0.03199
Std. Dev.	0.009023
Upper Lim.	0.03786
Lower Lim.	0.02612

## Confidence Intervals - Well MW-32 (Molybdenum)

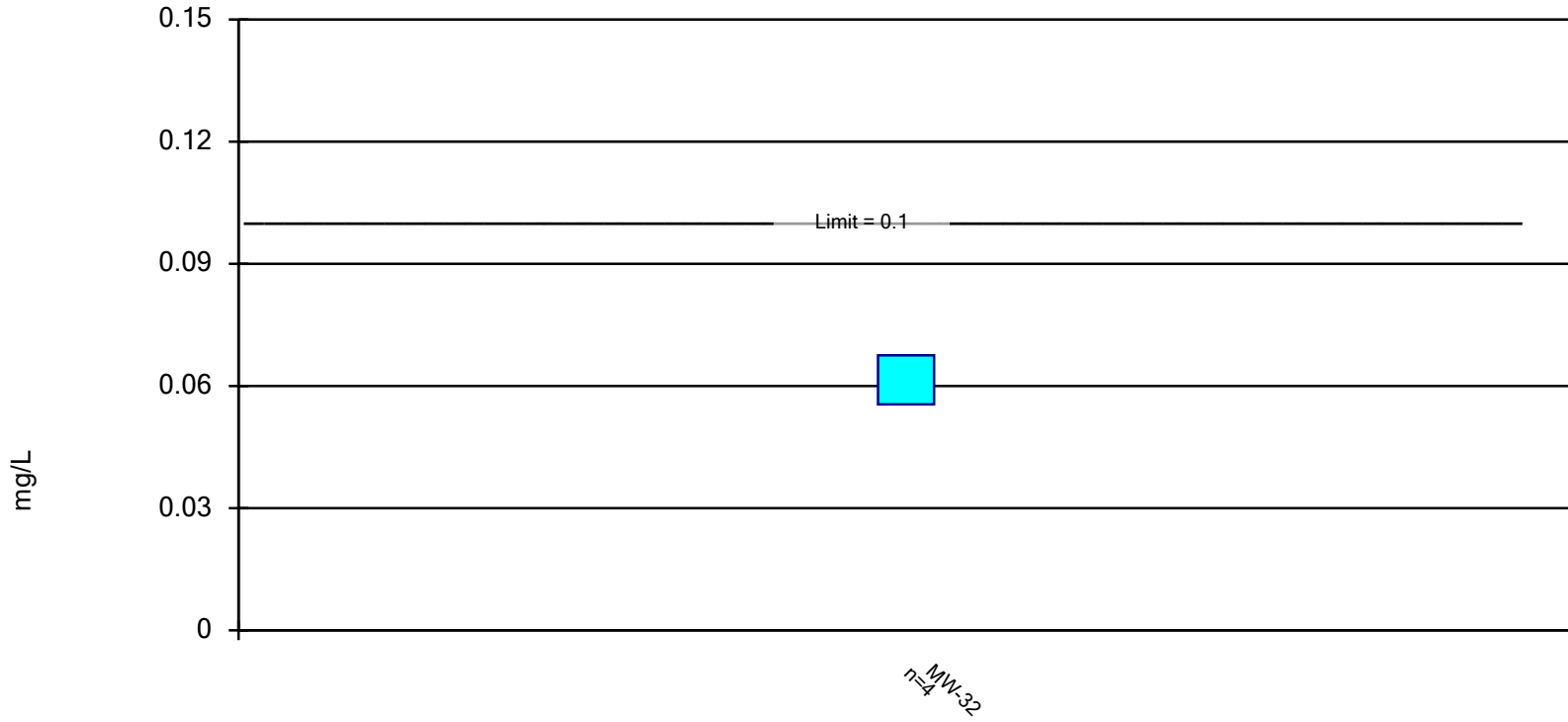
# August 2020 Confidence Interval - MW-32

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 5:39 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-32	0.06751	0.05549	0.1	No	4	0.0615	0.002646	0	None	No	0.01	Param.

### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 5:37 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3



# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 5:39 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	MW-32
1/3/2020	0.06
1/22/2020	0.059
3/25/2020	0.062
8/26/2020	0.065
Mean	0.0615
Std. Dev.	0.002646
Upper Lim.	0.06751
Lower Lim.	0.05549

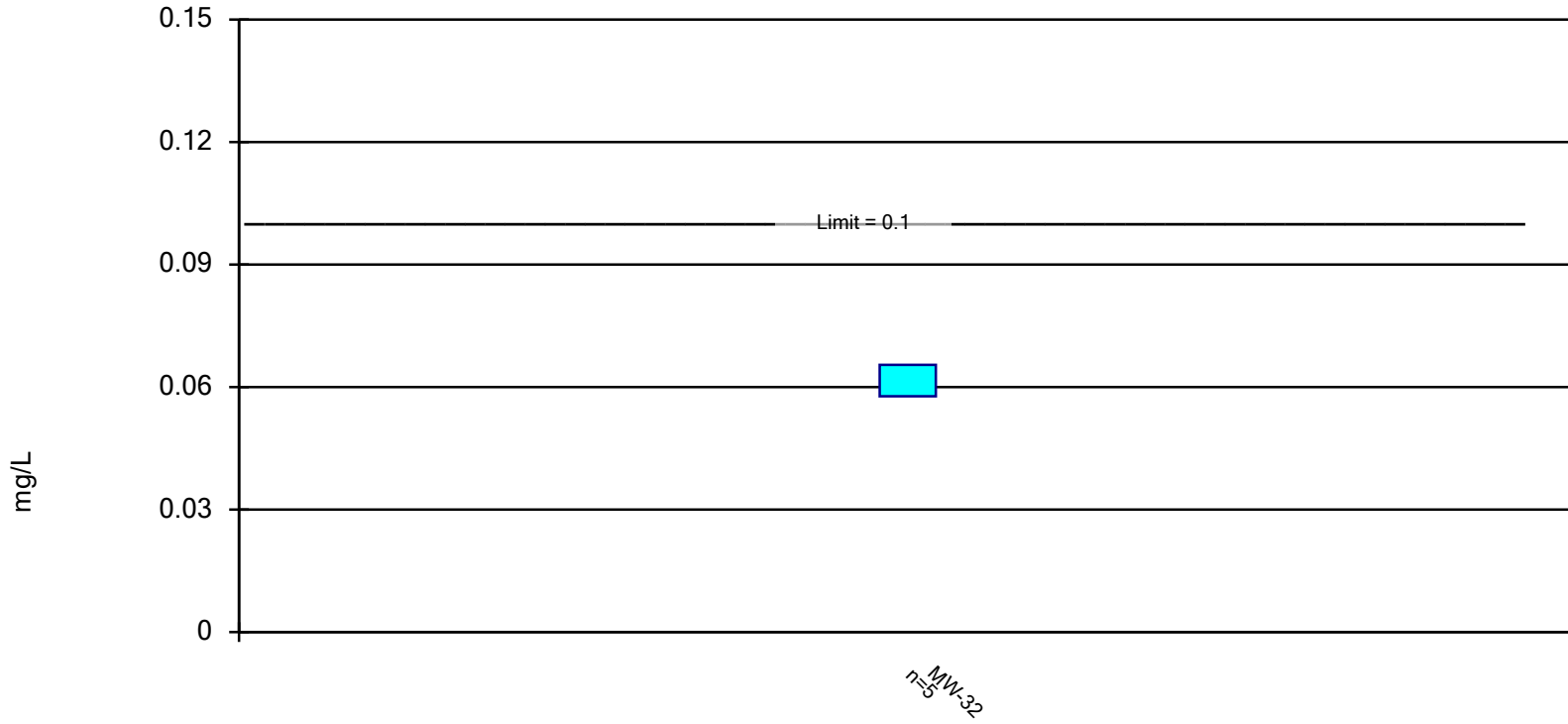
# September 2020 Confidence Interval - HGWC-32

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 3/29/2022, 2:32 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-32	0.06546	0.05774	0.1	No	5	0.0616	0.002302	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 2:31 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:32 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	MW-32
1/3/2020	0.06
1/22/2020	0.059
3/25/2020	0.062
8/26/2020	0.065
9/28/2020	0.062
Mean	0.0616
Std. Dev.	0.002302
Upper Lim.	0.06546
Lower Lim.	0.05774

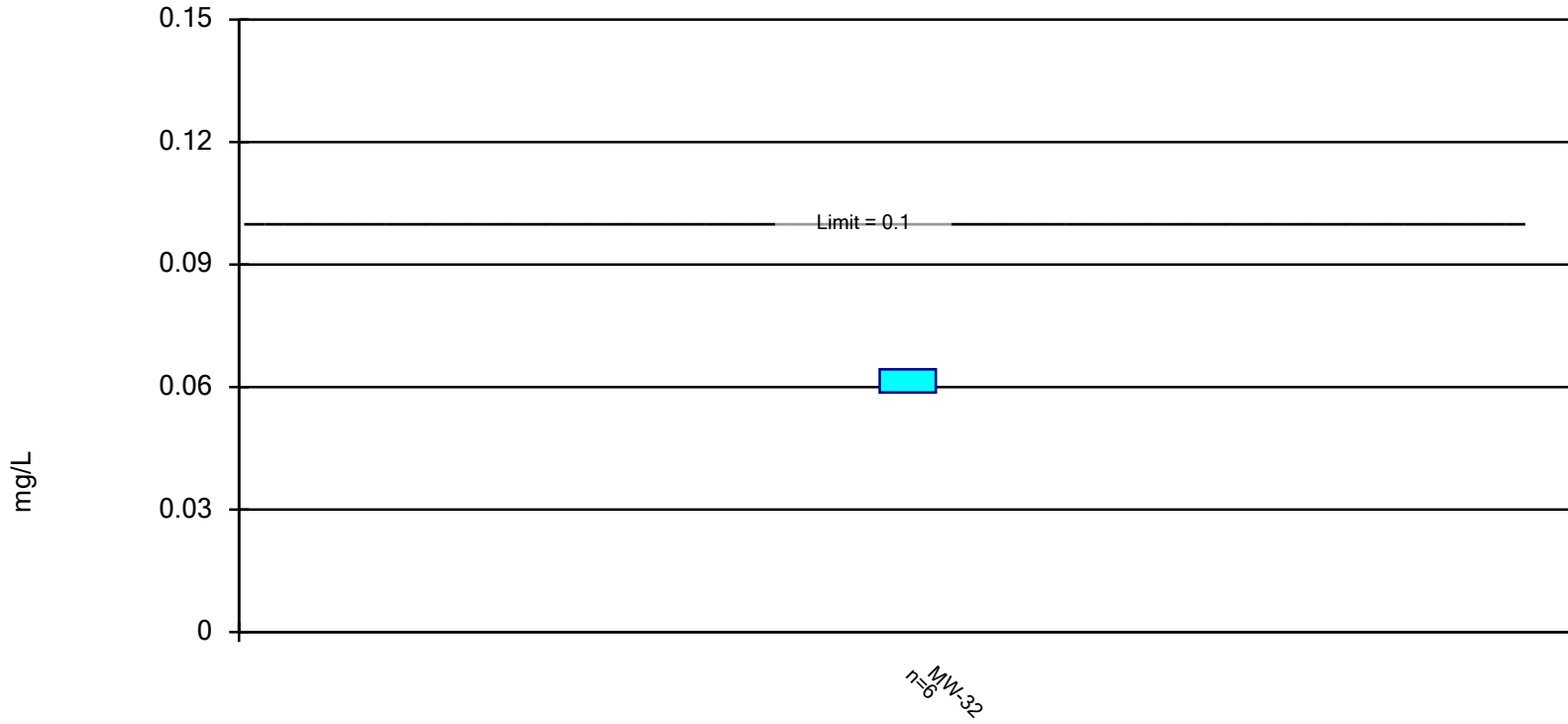
# March 2021 Confidence Interval - HGWC-32

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:33 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-32	0.06435	0.05865	0.1	No	6	0.0615	0.002074	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 2:32 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:33 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	MW-32
1/3/2020	0.06
1/22/2020	0.059
3/25/2020	0.062
8/26/2020	0.065
9/28/2020	0.062
3/15/2021	0.061
Mean	0.0615
Std. Dev.	0.002074
Upper Lim.	0.06435
Lower Lim.	0.05865

# August 2021 Confidence Interval - HGWC-32

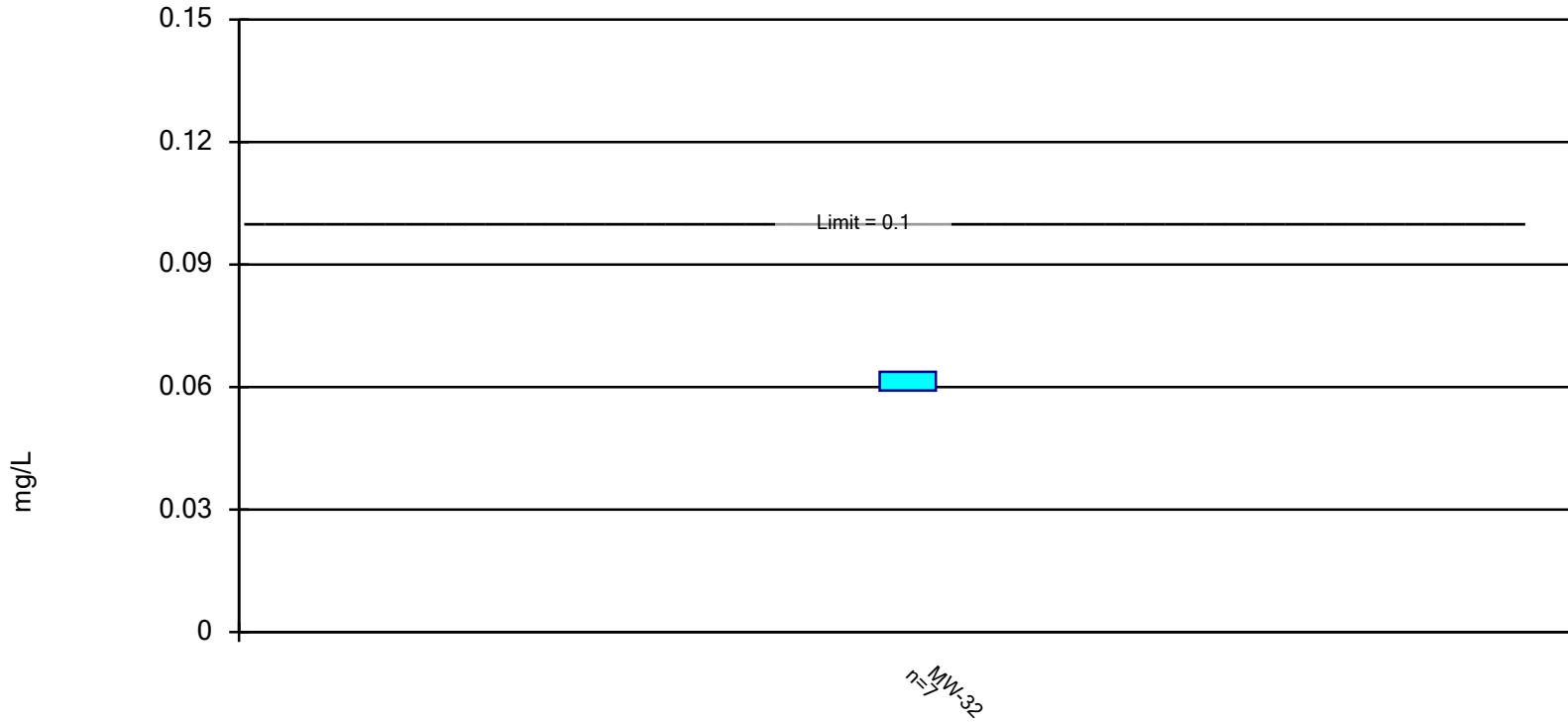
Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:34 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-32	0.06369	0.05917	0.1	No	7	0.06143	0.001902	0	None	No	0.01	Param.



## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 2:33 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:34 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

---

	MW-32
1/3/2020	0.06
1/22/2020	0.059
3/25/2020	0.062
8/26/2020	0.065
9/28/2020	0.062
3/15/2021	0.061
8/18/2021	0.061
Mean	0.06143
Std. Dev.	0.001902
Upper Lim.	0.06369
Lower Lim.	0.05917

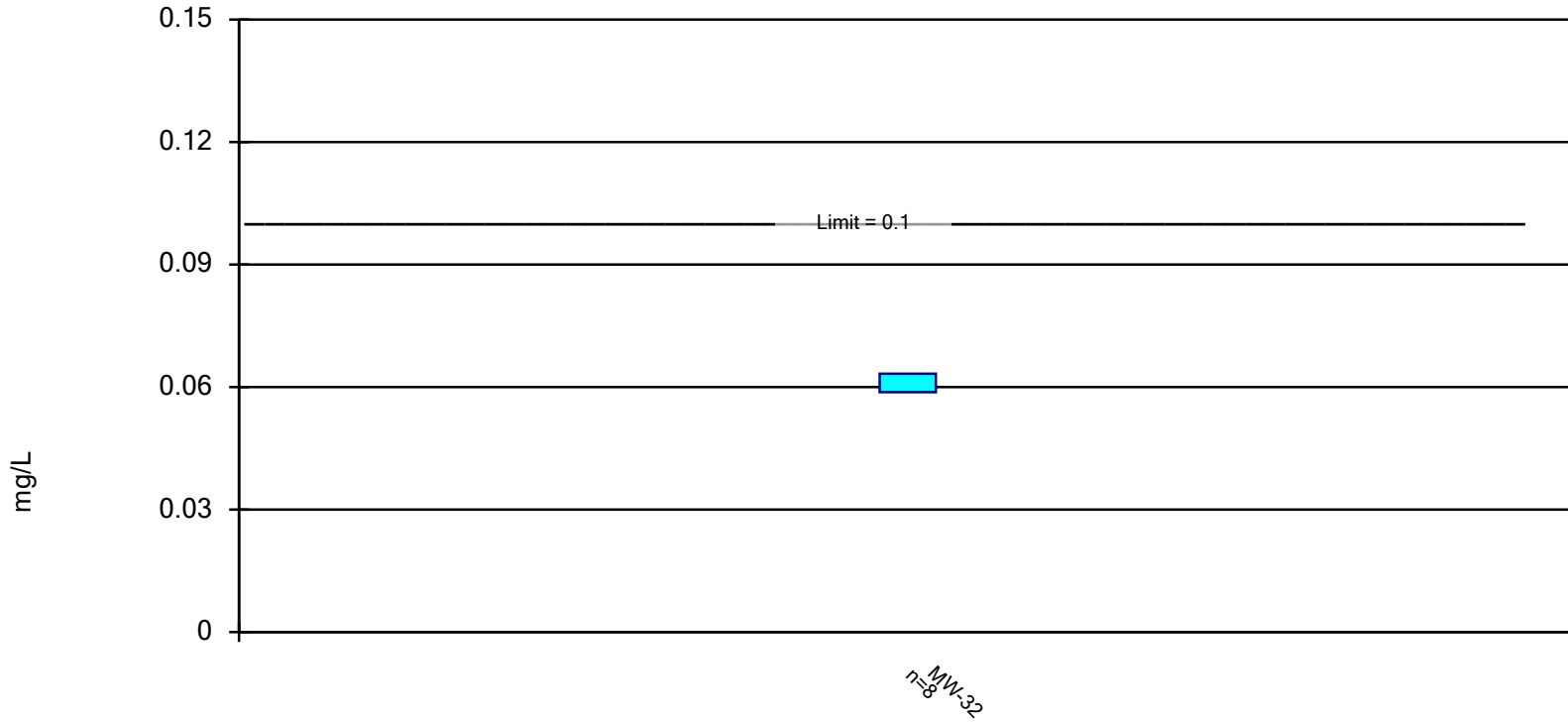
# February 2022 Confidence Interval - HGWC-32

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:34 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-32	0.06327	0.05873	0.1	No	8	0.061	0.002138	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 2:34 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:34 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

---

	MW-32
1/3/2020	0.06
1/22/2020	0.059
3/25/2020	0.062
8/26/2020	0.065
9/28/2020	0.062
3/15/2021	0.061
8/18/2021	0.061
2/3/2022	0.058
Mean	0.061
Std. Dev.	0.002138
Upper Lim.	0.06327
Lower Lim.	0.05873

## Confidence Intervals - Well MW-39 (Molybdenum)

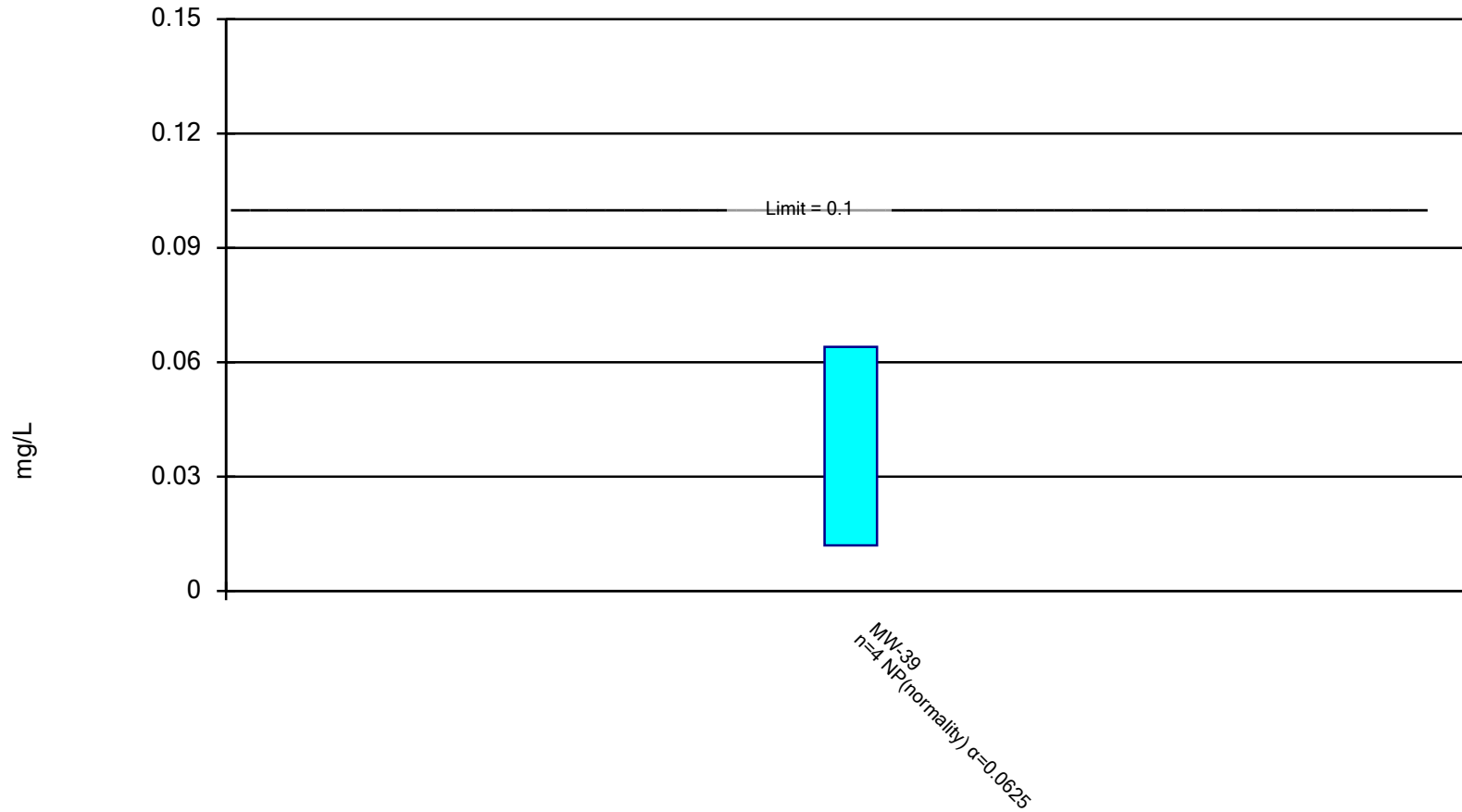
# September 2020 Confidence Interval - HGWC-39

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 3/29/2022, 2:37 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-39	0.064	0.012	0.1	No	4	0.05	0.02535	0	None	No	0.0625	NP (normality)

## Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 3/29/2022 2:36 PM View: CI - Molybdenum

Plant Hammond Client: Southern Company Data: Hammond AP-3



# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:37 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	MW-39
3/27/2020	0.012
4/24/2020	0.062
8/26/2020	0.064
9/28/2020	0.062
Mean	0.05
Std. Dev.	0.02535
Upper Lim.	0.064
Lower Lim.	0.012

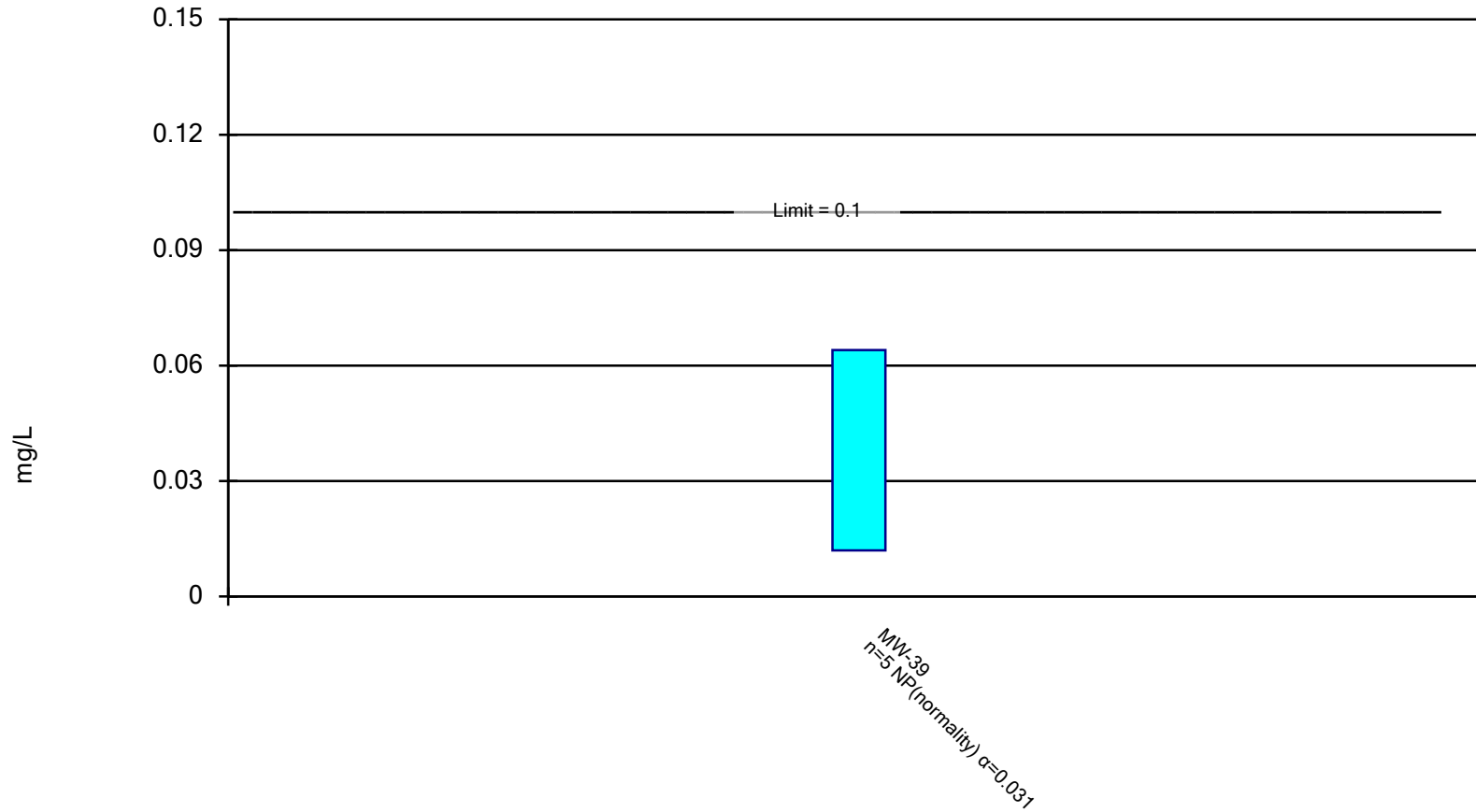
# March 2021 Confidence Interval - HGWC-39

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:38 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-39	0.064	0.012	0.1	No	5	0.0524	0.0226	0	None	No	0.031	NP (normality)

## Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 3/29/2022 2:38 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:39 PM View: CI -Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	MW-39
3/27/2020	0.012
4/24/2020	0.062
8/26/2020	0.064
9/28/2020	0.062
3/15/2021	0.062
Mean	0.0524
Std. Dev.	0.0226
Upper Lim.	0.064
Lower Lim.	0.012

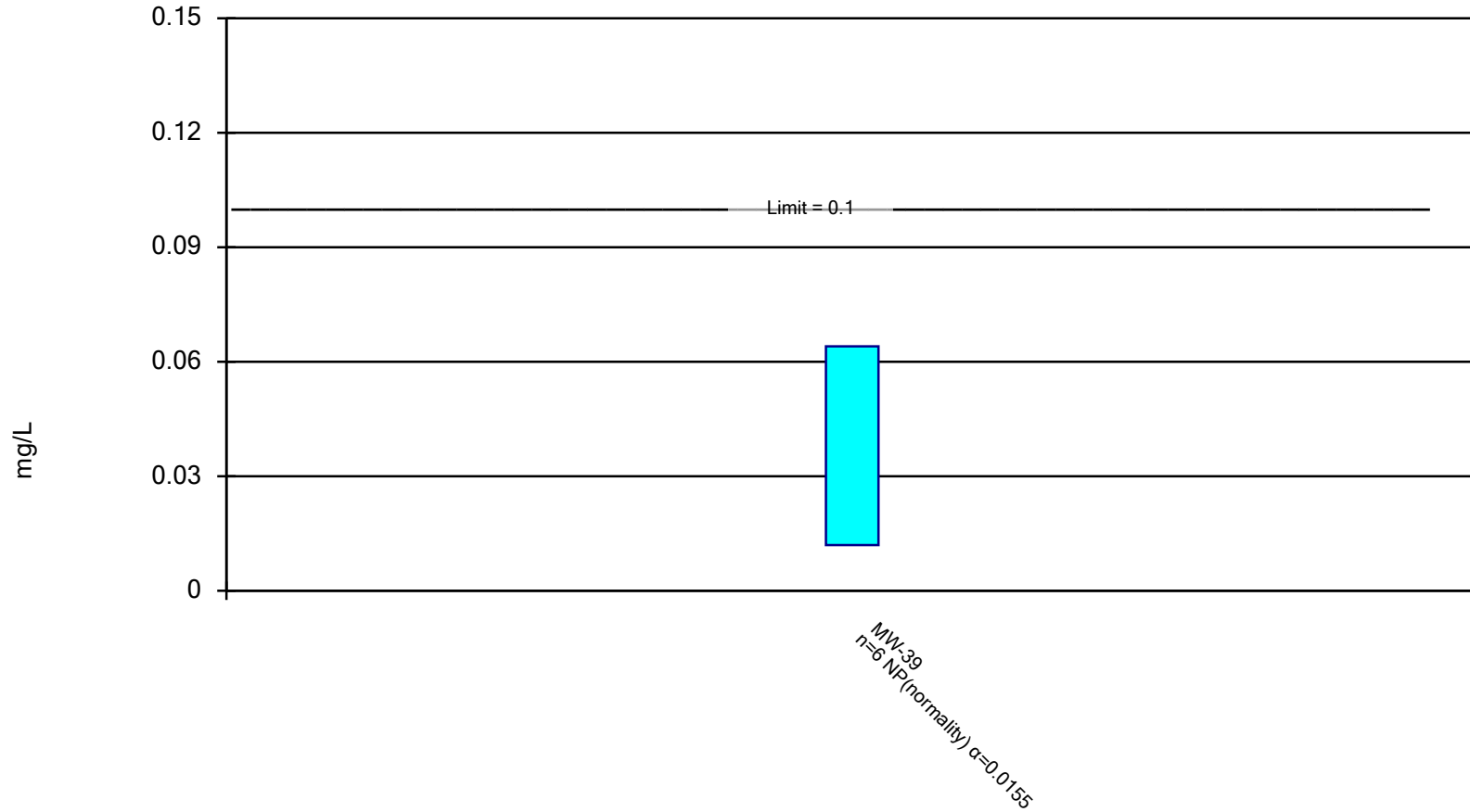
# August 2021 Confidence Interval - HGWC-39

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:39 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-39	0.064	0.012	0.1	No	6	0.05417	0.02067	0	None	No		0.0155NP (normality)

## Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 3/29/2022 2:39 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:39 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	MW-39
3/27/2020	0.012
4/24/2020	0.062
8/26/2020	0.064
9/28/2020	0.062
3/15/2021	0.062
8/18/2021	0.063
Mean	0.05417
Std. Dev.	0.02067
Upper Lim.	0.064
Lower Lim.	0.012

# February 2022 Confidence Interval - HGWC-39

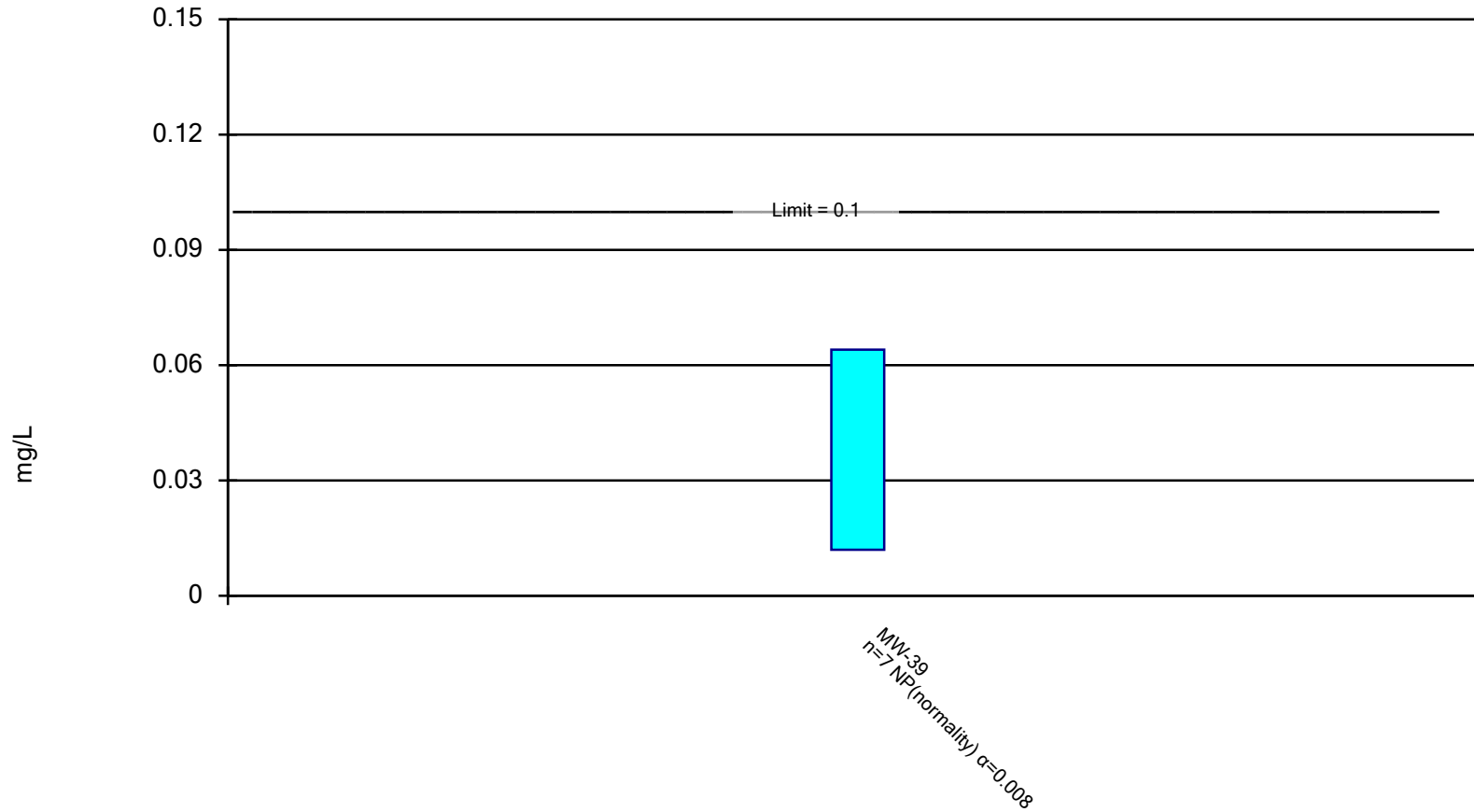
Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:40 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-39	0.064	0.012	0.1	No	7	0.05529	0.0191	0	None	No	0.008	NP (normality)



## Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 3/29/2022 2:40 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:40 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

---

	MW-39
3/27/2020	0.012
4/24/2020	0.062
8/26/2020	0.064
9/28/2020	0.062
3/15/2021	0.062
8/18/2021	0.063
2/2/2022	0.062
Mean	0.05529
Std. Dev.	0.0191
Upper Lim.	0.064
Lower Lim.	0.012

## Confidence Intervals - Well MW-41 (Molybdenum)

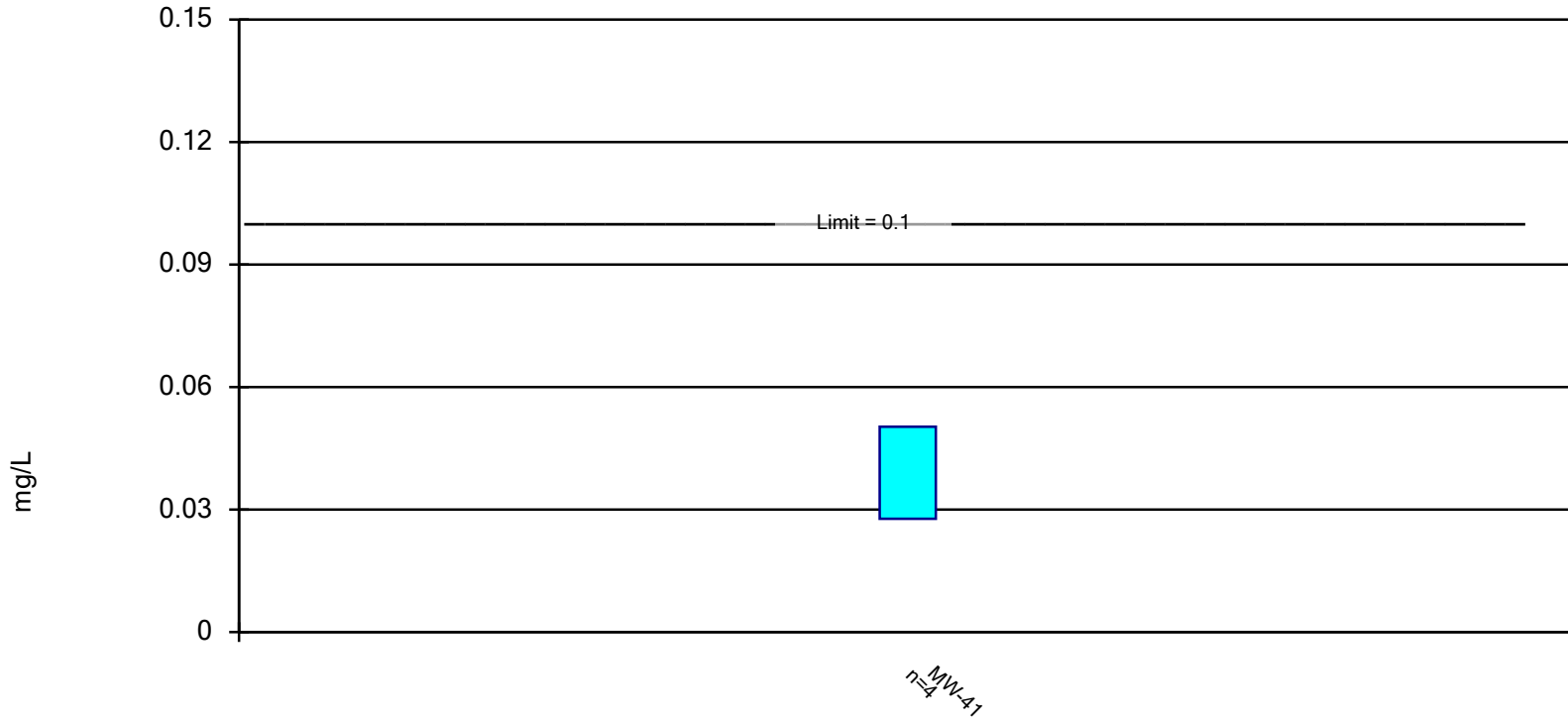
# March 2021 Confidence Interval - HGWC-41

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:41 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-41	0.05028	0.02772	0.1	No	4	0.039	0.004967	0	None	No	0.01	Param.

### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum    Analysis Run 3/29/2022 2:41 PM    View: CI - Molybdenum  
Plant Hammond    Client: Southern Company    Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:42 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

---

	MW-41
6/15/2020	0.035
8/26/2020	0.039
9/28/2020	0.036
3/15/2021	0.046
Mean	0.039
Std. Dev.	0.004967
Upper Lim.	0.05028
Lower Lim.	0.02772

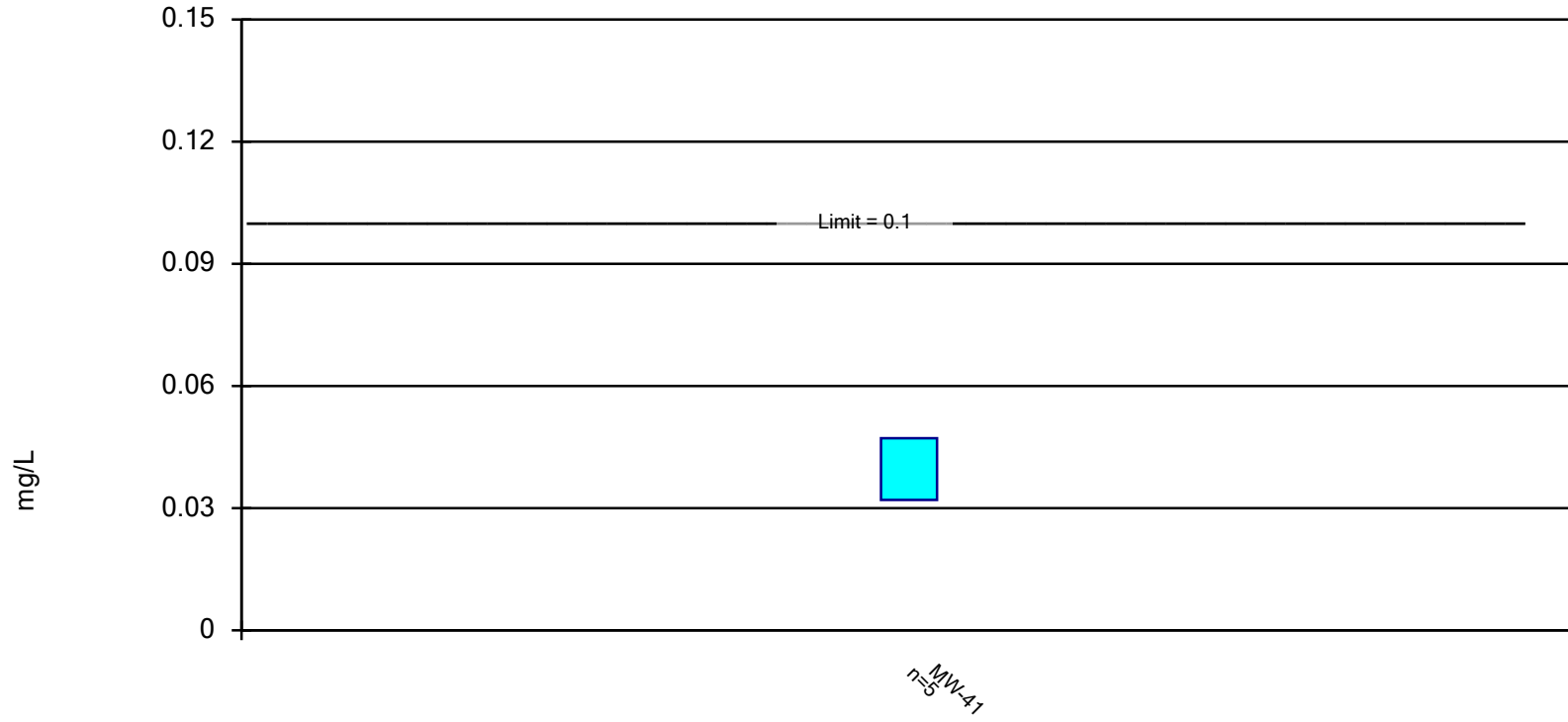
# August 2021 Confidence Interval - HGWC-41

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-41	0.04715	0.03205	0.1	No	5	0.0396	0.004506	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 2:42 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3



# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:42 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

---

	MW-41
6/15/2020	0.035
8/26/2020	0.039
9/28/2020	0.036
3/15/2021	0.046
8/18/2021	0.042
Mean	0.0396
Std. Dev.	0.004506
Upper Lim.	0.04715
Lower Lim.	0.03205

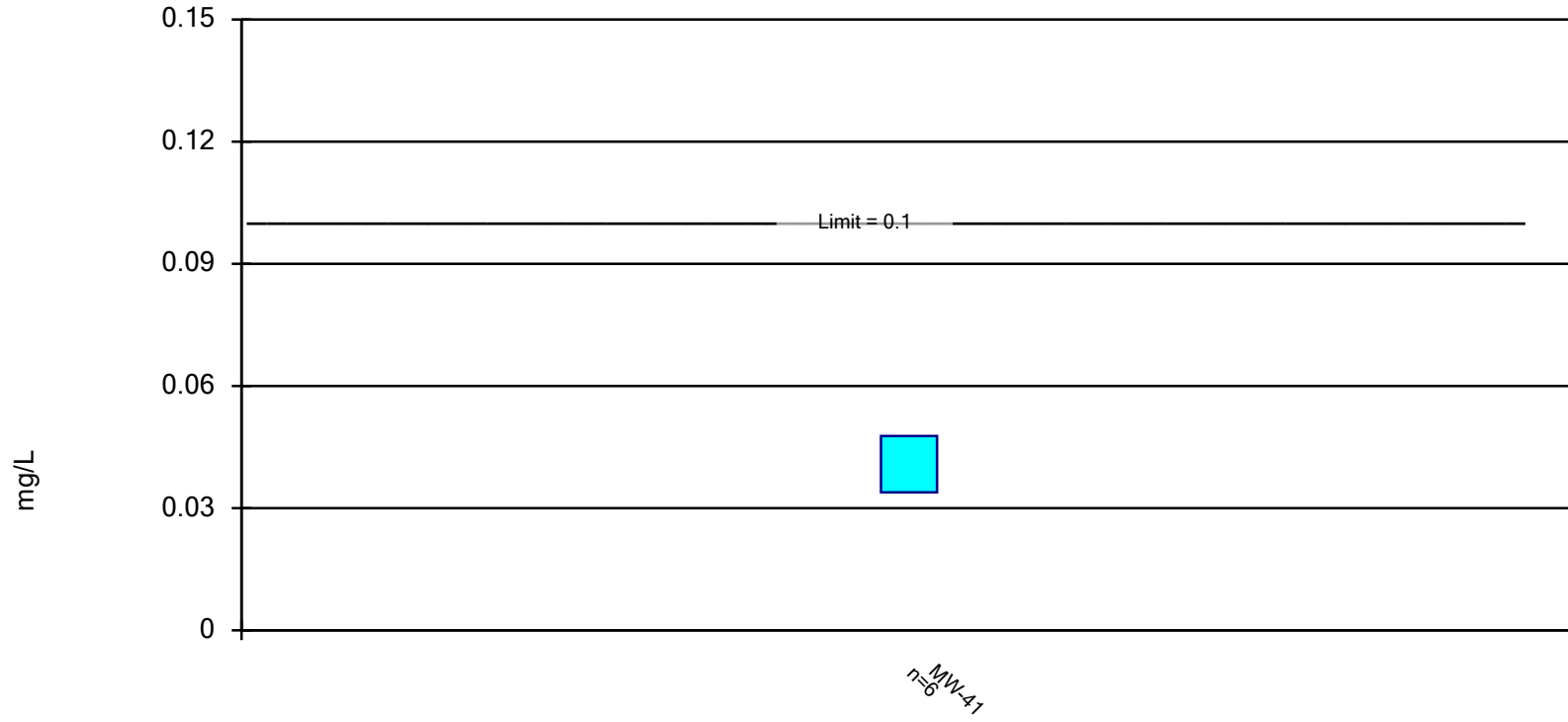
# February 2022 Confidence Interval - HGWC-41

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/29/2022, 2:43 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Molybdenum (mg/L)	MW-41	0.04775	0.03391	0.1	No	6	0.04083	0.005037	0	None	No	0.01	Param.

## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/29/2022 2:43 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/29/2022 2:43 PM View: CI - Molybdenum  
Plant Hammond Client: Southern Company Data: Hammond AP-3

---

	MW-41
6/15/2020	0.035
8/26/2020	0.039
9/28/2020	0.036
3/15/2021	0.046
8/18/2021	0.042
2/2/2022	0.047
Mean	0.04083
Std. Dev.	0.005037
Upper Lim.	0.04775
Lower Lim.	0.03391



**ENVIRONMENTAL PROTECTION DIVISION**

**Richard E. Dunn, Director**

**Land Protection Branch**

4244 International Parkway  
Suite 104  
Atlanta, Georgia 30354  
404-362-2537

July 15, 2022

Mr. Aaron D. Mitchell  
General Manager - Environmental Affairs  
Georgia Power  
241 Ralph McGill Boulevard  
Atlanta, GA 30308  
(via e-mail: AADMITCH@southernco.com)

**SUBJECT: Plant Hammond Ash Pond 3  
Release from Assessment of Corrective Measures - Approved  
GEOS Submittal 672613**

Dear Mr. Mitchell:

The Georgia Environmental Protection Division (EPD) has reviewed your request for the subject facility to be released from Assessment of Corrective Measures.

Based upon the information included in the submittal and having demonstrated that the contaminants of concern have never been above the federal health-based groundwater protection standards that were incorporated in the Georgia Solid Waste Management Rules on February 22, 2022, EPD hereby releases the subject facility from Assessment of Corrective Measures.

If you have any questions regarding this letter, please contact Mark Wescott at mark.wescott@dnr.ga.gov or (470)-763-6344.

Sincerely,

Mark Wescott  
Digitally signed by Mark Wescott  
Date: 2022.07.15 08:58:32 -04'00'

Mark Wescott, P.G  
Geologist  
Environmental Monitoring Unit  
Solid Waste Management Program

Beverly Tipton  
Digitally signed by Beverly Tipton  
Date: 2022.07.15 07:33:46 -04'00'

Beverly Tipton  
Manager  
Environmental Monitoring Unit  
Solid Waste Management Program

cc: Tim Earl, Tyler Boyles, David Gibbons, Lauren Petty, and Ben Hodges: GP  
William Cook, Keith Stevens, Rima Naji, Brian Love: EPD

File: S:\Land\LANDDOCS\SW\CCR Applications\GP Plant Hammond\AP-3\EPD Correspondence

## APPENDIX B

# Well Maintenance and Repair Documentation Memoranda

**MEMORANDUM**

**DATE:** December 20, 2021

**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 AP-3 during the 2021 semiannual reporting period. 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.

<b>Georgia Power Site/Unit</b>	<b>Date Performed</b>	<b>Well ID</b>	<b>Maintenance/ Repair Performed</b>
Hammond/AP-3	8/4/2021	All Wells	Checked and cleared weep holes of debris.
Hammond/AP-3	8/13/2021	HGWC-126	Replaced well lock.

# ATTACHMENT

## Well Inspection Forms



**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Groundwater  
 Permit Number: \_\_\_\_\_  
 Well ID: HGWA-1  
 Date field conditions: 8/11/21 Spring 92°F

	yes	no	nm
<b>1 Location/Sitination</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Surface Pad</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal Casing</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>6</b> Based on your professional judgement, is the well construction / location appropriate to fully achieve the objectives of the Groundwater Monitoring Program and to comply with the applicable regulatory requirements? <input checked="" type="checkbox"/>			
<b>7</b> Corrective actions as needed by date _____			

Signature and Seal of PE/PC responsible for inspection

\_\_\_\_\_

**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Hammond  
 Permit Number: \_\_\_\_\_  
 Well ID: HGMW-2  
 Date field conditions: 8/14/21 8/14/21

		yes	no	n/a
<b>1 Location/Ident/Access</b>				
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water near a well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water, or filled with sea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Surface Pad</b>				
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal Casing</b>				
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any construction from foreign objects (such as ladders)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the PVC move easily when touched or can't be taken apart by hand due to lack of grout or use of slip couplings in construction?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling Groundwater Wells Only</b>				
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is dedicated sampling equipment installed and in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow, turbid)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>6 Based on your professional judgement - is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?</b>				
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7 Corrective actions as needed by date: None

Signature and Seal of PE/PG responsible for inspection: \_\_\_\_\_

**Groundwater Monitoring Well Integrity Form**

Site Name: Plant - Hohenwald  
 Permit Number: \_\_\_\_\_  
 Well ID: HGWA-3  
 Date and conditions: 8/2/02

		yes	no	na
<b>1 Location Identification</b>				
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? and standing water not well located in obvious drainage flow paths?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Surface pad</b>				
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? not undermined by erosion, animal burrows, and does not move when stepped on?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal casing</b>				
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as sand)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equilibration of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? or does the pad move every when loosened or can it be taken apart by hand due to lack of gravel or use of slip couplings in construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only</b>				
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment/low flow status?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>6 Based on your professional judgement, is the well constructed in a manner appropriate to achieve the objectives of the Groundwater Monitoring Program and to comply with the applicable regulatory requirements?</b>				
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7 Corrective actions as needed by date:  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature and Seal of PE/PG responsible for inspection

\_\_\_\_\_

**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Maintenance  
 Permit Number: \_\_\_\_\_  
 Well ID: EG Ground 430  
 Date / Test conditions: 8/9/21 Smoking, hot

		yes	no	na
<b>1 Location/Accessibility</b>				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water nor is well located in obvious drainage flow path)	✓		
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning wrap hole?	✓		
d	Is the annular space between casings clear of debris and water or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
<b>3 Surface pad</b>				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad swept away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean and covered with sediment or debris?	✓		
<b>4 Internal casing</b>				
a	Does the cap prevent entry of foreign materials into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as ladders)?	✓		
c	Is the well properly vented for equalization of air pressure?	✓		
d	Is the survey point clearly marked on the metal casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pipe move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
<b>5 Sampling Groundwater Wells Only</b>				
a	Does well recharge adequately when purged?	✓		
b	Is dedicated sampling equipment installed, is in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (slow flow turbine)?		✓	
<b>6 Based on your professional judgement, is the well construction, location appropriate to achieve the objectives of the Groundwater Monitoring Program and to comply with the applicable regulatory requirements?</b>				
		✓		
<b>7 Corrective actions as needed by date</b>				
_____				
_____				

Signature and Seal of P/E T/G responsible for inspection

\_\_\_\_\_

**Groundwater Monitoring Well Integrity Form**

Site Name: Point Mansfield  
 Permit Number: \_\_\_\_\_  
 Well ID: 11-100-440  
 Date field conditions: 8/11/21

		Y/N	NC	N/A
<b>1 Location/Identification</b>				
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well feature protection from traffic?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water nor a well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Surface cap</b>				
a	Is the well cap in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well cap sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well cap in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well cap in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well surface clean and not covered with sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal casing</b>				
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of leaks or bonds or any obstructions from foreign objects (such as debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (it does not pull more easily when loosened or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only</b>				
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and identified in the approved groundwater plan for the facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c	Does the well require retrieval/opened flow flow (upset)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgement, is the well construction/location appropriate to: achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed by date:			
	<u>None</u>			

28 Signature and Seal of PE/PG responsible for inspection

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**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Hamstead  
 Permit Number: \_\_\_\_\_  
 Well ID: HGW/A-450  
 Date Field conditions: 8/13/20

		YES	NO	N/A
<b>1 Location Identification:</b>				
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Wellhead</b>				
a	Is the well head in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well head spaced away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well head in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well head in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the head surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal casing</b>				
a	Does the casing prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of holes or bends, or any obstructions from foreign objects (such as debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (no caving and does not move easily when touched or can it be taken apart by hand due to lack of grout or use of the couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only:</b>				
a	Does well recharge adequately when dugged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment? (see flow turbid)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Based on your professional judgment, is the well construction (location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Corrective actions as needed by date:			

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Signature and Seal of PE/PC responsible for inspection

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**Groundwater Monitoring Well Integrity Form**

Site Name: Plan + Hammond  
 Permit Number: \_\_\_\_\_  
 Well ID: HGLWA-122  
 Date field was done: Nov 8/13/21

		yes	no	na
<b>1 Location/Identification</b>				
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well adequate? (standing water near a well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water or filled with bed gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Surface Cap</b>				
a	Is the well cap in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well cap sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well cap in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well cap in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the cap surface clean and covered with sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal Casing</b>				
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of holes or bends or any disjunctions from foreign objects such as barrels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pipe move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only</b>				
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow surging)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>6 Based on your professional judgement, is the well construction in either appropriate to achieve the objectives of the Groundwater Monitoring Program and in comply with the applicable regulatory requirements?</b>				
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7 Curative actions as needed: (if date)</b>				
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Signature and Seal of PE/PG responsible for inspection

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**Groundwater Monitoring Well Integrity Form**

Site Name: Pilot Hammond  
 Permit Number: \_\_\_\_\_  
 Well ID: HAWK-120  
 Date field conditions: 8/16/01 Partly cloudy, 73°F

	yes	no	n/a
<b>1 Location, Access</b>			
a	Is the well site and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d	Is the drainage around the well acceptable? no standing water, nor is well located in obvious drainage flow path.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>			
a	Is the protective casing free from apparent damage and able to be serviced?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>3 Well Pad</b>			
a	Is the well pad in good used form not cracked or broken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad swept away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? not undermined by erosion, animal burrows, and does not move when stepped on?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean and covered with sepiant or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal casing</b>			
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends or any obstructions from foreign objects (such as paper)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? or does the pad move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only:</b>			
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b	Is dedicated sampling equipment (pumped) in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow turbid)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Based on your professional judgement, is the well construction, location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

7 Corrective actions as needed. By date \_\_\_\_\_

Signature and Seal of PC/FG responsible for inspection \_\_\_\_\_



**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Hammond  
 Permit Number: \_\_\_\_\_  
 Well ID: HGAWK-121A  
 Date Field conditions: 8/16/12 Partly Cloudy 85°F

	yes	no	NA
<b>1 Location/Identification</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Wellhead</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Intenna casing</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>6 Based on your professional judgement, is the well construction (Location appropriate to ), achieve the objectives of the Groundwater Monitoring Program and 7) comply with the applicable regulatory requirements?</b>			
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7 Corrective actions as needed by date:</b>			
_____			
_____			

Signature and Seal of PE/PG responsible for inspection

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**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Hillman  
 Permit Number: \_\_\_\_\_  
 Well ID: Hillman - 124  
 Date field conditions: 8/16/2017 Cloudy 76° F

		yes	no	na
<b>1 Location/Identification</b>				
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well adequate? no standing water nor is well located in obvious drainage flow path?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Surface pad</b>				
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? not undermined by erosion animal burrows and does not move when stepped on?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clear (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal casing</b>				
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of holes or bands or any obstructions from foreign objects (such as bacteria)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for regulation of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pad move easily when touched or can it be taken apart by hand due to lack of gravel or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only</b>				
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed is it in good condition and seal/no in the approved groundwater plan for the locality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow output)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>6 Based on your professional judgement, is the well construction location appropriate to it achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?</p> <p><input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> na</p>				
<p>7 Corrective actions as needed by date</p> <p>_____</p> <p>_____</p>				

Signature and Seal of PE/PG responsible for inspection

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**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Hydroponics  
 Permit Number: \_\_\_\_\_  
 Well ID: HK-613-025  
 Date field conditions: 8/11/21

		yes	no	na
<b>1 Location/Identification</b>				
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water, not a well located in common drainage flow paths)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water or filled with perlite/gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Surface pad</b>				
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad slanted away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion or mole burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clear (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal casing</b>				
a	Does the cap prevent entry of foreign matter into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of leaks or bends, or any dislocation from foreign objects (such as solder)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pad move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only:</b>				
a	Does well discharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow turbid)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>6 Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?</b>				
i) Corrective actions as needed:		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
by date:				

Signature and Seal of PE/PS responsible for inspection

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**Groundwater Monitoring Well Integrity Form**

Site Name \_\_\_\_\_

Plant Number \_\_\_\_\_

Well ID \_\_\_\_\_

Date Field conditions \_\_\_\_\_

Plant # 100000000  
Header - 126  
8/19/21/21/21/21

		yes	no	N/A
<b>1 Location Identification</b>				
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well receive protection from traffic?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water nor a well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water and filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Well Pad</b>				
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal casing</b>				
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as buttons)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable, or does the pad move easily when touched or can it be taken apart by hand due to lack of grout or use of sub coverings in construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only</b>				
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is dedicated sampling equipment installed, and in good condition and included in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require reverse operation flow control?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b	Based on your professional judgement, is the well construction/location appropriate to: 1) achieve the objectives of the Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7 Corrective actions as needed by date</b>				
<hr/> <hr/>				

Signature and Seal of PE/PG responsible for inspection

\_\_\_\_\_

**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Maintenance  
 Permit Number: \_\_\_\_\_  
 Well ID: AW-21  
 Date Performed: 8/11/21

		yes	no	na
<b>1. Location ID, Location</b>				
a	Is the well location and access well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require additional flow traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage area and the well protected off from storm water runoff and located in a correct drainage path?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or wear and tear?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a function to bleed hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings free of debris and water or filled with pea gravel sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well cased and is the rock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3. Surface pad</b>				
a	Is the well pad in good condition, not cracked or broken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad adequately sized for the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable and undisturbed by erosion, animal burrows, and other means of air/ground air?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean and unobstructed with well head or data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4. Internal casing</b>				
a	Does the cap prevent entry of surface water into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of rakes or bends, or any obstructions from foreign objects (such as tools)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing waterproof or does the pad make watertight when fixed and sealed to take input by hand due to lack of ground use of site coatings in construction.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5. Sampling: Unrestricted Wells Only</b>				
a	Does well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b	Is dedicated sampling equipment installed as a requirement for an approved groundwater plan for the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c	Does the well require redevelopment, or flow turned?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>6. Basis on your plan and a permit if applicable for well construction - set or appropriate to to address the objectives of the Groundwater Monitoring Program and comply with the applicable regulatory requirements?</b>				
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\* Complete actions as needed by date

\_\_\_\_\_

\_\_\_\_\_

Signature and Seal of PE/PC responsible for inspection

\_\_\_\_\_

**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Maintenance  
 Permit Number: \_\_\_\_\_  
 Well ID: MW 23  
 Well Conditions: SHUT

		Yes	No	N/A
<b>1 Location Identification</b>				
a	Is the well location clearly identified?	/		
b	Is the well properly identified with the correct well ID?	/		
c	Is the well in a high traffic area and does the well have any protective signage?	/		
d	Is the drainage around the well acceptable and standing water not a health hazard or obvious drainage flow path?	/		
<b>2 Protective Casing</b>				
a	Is the protection casing free from apparent damage and able to be secured?	/		
b	Is the casing free of degradation or deterioration?	/		
c	Does the casing have a functioning weep hole?	/		
d	Is the annular space between casing and borehole sealed with water or filled with pea gravel/sand?	/		
e	Is the well capped and is the cap in good condition?	/		
<b>3 Surface pad</b>				
a	Is the well pad in good condition, not cracked or broken?	/		
b	Is the well pad set back away from the protection casing?	/		
c	Is the well pad in complete contact with the protection casing?	/		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion or tree stumps) and does not move when stepped on?	/		
e	Is the pad surface clean and covered with sediment or debris?	/		
<b>4 Internal casing</b>				
a	Does the cap prevent entry of foreign matter into the well?	/		
b	Is the casing free of kinks or bends or any obstructions from foreign objects (such as debris)?	/		
c	Is the well properly vented for equalization of air pressure?	/		
d	Is the survey point clearly marked on the inner casing?	/		
e	Is the depth of the well consistent with the original well log?	/		
f	Is the casing stable or does the pad move easily when stepped on? (can be determined by hand due to lack of fluid or use of slip couplings in construction)	/		
<b>5 Sampling: Groundwater Wells Only</b>				
a	Does well recharge adequately when clogged?			/
b	Is dedicated sampling equipment installed in good condition and sized for the appropriate groundwater pump for the facility?			/
c	Does the well require redevelopment low flow pump?			/
<b>6 Based on your professional judgement, is the well in good condition and appropriate to meet the objectives of the Groundwater Monitoring Program and to comply with the applicable regulatory requirements?</b>				
		/		

Corrective actions as needed by date:

\_\_\_\_\_

Signature and Seal of DE DE is required for response

\_\_\_\_\_

**Groundwater Monitoring Well Integrity Form**

Site Name: Alumina Ref. (Munroe)  
 Permit Number: \_\_\_\_\_  
 Well ID: MW-32  
 Date / Ins. conditions: 22/9/21 Barry Hart

		yes	no	nm
<b>1 Location/Identify/Access</b>				
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well adequate? (no standing water near a well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water or filled with clean gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Surface pad</b>				
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not rattle when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal casing</b>				
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as balloons)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing stable? (or does the pad move laterally when touched or can it be later eroded by fluid due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only</b>				
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment is used, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment (low flow turbid)?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>6 Based on your professional judgement, is the well construction (location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?</b>				
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7 Corrective actions as needed (by date)</b>				
_____				
_____				

Signature and Seal of EPCWG responsible for inspection

\_\_\_\_\_

**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Hammond  
 Permit Number: \_\_\_\_\_  
 Well ID: HW-30  
 Date field conditions: 8/11/11 8/18/11

		yes	no	NA
<b>1 Location/Identification</b>				
a	Is the well safe and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water nor is any located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be accessed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Surface Well</b>				
a	Is the well pad in good condition - not cracked or broken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not lean when stepped on)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the pad surface clean, not covered with sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal casing</b>				
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of holes or breaks or any obstructions from foreign objects (such as ladders)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing secure? (or does the PVC move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only</b>				
a	Does well recharge adequately, when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment included, is it in good condition and specified in the approved groundwater plan for the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c	Does the well require redevelopment (low flow, surging)?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>6 Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?</b>				
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Corrective actions as needed by date:

none

Signature and Seal of PI / PU responsible for inspection





**Groundwater Monitoring Well Integrity Form**

Site Name: Plant Hammond  
 Permit Number: \_\_\_\_\_  
 Well ID: MW-48D  
 Date Field conditions: 5/16/21 Cloudy 88°F

		yes	no	n/a
<b>1 Location/Identification</b>				
a	Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well in a high traffic area and does the well require protection from traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d	Is the drainage around the well acceptable? (no standing water nor is well located in obvious drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 Protective Casing</b>				
a	Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the annular space between casings clear of debris and water or filled with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the well locked and is the lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 Surface pad</b>				
a	Is the well pad in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the soil surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Internal Casing</b>				
a	Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as hairpins)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Is the survey point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Is the casing "spool" not does the spool move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5 Sampling: Groundwater Wells Only</b>				
a	Does well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Does the well require redevelopment, or flow to bed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>6 Based on your professional judgement, is the well construction, location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?</b>				
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7 Corrective actions as needed, by date:</b>				
_____				
_____				

Signature and Seal of PE (P) required by form spec: \_\_\_\_\_

\_\_\_\_\_

**MEMORANDUM**

**DATE:** April 6, 2022

**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**

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Geosyntec Consultants has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant Hammond AP-3 during the 2022 annual reporting period. 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.

<b>Georgia Power Site/Unit</b>	<b>Date Performed</b>	<b>Well ID</b>	<b>Maintenance/ Repair Performed</b>
Hammond/AP-3	1/31/2022	All Wells	Checked and cleared weep holes of debris.

January 2022

# ATTACHMENT

## Well Inspection Forms

# Well Inspection Form

Plant Name/ID No: Plant Hammond/DP 11273  
 Well Location: C-201W  
 Well ID: Hght-1

Inspection Date: 01/31/72  
 Inspector: Jim B

	Yes	No	Comments
<b>1. Location/Identification</b>			
a. Is the well visible and accessible?	<input checked="" type="checkbox"/>		
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>		
c. Is the well in a high traffic area?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are appropriate measures in place to protect the well (e.g. grouting)?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
e. Is the drainage around the well acceptable? (no standing water near well down to the local drainage flow path)	<input checked="" type="checkbox"/>		
<b>2. Protective Casing</b>			
a. Is the point of casing head from apparent damage and accessible to personnel?	<input checked="" type="checkbox"/>		
b. Is the casing free of degradation or deterioration? (check the casing for any cracking, weed holes?)	<input checked="" type="checkbox"/>		
c. Is there annular space between casings near the down and wash or flow of gas pipe, etc.?	<input checked="" type="checkbox"/>		
d. Is the well cased?	<input checked="" type="checkbox"/>		
e. If cased, is the well in good condition?	<input checked="" type="checkbox"/>		
f. Is the well in good condition?	<input checked="" type="checkbox"/>		
<b>3. Sealing (if cased)</b>			
a. Is the well head in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>		
b. Is the well pack kept away from the protective casing?	<input checked="" type="checkbox"/>		
c. Is the well pack in complete contact with the protective casing?	<input checked="" type="checkbox"/>		
d. Is the well head and pack surface with the ground surface and stable (not undermined by erosion, animal burrows, and other means when the ground is wet)?	<input checked="" type="checkbox"/>		
e. Is the pack surface level of ground with both end to depth?	<input checked="" type="checkbox"/>		
<b>4. Casing Casing</b>			
a. Does the casing show signs of foreign material in the well?	<input checked="" type="checkbox"/>		
b. Is the casing free of cracks or bands or any obstructions from foreign materials or debris?	<input checked="" type="checkbox"/>		
c. Is the well properly vented for production of air or steam?	<input checked="" type="checkbox"/>		
d. Is the casing properly sealed near the surface?	<input checked="" type="checkbox"/>		
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>		
f. Is the casing intact? (is there any cut through casing when checked by hand? Is there any cut through casing due to lack of quality or use of this casing in construction?)	<input checked="" type="checkbox"/>		
<b>5. Sampling and Data Collection Equipment</b>			
a. Is the well equipped with dedicated sampling equipment (a dedicated water quality sampler and a dedicated water level data logger)?			<u>Ballon pump</u>
b. Is the well equipped with dedicated sampling equipment (a good operational sampler)?	<input checked="" type="checkbox"/>		
c. Is the well equipped with a dedicated water level logger in good operational condition?			<u>N/A</u>
d. Does the data logger need to be replaced on the water quality logger?			<u>N/A</u>
e. Is the well equipped with a water level data logger in good operational condition?			<u>NA</u>
f. Does the well discharge along any other piping?	<input checked="" type="checkbox"/>		
g. Does the well require any comments on flow characteristics?		<input checked="" type="checkbox"/>	
<b>6. Comments/Actions</b>			
a. Are there any other actions needed?		<input checked="" type="checkbox"/>	
b. Yes, comment here:			

# Well Inspection Form

Client Name (or Name of Property) Plant Hammond / AP 1113  
 Field Technician C. FAIR  
 Well ID HW-1-2

Date (mm/dd/yyyy) 6/30/22  
 Field Conditions Sun 55

### 1. Location and Location

- a. Is the well in the right location?
- b. Is the well properly identified with the correct well ID?
- c. Is the well in a high traffic area?
- d. Are appropriate measures in place to protect the well if in an area?
- e. Is the well depth and the well regulated? (no standing water near well location or obvious drainage flow path)

Yes	No	Comments
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	

### 2. Protective Casing

- a. Is the protective casing free from impact and damage and able to be secured?
- b. Is the casing free of degradation or deterioration?
- c. Does the casing have a lining or any other type?
- d. Is there a clear seal between the top of the casing and water or fluid with porous material?
- e. Is the well sealed?
- f. Produced in the well occur in good condition?
- g. Is the well in good condition?

Yes	No	Comments
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	

### 3. Surface Pad

- a. Is the well pad in good condition or replaced or replaced?
- b. Is the well pad sloped away from the ground surface?
- c. Is the well pad in complete contact with the protective casing?
- d. Is the well pad in complete contact with the ground surface and water table? (not covered by erosion, animal burrows, and does not move when checked on?)
- e. Is the well pad free from any material or debris?

Yes	No	Comments
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	

### 4. Well Casing

- a. Does the well prevent entry of foreign material into the well?
- b. Is the casing free of any degradation or any deterioration from the ground surface?
- c. Is the well properly vented for reduction of air pressure?
- d. Is the surface joint clearly marked on the casing?
- e. Is the depth of the well consistent with the original well log?
- f. Is the casing placed? (Does the well have any other casing or can it be tested by hand due to lack of ground surface or casing material?)

Yes	No	Comments
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	

### 5. Sampling and Data Collection Equipment

- a. The date of the well is equipped with dedicated sampling equipment, dedicated water quality funds, and/or dedicated water level data logger.
- b. Is equipped with dedicated sampling equipment in good condition?
- c. Is equipped with dedicated water quality funds in good operational condition?
- d. Does the data logger have to be replaced on the water quality funds?
- e. Is equipped with a water level data logger in good operational condition?
- f. Does the well have any other equipment?
- g. Just the well requires dedicated equipment flow in well tubing?

Yes	No	Comments
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Reddick pump
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	N/A
<input type="checkbox"/>	<input type="checkbox"/>	N/A
<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

### 6. Comments/Notes

- a. Are there any other notes needed?

Yes	No	Comments
<input type="checkbox"/>	<input checked="" type="checkbox"/>	

# Well Inspection Form

Plant Name (or Name): Plant Hammond LAR V2/3  
 Field Type (or Loc): G. CAN V2/3  
 Dept ID: HGRCA-3

Date (mm/dd/yyyy): 01/21/12  
 Field Conditions: Sect 55

	Yes	No	Comments
<b>1. Location Identification</b>			
a. Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are appropriate measures in place to protect the well (e.g. cover, lock)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the drainage around the well appropriate? No standing water nor is well located in obvious drainage flow path.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2. Protective Casing</b>			
a. Is the protection having free from apparent damage and secure in the ground?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have an effective weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is there an air space between casing and annulus of cement and water or fluid within casing annulus?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well capped?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. If capped, is the well under good protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well ID in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3. Wellhead Pad</b>			
a. Is the well head in good condition and cracked or broken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well pad sloped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well pad free of weeds, brush, soil, debris and surface and stable and unobstructed by erosion, animal burrows, and other surface obstructions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well surface clean and not covered with sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4. Inner Casing</b>			
a. Does the casing prevent entry of foreign materials into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of areas of bends, kinks, or obstructions from foreign objects such as slats?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly secured to the casing or wellhead?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well sufficiently marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing stable? or Does the well move easily when touched or can it be taken apart by hand due to lack of grout or use of a pump down liquid construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5. Sampling and Data Collection Equipment</b>			
a. Is/are the well(s) equipped with dedicated sampling equipment & dedicated water quality sensors and/or dedicated water level data logger?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Reluctor pumps</u>
b. Is/are equipped with dedicated logging equipment in a good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is/are equipped with a dedicated water level sensor in a good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NO</u>
d. Does the sensor need to be replaced on the water quality sensor?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NO</u>
e. Is/are equipped with a water level data logger in a good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NO</u>
f. Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Does the well log in record equipment used flow excess to well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6. Corrective Actions</b>			
a. Are corrective actions needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If yes, include here:			



# Well Inspection Form

Pump Name/Unit Name: Plant Hammond/JF-1/2/3  
 Lead Inspector: C. CALIN  
 Well ID: HW-930

Date (mm/dd/yyyy): 11/21/22  
 Field Operator: John SS

	Yes	No	Comments
<b>1. Location/Identification</b>			
a. Is the well location and depth correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are any suitable measures in place to protect the well (e.g., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the drainage around the well (especially for changing water level wells) indicated with an drainage flow cell?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2. Protective Casing</b>			
a. Is the protective casing free from significant damage and able to be repaired?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is there any leakage between the pipe (head) and the well (water) pipe at the casing seal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. If cased in, is the well rock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well in a good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3. Wellhead</b>			
a. Is the well pad in good condition (no cracks, no debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well pad a good distance from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well pad free of debris (contact with the protective casing)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well pad in complete contact with the ground surface and is the wellhead protected by a cover (at all times) and does it move when disturbed (no)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the pad surface clean and covered with a sealant or cement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4. Wellhead Casing</b>			
a. Does the casing show any signs of foreign material in the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of the salt or debris or any obstructions that might interfere with its function?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly vented for gas expansion (if applicable)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the burner vent clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original survey?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing stable? (or does the casing move when touched or can it be taken apart by hand due to lack of grout or due to coupling or connections)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5. Sampling and Data Collection Equipment</b>			
a. Is cased in well equipped with dedicated sampling equipment?			
b. Is cased in well equipped with dedicated water quality sensor and/or dedicated water level data logger?			
c. Is cased in well equipped with dedicated water level data logger in a good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Bladder pump
d. Is cased in well equipped with dedicated water quality sensor in a good operational condition?			NA
e. Does the sensor need to be replaced on the water quality sensor?			NA
f. Is cased in well equipped with a water level data logger in a good operational condition?			NA
g. Does the well head go above the water level?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
h. Does the well require special equipment for data collection (if any)?		<input checked="" type="checkbox"/>	
<b>6. Corrective Actions</b>			
a. Are corrective actions needed?		<input checked="" type="checkbox"/>	
If yes, include here:			

# Well Inspection Form

Plant Name and Unit Name: Plant Hammond CAP 1873  
 Field Location: G. CAP 18  
 Well ID: HAWK-9710

Date and Time of Inspection: 10/11/27  
 Field Conditions: 6m SS

	Yes	No	Comments
<b>1. Well Identification</b>			
a. Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are signs for the location in place to protect the well to go around?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the drainage around the well adequate? (i.e. standing water for a well located in low-lying drainage flow path)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2. Protective Casing</b>			
a. Is the protective casing free from equipment damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of vegetation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the annular space between casings clear of debris and water or food with one (pressure)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well locked?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Flashed: Is the well cap in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3. Surface Seal</b>			
a. Is the well cap in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well seal secured away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well cap in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well seal in complete contact with the ground surface and made not undermined by erosion of soil below and does not move when secured on?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well seal in contact covered with sealant or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4. Casing Casing</b>			
a. Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of any type of debris (i.e. any debris from foreign objects) or other debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly capped for maintenance of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the entry point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing stable? (i.e. Does the casing move easily when touched or can it be taken apart by hand due to lack of grout or use of a pump could not be constructed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5. Sampling and Data Collection Equipment</b>			
a. Is each of the well test points with dedicated sampling equipment (i.e. dedicated water quality sondes and/or dedicated water level data logger)	<input type="checkbox"/>	<input type="checkbox"/>	Bladder pump
b. Is equipment in test casing sampling equipment in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is each well with dedicated water quality sonde in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
d. Does the test data need to be restored on the water quality sondes?	<input type="checkbox"/>	<input type="checkbox"/>	NA
e. Is each well with a water level data logger in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
f. Are the well test points adequately protected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Does the well require special operation for successful use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6. Construction Details</b>			
a. Are CO <sub>2</sub> relief valves needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well cap here	<input type="checkbox"/>	<input type="checkbox"/>	

# Well Inspection Form

Plant Name/Unit Name: Plant Hammond/AP-3  
 Field Technician: C. GALT  
 Well ID: HAWK-450

Date (mm/dd/yyyy): 01/31/13  
 Field Conditions: Clear SS

	Yes	No	Comments
<b>1 Local Installation</b>			
a. Is the well within 400' of a structure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are accurate measurements in place to protect the well against intrusion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is there drainage around the well a depth of 1' or a standing water table is well installed to avoid drainage flow back?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2 Protective Casing</b>			
a. Is the casing free from structural damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the 4" clearance between casing and debris and a seal is placed in the gravel annulus?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. If located at the well, is it in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well at a good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3 Surface Plug</b>			
a. Is the well plug in good condition and installed or located?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well plug a good seal from the ground surface?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well plug in complete contact with the ground surface?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well plug in complete contact with the ground surface and visible? Is it not held by a wire, spring, bumper, and does not move when stepped on?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well surface free of sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4 Inner Casing</b>			
a. Does the cap cover the well to a depth of 1' or more?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of holes or cracks or any restrictions from foreign objects, mud, or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the surface point maintained for the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing material not damaged due to mud, salt, water, or other? (e.g. The casing should be and due to lack of proper use of the casing in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a. Is the well equipped with dedicated sampling equipment, a dedicated water quality sampler, and a dedicated water level data logger?			<u>Bladder pump</u>
b. Is the well equipped with dedicated sampling equipment and in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well equipped with a dedicated water quality sampler in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d. Does the equipment need to be replaced or the water quality sampler?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e. Is the well equipped with a water level data logger in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f. Does the well have a change appropriate when changed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Does the well have a dedicated control for the water level?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6 General Remarks</b>			
a. Are there any other issues?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If you need more space, use the back of this page.			

# Well Inspection Form

Plant Name/Line Name: Plant Hammond/AP-3  
 Field Tag Number: C-242N  
 Well ID: HQWA-122

Date of Inspection: 01/31/22  
 Field Operator: Sean SS

	Yes	No	Comments
<b>1. Wellhead Identification</b>			
a. Is the wellhead clearly identified?	<input checked="" type="checkbox"/>		
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>		
c. Is the well marked with traffic cone?		<input checked="" type="checkbox"/>	
d. Are appropriate measures in place to protect the well, e.g. boards?	<input checked="" type="checkbox"/>		
e. Is the discharge area of the well adequately marked if water from well is used in obvious drainage flow path?	<input checked="" type="checkbox"/>		
<b>2. Protective Casing</b>			
a. Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>		
b. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>		
c. Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>		
d. Is the annular space between casing and wellbore filled with seal grout sand?	<input checked="" type="checkbox"/>		
e. Is the well cased?	<input checked="" type="checkbox"/>		
f. Is cased well with a good casing?	<input checked="" type="checkbox"/>		
g. Is the well in good condition?	<input checked="" type="checkbox"/>		
<b>3. Surface Cap</b>			
a. Is the well cap in good condition and secured to the well?	<input checked="" type="checkbox"/>		
b. Is the well cap sloped away from the protective casing?	<input checked="" type="checkbox"/>		
c. Is the well cap in complete contact with the protective casing?	<input checked="" type="checkbox"/>		
d. Is the well cap in contact with the ground surface and stable, free of erosion or other damage, and does not move when pedaled on?	<input checked="" type="checkbox"/>		
e. Is the well cap adequately covered with sediment or debris?	<input checked="" type="checkbox"/>		
<b>4. Casing Casing</b>			
a. Does the casing prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>		
b. Is the casing free of holes or damage, or any obstructions from foreign objects, such as debris?	<input checked="" type="checkbox"/>		
c. Is the well properly cased for the purpose of an observation?	<input checked="" type="checkbox"/>		
d. Is the casing completely sealed on the inner casing?	<input checked="" type="checkbox"/>		
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>		
f. Is the casing stable? Or does the casing move easily when touched or can it be taken apart by hand due to use of grout or use of a pump rig in construction?	<input checked="" type="checkbox"/>		
<b>5. Sampling and Data Collection Equipment</b>			
a. Is the well equipped with dedicated sampling equipment, a dedicated water quality sampler, and/or dedicated water level data logger?			<u>Blowdown pump</u>
b. Is the well equipped with dedicated sampling equipment in good operational condition?	<input checked="" type="checkbox"/>		
c. Is the well equipped with a dedicated water quality sensor in good operational condition?			<u>NO</u> <u>NO</u>
d. Does the device need to be recalibrated or the water quality to be checked?			<u>NP</u>
e. Is the well equipped with a water level data logger in good operational condition?			
f. Does the well have a geopotential water sampler?	<input checked="" type="checkbox"/>		
g. Does the well require special collection for fecal coliforms?			
<b>6. Corrective Actions</b>			
a. Are corrective actions needed?		<input checked="" type="checkbox"/>	
b. What corrective actions are needed?			

# Well Inspection Form

Plant Name: Plant Hammond CAP 3  
 Field Number: 6-0111  
 Dept: HAWK-120

Date: 11/01/22  
 Field Conditions: sun 65

	Yes	No	Comments
<b>1. Location/Identification</b>			
1. Is the well capped and secured?	<input checked="" type="checkbox"/>		
2. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>		
3. Is the well in a "good" location?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Are appropriate measures in place to protect the well (e.g., collars)?	<input checked="" type="checkbox"/>		
5. Is the drainage around the well protected (e.g., no standing water, no unenclosed, unobstructed drainage flow path)?	<input checked="" type="checkbox"/>		
<b>2. Protective Casing</b>			
1. Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>		
2. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>		
3. Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>		
4. Is there a 1/4" gap between casing and seal of bottom and is also filled with seal-grout sand?	<input checked="" type="checkbox"/>		
5. Is the well capped?	<input checked="" type="checkbox"/>		
6. If capped, is the well cap in good condition?	<input checked="" type="checkbox"/>		
7. Is the well in "good" condition?	<input checked="" type="checkbox"/>		
<b>3. Wellhead Area</b>			
1. Is the well cap in good condition and secured to casing?	<input checked="" type="checkbox"/>		
2. Is the well head secured away from the protective casing?	<input checked="" type="checkbox"/>		
3. Is the well cap in concrete contact with the protective casing?	<input checked="" type="checkbox"/>		
4. Is the well pad in concrete contact with the ground surface and stable (not undermined by erosion, animal burrows, and structural movement triggered on)?	<input checked="" type="checkbox"/>		
5. Is the pad surface clean, not covered with sediment or debris?	<input checked="" type="checkbox"/>		
<b>4. Inner Casing</b>			
1. Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>		
2. Is the casing free of holes or cracks, or any construction from foreign sources, such as plastic?	<input checked="" type="checkbox"/>		
3. Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>		
4. Is the surface ground clearly marked on the inner casing?	<input checked="" type="checkbox"/>		
5. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>		
6. Is the casing stable? (It does not pull from the well, when the steel is cut, it is level, level by hand due to work stops / or use of level casing in construction)	<input checked="" type="checkbox"/>		
<b>5. Sampling and Data Collection Equipment</b>			
1. Is the well and wellhead equipped with dedicated sampling equipment (dedicated water quality sonde and/or dedicated water level data logger)?			<u>Bladder pump</u>
2. Is equipment with dedicated sampling equipment in good operational condition?	<input checked="" type="checkbox"/>		
3. Is equipment with a dedicated water quality sonde in good operational condition?			<u>NA</u>
4. Is the data logger in good operational condition (no water level sonde)?			<u>NA</u>
5. Is equipment with a water level data logger in good operational condition?			<u>NA</u>
6. Does the well drainage area leak when purged?	<input checked="" type="checkbox"/>		
7. Does the well require redevelopment (low flow or circulation)?		<input checked="" type="checkbox"/>	
<b>6. Comments/Actions</b>			
1. Are corrective actions needed?		<input checked="" type="checkbox"/>	
If yes, list actions:			

# Well Inspection Form

Plant Name (and Name) Plant Hummel CAP-3  
 Land Term (or) C. CAN  
 Well ID Haber-121A

Date (mm/dd/yyyy) 01/21/22  
 Field Location Sm 53

	Yes	No	Comments
<b>1 Location Identification</b>			
1. Is the well visible and accessible?	<input checked="" type="checkbox"/>		
2. Is the well clearly identified with the correct well ID?	<input checked="" type="checkbox"/>		
3. Is the well in a high traffic area?		<input checked="" type="checkbox"/>	
4. Are appropriate measures in place to protect the well (e.g. lock on)?	<input checked="" type="checkbox"/>		
5. Is there drainage around the well and/or pit? Is standing water near the well (e.g. in a ditch) a concern for leakage from?	<input checked="" type="checkbox"/>		
<b>2 Protective Casing</b>			
6. Is the protective casing free from apparent damage and seal to be sound?	<input checked="" type="checkbox"/>		
7. Is the casing free of separation or deterioration?	<input checked="" type="checkbox"/>		
8. Does the casing have a functional weep hole?	<input checked="" type="checkbox"/>		
9. Is there any air space between casing and/or cement and water or fluid within casing (air-lead)?	<input checked="" type="checkbox"/>		
10. Is the well cased?	<input checked="" type="checkbox"/>		
11. If cased, is the well in good condition?	<input checked="" type="checkbox"/>		
12. Is the well in good condition?		<input checked="" type="checkbox"/>	Protective casing lid covered
<b>3 Wellhead</b>			
13. Is the wellhead in good condition and maintained or broken?	<input checked="" type="checkbox"/>		
14. Is the wellhead secured away from the protective casing?	<input checked="" type="checkbox"/>		
15. Is the wellhead in complete contact with the protective casing?	<input checked="" type="checkbox"/>		
16. Is the wellhead in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and other non-man-made alterations)?	<input checked="" type="checkbox"/>		
17. Is the wellhead clean and free of sediment or debris?	<input checked="" type="checkbox"/>		
<b>4 Well Casing</b>			
18. Does the casing extend vertically to the top of the well?	<input checked="" type="checkbox"/>		
19. Is the casing free of obstructions or any accumulation from the ground (e.g. roots, debris)?	<input checked="" type="checkbox"/>		
20. Is the well properly sealed for equivalent of air pressure?	<input checked="" type="checkbox"/>		
21. Is the survey depth clearly marked on the casing top?	<input checked="" type="checkbox"/>		
22. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>		
23. Is the casing stable? Will the well move easily when touched or can it be later acted by hand due to lack of grout or use of slip couplings in construction?	<input checked="" type="checkbox"/>		
<b>5 Sampling and Data Collection Equipment</b>			
24. Is the well head equipped with dedicated sampling equipment (dedicated water quality sonde and/or dedicated water level data logger)?			Bladder pump
25. The logger will be having sampling equipment in a good operational condition?	<input checked="" type="checkbox"/>		
26. The logger will be equipped with quality sonde with in good operational condition?			NO
27. Does the log (CAN) need to be replaced on the well (quality sonde)?			NO
28. The logger will be water level data logger in a good operational condition?			NO
29. Does the well head have adequate protection (e.g. pad)?	<input checked="" type="checkbox"/>		
30. Does the well require modifications for the accessibility?		<input checked="" type="checkbox"/>	
<b>6 Construction Details</b>			
31. Are correct well logs needed?		<input checked="" type="checkbox"/>	

# Well Inspection Form

Site Name: 1411 W  
 Field Number: Plant Hammond/AP3  
 Title: C. CAIN  
Harris-124

Date (mm/dd/yyyy): 01/21/22  
 Field Location: Site SE

	Yes	No	Comments
<b>1. Wellhead (Casing)</b>			
a. Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well in a safe traffic area?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are appropriate measures in place to protect the well (e.g., cover)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the drainage around the well appropriate? (i.e., is there a water flow away from the well, or is there a drainage flow back?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2. Protective Casing</b>			
a. Is the protective casing free from apparent damage and able to be accessed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a full annular seal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the annular space between casing seal of cement and water or lined with pea gravel/sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well cased?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is cased? Is the well cased in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3. Surface Well</b>			
a. Is the well head in good condition and protected by a cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well cap a proper design for the ground or casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well cap in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well head in complete contact with the ground surface and made undisturbed by erosion, animal burrows, and does not appear to be clogged or?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the top surface seal area covered with sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4. Casing Casing</b>			
a. Does the casing prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of leaks, bends, or any obstructions from foreign material, such as roots etc.?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly vented for circulation of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the casing joint sealed properly on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing intact? (i.e., does the casing have any other damage or can it be tested again by using the data of the original log or the casing construction?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5. Sampling and Data Collection Equipment</b>			
a. Indicate if the well is equipped with dedicated sampling equipment (e.g., dedicated water quality sensor and/or dedicated water level data logger)	<input type="checkbox"/>	<input type="checkbox"/>	<u>Bladder pump</u>
b. If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. If not equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NO</u>
d. Does the equipment need to be replaced or the water quality sensor?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NO</u>
e. If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NO</u>
f. Does the well discharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Does the well discharge adequately (i.e., flow is consistent)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6. In-situ Sensors</b>			
a. Are in-situ sensors needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. If yes, describe here:			

## Well Inspection Form

Plant Name (if known) Plant Hammond AP-7  
 Field Technician C. CAIRN  
 Well ID: number - 175

Date (month, day, year) 01/31/03  
 Field Conditions Sun 53

	Yes	No	Comments
<b>1. Location Identification</b>			
1. Is the well in the area accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Are appropriate measures in place to protect the well (e.g., fence, pad)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Is the drainage around the well acceptable? (no standing water, nor is well located in potential drainage for a pit)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2. Protective Casing</b>			
a. Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of vegetation or obstructions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a functional weep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the annular space between the pipe and concrete and water or lined with dry gravel sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well locked?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. If locked, is the well under 2000 psi (max)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3. Well Pad</b>			
a. Is the well pad in good condition (no cracks or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well pad sealed away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well pad in complete contact with the ground surface and stable (no settlements by erosion or animal burrows) and does not have water pooled on it?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the pad surface clean (not covered with sediment or debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4. Well Casing</b>			
a. Does the casing prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of cracks or other obvious deteriorations from foreign debris or debris clogging?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly sealed for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the surface of the casing painted on the well casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing straight? (or does the pipe have a curve, which is noted or can it be later altered by hand due to use of gravel or use of well pump legs in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5. Sampling and Data Collection Equipment</b>			
a. Is a part of the well equipped with dedicated sampling equipment (dedicated water quality probe, etc.) or dedicated water level data logger?			<u>Added to pumps</u>
b. The equipment used has a sampling eq. manual in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. The equipment with a dedicated water quality probe is in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d. Does the device need to be replaced by the water quality vendor?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e. The equipment with a dedicated data logger is in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NO</u>
f. Does the well discharge adequately when pumped?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Does the well require no improvement or flow measurements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6. Corrective Actions</b>			
a. Are corrective actions needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1. Yes - include here			



# Well Inspection Form

Plan Name/Unit Name: Plant Hammond/AP 3  
 Field Technician: C. CAIRN  
 Well ID: H1666-126

Date (mm/dd/yyyy): 01/31/20  
 Field Conditions: sun SS

Inspection Item	Yes	No	Comments
<b>6 Location/Ident Features</b>			
a. Is the well unique and a prototype?	<input checked="" type="checkbox"/>		
b. Is the well correctly identified with the correct well ID?	<input checked="" type="checkbox"/>		
c. Is the well in a high traffic area?		<input checked="" type="checkbox"/>	
d. Are appropriate measures in place to protect the well in high traffic areas?	<input checked="" type="checkbox"/>		
e. Is there drainage around the well appropriate to the standing water that will protect the well and drainage flow path?	<input checked="" type="checkbox"/>		
<b>7 Protective Casing</b>			
a. Is the protective casing free from assessment damage and able to do its job?	<input checked="" type="checkbox"/>		
b. Is the casing free of deep cracks or deterioration?	<input checked="" type="checkbox"/>		
c. Does the casing have a functioning weep hole?	<input checked="" type="checkbox"/>		
d. Is the annular space between casings clear of debris and water or filled with permeable material?	<input checked="" type="checkbox"/>		
e. Is the well sealed?	<input checked="" type="checkbox"/>		
f. If sealed, is the well seal in good condition?	<input checked="" type="checkbox"/>		
g. Is the well seal in good condition?	<input checked="" type="checkbox"/>		
<b>8 Surface Lid</b>			
a. Is the well seal in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>		
b. Is the well seal moved away from the ground or casing?	<input checked="" type="checkbox"/>		
c. Is the well seal in complete contact with the ground or casing?	<input checked="" type="checkbox"/>		
d. Is the well seal in complete contact with the ground or casing and does it not deform (i.e. rips or tears) or become loose and does not move when accessed on?	<input checked="" type="checkbox"/>		
e. Is the well surface clean and covered with sediment or debris?	<input checked="" type="checkbox"/>		
<b>9 Well Casing</b>			
a. Does the casing prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>		
b. Is the casing free of leaks or debris that could obstruct flow from foreign debris or surface seepage?	<input checked="" type="checkbox"/>		
c. Is the well properly sealed at the top of the casing?	<input checked="" type="checkbox"/>		
d. Is the well seal clearly marked on the inner casing?	<input checked="" type="checkbox"/>		
e. Is the depth of the well appropriate with the original well log?	<input checked="" type="checkbox"/>		
f. Is the casing stable? (i.e. does the casing move when touched or can it be torn apart by hand due to lack of grout or use of top coupling in construction)	<input checked="" type="checkbox"/>		
<b>10 Sampling and Data Collection Equipment</b>			
a. Is each of the wells equipped with dedicated sampling equipment (dedicated water quality probe and/or dedicated water level data logger)?			Reactor pump
b. If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>		
c. Is each probe with a dedicated warning relay sensor in a good operational condition?			NA
d. Does the device it need to be replaced on the water quality sensor?			NA
e. Is each well with a water level data logger in a good operational condition?			NA
f. Does the well seal adequately when pumped?	<input checked="" type="checkbox"/>		
g. Does the well require equipment for flow restriction (e.g.)?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>11 Other Activities</b>			
a. Are current activities needed?		<input checked="" type="checkbox"/>	
If yes, describe here:			

## Well Inspection Form

Plant Name/Unit Name: Plant Hammond / AP-2  
 Field Team Lead: C. CAHILL  
 Well ID: APR-21

Well ID (if different): G1  
 Date: 9/11/22  
 Well Condition: Good SS

	Yes	No	Comments
<b>1. Location Identification</b>			
a. Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are appropriate measures being used to protect the well (e.g., fence)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the drainage around the well acceptable? Is standing water (or other water) located in excess of drainage flow path?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2. Protective Casing</b>			
a. Is the protective casing free from apparent damage and able to be used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a functioning seal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is there any visible space between the top edge of the casing and water table with gas being used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. If open to the well, is the well in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3. Wellhead Seal</b>			
a. Is the wellhead in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the wellhead fitted snugly to the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the wellhead completely resistant to the ground surface?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the wellhead completely sealed with the ground surface and stable (not undermined by erosion, animal burrows, and/or other means when triggered)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the seal surface when well covered with sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4. Ingress Control</b>			
a. Does the casing prevent entry of foreign materials to the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of holes or cracks, debris, obstructions from foreign sources, such as pebbles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly vented for equilibration of air or ground?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the venting point clearly marked on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing intact? Is there any visible damage when the casing can be lifted (not done by hand) due to lack of quality or use of the casing in construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5. Sampling and Data Collection Equipment</b>			
a. Is there a dedicated well developed with dedicated sampling equipment, a dedicated water quality sonar, and a dedicated water level data logger?	<input type="checkbox"/>	<input type="checkbox"/>	NA
b. Is equipped with dedicated sampling equipment, but in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
c. Is equipped with a dedicated water quality sonar, but in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
d. Does the equipment need to be repaired on the water quality sonar?	<input type="checkbox"/>	<input type="checkbox"/>	NA
e. Is equipped with a water level data logger, but in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
f. Does the well require age dating when purged?	<input type="checkbox"/>	<input type="checkbox"/>	NA
g. Does the well require release consent from flow control authority?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6. Corrective Actions</b>			
a. Are corrective actions needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Yes, list corrective actions:			

## Well Inspection Form

Plant Name/Well Name: Plant Hummel - 1A7-2-AP-3  
 Field Technician: C. GAIN  
 Well ID: 1A7-2-AP-3

Date of Inspection: 01/31/22  
 Field Conditions: Clear, 88

	Yes	No	Comments
<b>1 Location/Identification</b>			
a. Is the well number and location?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the well surface ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are additional measures in place to protect the well (e.g. barrier)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the drainage around the well acceptable? Are standing water or mud tracked or pooled drainage flow paths?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2 Protective Casing</b>			
a. Is the protective casing free from apparent damage and secure as required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of degradation or corrosion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a functioning wear foot?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the annular space between casing near the wellhead and water or fluid well seal maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. If locked, is the well lock in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well in a good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3 Wellhead</b>			
a. Is the well pad in good condition and maintained as required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well head secured away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well head in complete contact with the ground surface and secure for undisturbed protection of the wellhead and casing? (If not, what is needed?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well surface clean and covered with sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4 Wellhead Casing</b>			
a. Does the casing provide integrity of the wellhead and the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of cracks or defects or any condition that may compromise integrity to the wellhead?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly secured for reduction of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the wellhead clearly marked for the wellhead ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing stable? (If not, the wellhead must be in contact or can't be taken apart by hand due to well design or use of a pipe coverings in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a. Is the well equipped with dedicated sampling equipment or dedicated water quality tools (e.g. or dedicated water level data logger)?			NA
b. Are upper well dedicated sampling equipment and good job at site maintained?			NA
c. Is a good well dedicated water quality tools in a good operational condition?			NA
d. Does the dedicated tool(s) be labeled with the water quality tool ID?			NA
e. Are good well water level data logger and good condition a condition?			NA
f. Does the well head gate valve are properly closed?			NA
g. Does the wellhead equipment flow lines are labeled?		<input checked="" type="checkbox"/>	
<b>6 Corrective Actions</b>			
a. Are corrective actions needed?		<input checked="" type="checkbox"/>	
If yes, describe here:			

## Well Inspection Form

Well Name (if Name): Plant Hammond LLP 3  
 Well Type (if): CRAIN  
 Well ID: MW-32

Date (mm/dd/yyyy): 01/31/12  
 Field Collection: Ann 55

	Yes	No	Comments
<b>1. Location/Identification</b>			
a. Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well in a safe area?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are appropriate measures being taken to protect the well against animals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the drainage around the well appropriate? (no standing water, no direct discharge to obvious drainage flow paths)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2. Protective Casing</b>			
a. Is the protective casing free from apparent damage and adequate to seal the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a functional well flow?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the annular space between casing bore of bore and water or land with pea gravel seal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is there any water leakage in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3. Well Pad</b>			
a. Is the well pad in good condition, not cracked or broken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well pad separated away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well pad in contact with the ground surface and stable, not undermined by erosion, animal burrows, and does not move when released with?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the pad surface clean, not covered with sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4. Casing Security</b>			
a. Does the cap prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of leaks or holes or any obstructions from foreign objects (such as debris)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly sealed for gas transfer of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is there any vegetation growing on the well casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing stable? (cracks the casing more easily when touched or can't be lifted easily by hand due to lack of ground or use of a coupling in construction)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5. Sampling and Data Collection Equipment</b>			
a. Are there any dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NA
b. If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NA
c. If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NA
d. Does the data logger need to be recovered on the water quality sonde?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NA
e. Does the data logger need to be recovered on the water quality sonde?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NA
f. Does the well change substantially when purged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NA
g. Does the well require any special equipment, the flow or level stability?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6. Concluding Remarks</b>			
a. Are corrective actions needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If yes, include here:			

# Well Inspection Form

Part Number: None  
 Field Office: Plant Hammond / AP-3  
 Well ID: L-31N  
NOV 19

Date (mm/dd/yyyy): 01/11/23  
 Field Operator: Tom SS

	Yes	No	Comments
<b>1. Well Construction</b>			
a. Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are appropriate measures in place to protect the well (e.g. concrete)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the discharge around the well accessible? Is standing water or other materials in obvious drainage flow paths?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2. Protective Casing</b>			
a. Is the protective casing free from apparent damage and able to be secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a firming wear line?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the annular space between casing and borehole sealed and water or fluid well past ground level?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well secured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is there a lock on the well when in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3. Surface Pad</b>			
a. Is the well pad in good condition (no cracks or blisters)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well pad topped away from the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well pad in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well pad free of debris (e.g. sticks, twigs, leaves) and stable (not undermined by erosion or animal burrows) and does not move when stepped on?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the pad surface near and covered with sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4. Inner Casing</b>			
a. Does the cap prevent entry of foreign materials into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of cracks or bands or any other signs from foreign objects such as hairpins?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well screen installed for a sufficient distance below?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the screen properly installed in the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well screen at least 10' below the well top?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing stable? Or does the permit require it when required or can it be taken apart by hand due to a lack of grout or use of the couplings in construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5. Sampling and Data Collection Equipment</b>			
a. Indicate if the well also used well dedicated sampling equipment (a dedicated water quality sensor and/or dedicated water level data logger)	<input type="checkbox"/>	<input type="checkbox"/>	N/A
b. If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	N/A
c. If equipped with a dedicated water quality sensor, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	N/A
d. Does the dedicated need to be replaced on the water quality sensor?	<input type="checkbox"/>	<input type="checkbox"/>	N/A
e. If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	N/A
f. Does the well discharge adequate water purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Does the well require recirculation flow for protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6. Corrective Actions</b>			
a. Are corrective actions needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Yes, describe here:			

# Well Inspection Form

Participant Name: Plant Hammer WP 3  
 Field No: 6-6118  
 Well ID: MSW-41

Date (mm/dd/yyyy): 01/19/22  
 Field Conditions: Sim 55

	Yes	No	Comments
<b>1. Well Construction</b>			
a. Is the well in the and accurate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well a high flow well?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are appropriate measures in place to protect the well e.g. colts?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the drainage around the well accessible? Is water being water for well located in both out drainage flow paths?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2. Protective Casing</b>			
a. Is the protective casing free from apparent damage and able to be surveyed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a lining and sweep hole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the annular space between casing and well bore filled with pea gravel sand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well cased?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Marked - Is the well in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3. Well Pad</b>			
a. Is the well pad in good condition not cracked or broken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well pad sloped away from the external casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well pad in some contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well pad in complete contact with the ground surface and slope not undermined by erosion animal burrows and other? Have other checked by?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the pad surface clean not covered with sediment or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4. Internal Casing</b>			
a. Does the casing consist of 100% galv steel into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of holes or damage or any obstructions from foreign objects such as debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly vented for equalization of air pressure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the casing vent properly installed on the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing flat? Or does the casing dip when touched? Can it be later equality? and due to some of production use of the group in construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5. Sampling and Data Collection Equipment</b>			
a. Is there for the well equipped with dedicated sampling equipment a dedicated water quality sonde and a dedicated water level data logger?	<input type="checkbox"/>	<input type="checkbox"/>	NA
b. Is the sonde well positioned sampling equipment in the good condition condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
c. Is equipped with a dedicated water quality sonde in the good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
d. Does the data logger log a dedicated a the water quality data?	<input type="checkbox"/>	<input type="checkbox"/>	NA
e. Is equipped with a water level data logger in the good condition condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
f. Does the well test also adequately purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Do the well test also equipment on flow in construction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6. Corrective Actions</b>			
a. Are corrective actions needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If yes indicate here			

## Well Inspection Form

Plant Name (or Name): Plant Howard / AP-3  
 Field Technician: A. Saurak  
 Well ID: 20-438

Date (month/year): 2/11/2023  
 Well Completion: 100% 50-6

	Yes	No	Comments
<b>1. Location Identification</b>			
a. Is the well visible and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well properly identified with the correct well ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well in a high traffic area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d. Are appropriate measures in place to protect the well (e.g., no access)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the drainage around the well established, not standing water, and well located above outdoor drainage flow paths?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2. Protective Casing</b>			
a. Is the protective casing free from apparent damage and able to be accessed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of degradation or deterioration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Does the casing have a lightning wiper on it?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the annular space between casing seal of debris and water or fluid with pea gravel around?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well buried?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. If buried, is the well under good protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Is the well ID in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3. Surface Flag</b>			
a. Is the well cap in good condition (not cracked or broken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the well cap stepped away from the ground surface?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well cap in complete contact with the protective casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the well cap in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and debris not visible when the well is)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the well cap clean, free of debris and free of sediment underneath?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4. Inner Casing</b>			
a. Does the well prevent entry of foreign material into the well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the casing free of debris or material that could obstruct flow through the well, such as debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Is the well properly vented for gas, dust or other vapors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d. Is the casing joint clear and sealed at the inner casing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e. Is the depth of the well consistent with the original well log?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f. Is the casing stable? Or does the casing show signs of settlement or can it be later used to land due to lack of production use of the casing in construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5. Sampling and Data Collection Equipment</b>			
a. Does the well use equipment dedicated sampling equipment & dedicated water quality number and/or dedicated water level data logger?			<u>dedicated sampling equipment</u>
b. If not, does it require sampling equipment in the good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. If not, does it require a dedicated water quality number in the good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>116</u> <u>228</u>
d. Does the device need to be retrieved by the water quality user?	<input type="checkbox"/>	<input type="checkbox"/>	<u>116A</u>
e. If not, does it require a water level data logger in the good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	
f. Does the well need a geotechnical when clogged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g. Does the well require remedial work on a few or less times?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6. Corrective Actions</b>			
a. Are corrective actions needed (check box below)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

# APPENDIX C

## Laboratory Analytical and Field Sampling Reports



# LABORATORY ANALYTICAL RESULTS

August 2021



September 14, 2021

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: HAMMOND ASH POND #3  
Pace Project No.: 92555514

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between August 13, 2021 and August 20, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Christine Hug, Geosyntec Consultants, Inc.  
Kristen Jurinko  
Thomas Kessler, Geosyntec  
Whitney Law, Geosyntec Consultants  
Noelia Muskus, Geosyntec Consultants  
Ms. Lauren Petty, Southern Company  
Nardos Tilahun, GeoSyntec  
Dawit Yifru, Geosyntec Consultants, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

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### Pace Analytical Services Charlotte

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078

Louisiana/NELAP Certification # LA170028

North Carolina Drinking Water Certification #: 37706

North Carolina Field Services Certification #: 5342

North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627

Kentucky UST Certification #: 84

Virginia/VELAP Certification #: 460221

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### 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 Certification #: 99030001

Virginia/VELAP Certification #: 460222

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### 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

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### SAMPLE SUMMARY

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92555514001	HGWA-1	Water	08/11/21 17:00	08/13/21 14:55
92555514002	HGWA-43D	Water	08/11/21 17:03	08/13/21 14:55
92555514003	HGWA-2	Water	08/12/21 15:35	08/13/21 14:55
92555514004	HGWA-3	Water	08/12/21 10:17	08/13/21 14:55
92555514005	HGWA-45D	Water	08/13/21 12:07	08/16/21 13:25
92555514006	HGWA-122	Water	08/13/21 10:22	08/16/21 13:25
92555514007	HGWA-44D	Water	08/13/21 11:25	08/16/21 13:25
92555938001	HGWC-121A	Water	08/16/21 16:10	08/17/21 11:25
92555938002	HGWC-120	Water	08/16/21 12:15	08/17/21 11:25
92555938003	HGWC-124	Water	08/16/21 10:09	08/17/21 11:25
92555938004	MW-46D	Water	08/16/21 14:36	08/17/21 11:25
92555938005	MW-39	Water	08/18/21 09:10	08/19/21 12:40
92555938006	MW-32	Water	08/18/21 11:45	08/19/21 12:40
92555938007	MW-41	Water	08/18/21 13:20	08/19/21 12:40
92555938008	HGWC-126	Water	08/19/21 09:45	08/20/21 12:15
92555938009	HGWC-125	Water	08/19/21 11:14	08/20/21 12:15
92555938010	DUP-3	Water	08/19/21 00:00	08/20/21 12:15
92555938011	EB-3	Water	08/19/21 12:05	08/20/21 12:15
92555938012	FB-3	Water	08/19/21 12:00	08/20/21 12:15

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92555514001	HGWA-1	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92555514002	HGWA-43D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92555514003	HGWA-2	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92555514004	HGWA-3	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92555514005	HGWA-45D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92555514006	HGWA-122	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92555514007	HGWA-44D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92555938001	HGWC-121A	EPA 6010D	DRB	1
		EPA 6020B	CW1	13

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### SAMPLE ANALYTE COUNT

Project: HAMMOND ASH POND #3  
 Pace Project No.: 9255514

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92555938002	HGWC-120	EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
92555938003	HGWC-124	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
92555938004	MW-46D	EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92555938005	MW-39	SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92555938006	MW-32	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
92555938007	MW-41	EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
92555938008	HGWC-126	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13

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**SAMPLE ANALYTE COUNT**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92555938009	HGWC-125	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
92555938010	DUP-3	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
92555938011	EB-3	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
92555938012	FB-3	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

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

**REPORT OF LABORATORY ANALYSIS**

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**SUMMARY OF DETECTION**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92555514001</b>	<b>HGWA-1</b>					
	Performed by	CUSTOMER			08/16/21 11:17	
	pH	6.98	Std. Units		08/16/21 11:17	
EPA 6010D	Calcium	113	mg/L	1.0	08/18/21 18:00	
EPA 6020B	Barium	0.030	mg/L	0.0050	08/19/21 19:05	
EPA 6020B	Boron	0.020J	mg/L	0.040	08/19/21 19:05	
EPA 6020B	Lithium	0.00078J	mg/L	0.030	08/19/21 19:05	
SM 2540C-2011	Total Dissolved Solids	366	mg/L	10.0	08/18/21 08:29	
EPA 300.0 Rev 2.1 1993	Chloride	9.6	mg/L	1.0	08/20/21 06:28	
EPA 300.0 Rev 2.1 1993	Fluoride	0.058J	mg/L	0.10	08/20/21 06:28	
EPA 300.0 Rev 2.1 1993	Sulfate	48.9	mg/L	1.0	08/20/21 06:28	
<b>92555514002</b>	<b>HGWA-43D</b>					
	Performed by	CUSTOMER			08/16/21 11:18	
	pH	7.40	Std. Units		08/16/21 11:18	
EPA 6010D	Calcium	61.0	mg/L	1.0	08/18/21 18:04	
EPA 6020B	Arsenic	0.0015J	mg/L	0.0050	08/19/21 19:10	
EPA 6020B	Barium	0.28	mg/L	0.0050	08/19/21 19:10	
EPA 6020B	Boron	0.042	mg/L	0.040	08/19/21 19:10	
EPA 6020B	Lithium	0.0024J	mg/L	0.030	08/19/21 19:10	
EPA 6020B	Molybdenum	0.0034J	mg/L	0.010	08/19/21 19:10	
SM 2540C-2011	Total Dissolved Solids	277	mg/L	10.0	08/18/21 08:29	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	08/20/21 07:13	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	08/20/21 07:13	
EPA 300.0 Rev 2.1 1993	Sulfate	30.5	mg/L	1.0	08/20/21 07:13	
<b>92555514003</b>	<b>HGWA-2</b>					
	Performed by	CUSTOMER			08/16/21 11:18	
	pH	5.05	Std. Units		08/16/21 11:18	
EPA 6010D	Calcium	21.9	mg/L	1.0	08/18/21 18:09	
EPA 6020B	Barium	0.12	mg/L	0.0050	08/19/21 19:16	
EPA 6020B	Beryllium	0.00014J	mg/L	0.00050	08/19/21 19:16	
EPA 6020B	Boron	0.044	mg/L	0.040	08/19/21 19:16	
EPA 6020B	Cadmium	0.00014J	mg/L	0.00050	08/19/21 19:16	
EPA 6020B	Cobalt	0.022	mg/L	0.0050	08/19/21 19:16	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	08/19/21 19:16	
SM 2540C-2011	Total Dissolved Solids	118	mg/L	10.0	08/19/21 15:09	
EPA 300.0 Rev 2.1 1993	Chloride	5.2	mg/L	1.0	08/20/21 08:28	
EPA 300.0 Rev 2.1 1993	Sulfate	47.4	mg/L	1.0	08/20/21 08:28	
<b>92555514004</b>	<b>HGWA-3</b>					
	Performed by	CUSTOMER			08/16/21 11:18	
	pH	7.31	Std. Units		08/16/21 11:18	
EPA 6010D	Calcium	84.0	mg/L	1.0	08/18/21 18:14	
EPA 6020B	Barium	0.11	mg/L	0.0050	08/19/21 19:22	
EPA 6020B	Lithium	0.0028J	mg/L	0.030	08/19/21 19:22	
SM 2540C-2011	Total Dissolved Solids	265	mg/L	10.0	08/19/21 15:09	

**REPORT OF LABORATORY ANALYSIS**

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### SUMMARY OF DETECTION

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92555514004</b>	<b>HGWA-3</b>					
EPA 300.0 Rev 2.1 1993	Chloride	4.8	mg/L	1.0	08/20/21 08:43	
EPA 300.0 Rev 2.1 1993	Sulfate	38.6	mg/L	1.0	08/20/21 08:43	
<b>92555514005</b>	<b>HGWA-45D</b>					
	Performed by	CUSTOMER			08/16/21 17:38	
	pH	7.42	Std. Units		08/16/21 17:38	
EPA 6010D	Calcium	53.0	mg/L	1.0	08/18/21 18:19	
EPA 6020B	Arsenic	0.0012J	mg/L	0.0050	08/19/21 19:28	
EPA 6020B	Barium	0.51	mg/L	0.0050	08/19/21 19:28	
EPA 6020B	Boron	0.15	mg/L	0.040	08/19/21 19:28	
EPA 6020B	Lithium	0.0044J	mg/L	0.030	08/19/21 19:28	
SM 2540C-2011	Total Dissolved Solids	272	mg/L	10.0	08/19/21 15:11	
EPA 300.0 Rev 2.1 1993	Chloride	3.3	mg/L	1.0	08/20/21 21:01	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	08/20/21 21:01	
EPA 300.0 Rev 2.1 1993	Sulfate	8.1	mg/L	1.0	08/20/21 21:01	
<b>92555514006</b>	<b>HGWA-122</b>					
	Performed by	CUSTOMER			08/16/21 17:38	
	pH	6.56	Std. Units		08/16/21 17:38	
EPA 6010D	Calcium	62.9	mg/L	1.0	08/18/21 18:24	
EPA 6020B	Barium	0.033	mg/L	0.0050	08/19/21 19:33	
EPA 6020B	Boron	0.19	mg/L	0.040	08/19/21 19:33	
EPA 6020B	Molybdenum	0.0022J	mg/L	0.010	08/19/21 19:33	
SM 2540C-2011	Total Dissolved Solids	201	mg/L	10.0	08/19/21 15:11	
EPA 300.0 Rev 2.1 1993	Chloride	2.6	mg/L	1.0	08/20/21 21:16	
EPA 300.0 Rev 2.1 1993	Fluoride	0.065J	mg/L	0.10	08/20/21 21:16	
EPA 300.0 Rev 2.1 1993	Sulfate	42.1	mg/L	1.0	08/20/21 21:16	
<b>92555514007</b>	<b>HGWA-44D</b>					
	Performed by	CUSTOMER			08/16/21 17:39	
	pH	7.77	Std. Units		08/16/21 17:39	
EPA 6010D	Calcium	28.9	mg/L	1.0	08/18/21 18:29	
EPA 6020B	Barium	0.22	mg/L	0.0050	08/19/21 19:39	
EPA 6020B	Boron	0.31	mg/L	0.040	08/19/21 19:39	
EPA 6020B	Chromium	0.0016J	mg/L	0.0050	08/19/21 19:39	
EPA 6020B	Lithium	0.032	mg/L	0.030	08/19/21 19:39	
EPA 6020B	Molybdenum	0.0051J	mg/L	0.010	08/19/21 19:39	
SM 2540C-2011	Total Dissolved Solids	436	mg/L	20.0	08/19/21 15:11	
EPA 300.0 Rev 2.1 1993	Chloride	39.9	mg/L	1.0	08/20/21 22:01	
EPA 300.0 Rev 2.1 1993	Fluoride	0.87	mg/L	0.10	08/20/21 22:01	
EPA 300.0 Rev 2.1 1993	Sulfate	56.1	mg/L	1.0	08/20/21 22:01	
<b>92555938001</b>	<b>HGWC-121A</b>					
	Performed by	CUSTOMER			08/17/21 16:31	
	pH	6.74	Std. Units		08/17/21 16:31	
EPA 6010D	Calcium	162	mg/L	1.0	08/19/21 17:35	M1

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### SUMMARY OF DETECTION

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92555938001</b>	<b>HGWC-121A</b>					
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	08/20/21 18:20	
EPA 6020B	Barium	0.060	mg/L	0.0050	08/20/21 18:20	
EPA 6020B	Boron	2.0	mg/L	0.040	08/20/21 18:20	
EPA 6020B	Lithium	0.0075J	mg/L	0.030	08/20/21 18:20	
SM 2540C-2011	Total Dissolved Solids	626	mg/L	20.0	08/20/21 16:39	
EPA 300.0 Rev 2.1 1993	Chloride	18.0	mg/L	1.0	08/23/21 00:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	08/23/21 00:32	
EPA 300.0 Rev 2.1 1993	Sulfate	158	mg/L	4.0	08/23/21 12:59	
<b>92555938002</b>	<b>HGWC-120</b>					
	Performed by	CUSTOMER			08/17/21 16:31	
	pH	6.92	Std. Units		08/17/21 16:31	
EPA 6010D	Calcium	171	mg/L	1.0	08/19/21 17:54	
EPA 6020B	Arsenic	0.0015J	mg/L	0.0050	08/20/21 18:26	
EPA 6020B	Barium	0.052	mg/L	0.0050	08/20/21 18:26	
EPA 6020B	Boron	1.1	mg/L	0.040	08/20/21 18:26	
EPA 6020B	Cobalt	0.0037J	mg/L	0.0050	08/20/21 18:26	
EPA 6020B	Lithium	0.025J	mg/L	0.030	08/20/21 18:26	
EPA 6020B	Molybdenum	0.035	mg/L	0.010	08/20/21 18:26	
SM 2540C-2011	Total Dissolved Solids	632	mg/L	20.0	08/20/21 16:39	
EPA 300.0 Rev 2.1 1993	Chloride	2.4	mg/L	1.0	08/23/21 00:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.39	mg/L	0.10	08/23/21 00:47	
EPA 300.0 Rev 2.1 1993	Sulfate	211	mg/L	5.0	08/23/21 13:14	M1
<b>92555938003</b>	<b>HGWC-124</b>					
	Performed by	CUSTOMER			08/17/21 16:32	
	pH	7.09	Std. Units		08/17/21 16:32	
EPA 6010D	Calcium	106	mg/L	1.0	08/19/21 17:59	
EPA 6020B	Barium	0.069	mg/L	0.0050	08/20/21 18:32	
EPA 6020B	Boron	0.44	mg/L	0.040	08/20/21 18:32	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	08/20/21 18:32	
EPA 6020B	Molybdenum	0.00091J	mg/L	0.010	08/20/21 18:32	
SM 2540C-2011	Total Dissolved Solids	352	mg/L	10.0	08/20/21 16:40	
EPA 300.0 Rev 2.1 1993	Chloride	2.6	mg/L	1.0	08/23/21 01:31	
EPA 300.0 Rev 2.1 1993	Sulfate	74.0	mg/L	1.0	08/23/21 01:31	
<b>92555938004</b>	<b>MW-46D</b>					
	Performed by	CUSTOMER			08/17/21 16:32	
	pH	7.65	Std. Units		08/17/21 16:32	
EPA 6010D	Calcium	45.8	mg/L	1.0	08/19/21 18:04	
EPA 6020B	Arsenic	0.0032J	mg/L	0.0050	08/20/21 18:38	
EPA 6020B	Barium	0.026	mg/L	0.0050	08/20/21 18:38	
EPA 6020B	Boron	0.87	mg/L	0.040	08/20/21 18:38	
EPA 6020B	Lithium	0.0062J	mg/L	0.030	08/20/21 18:38	
EPA 6020B	Molybdenum	0.0012J	mg/L	0.010	08/20/21 18:38	
SM 2540C-2011	Total Dissolved Solids	516	mg/L	20.0	08/20/21 16:40	

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### SUMMARY OF DETECTION

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92555938004</b>	<b>MW-46D</b>					
EPA 300.0 Rev 2.1 1993	Chloride	3.7	mg/L	1.0	08/23/21 01:46	
EPA 300.0 Rev 2.1 1993	Fluoride	1.0	mg/L	0.10	08/23/21 01:46	
EPA 300.0 Rev 2.1 1993	Sulfate	144	mg/L	3.0	08/23/21 13:59	
<b>92555938005</b>	<b>MW-39</b>					
	Performed by	CUSTOMER			08/19/21 17:01	
	pH	6.90	Std. Units		08/19/21 17:01	
EPA 6010D	Calcium	171	mg/L	1.0	08/20/21 18:46	
EPA 6020B	Barium	0.060	mg/L	0.0050	08/27/21 16:23	
EPA 6020B	Boron	1.2	mg/L	0.040	08/30/21 17:25	
EPA 6020B	Cobalt	0.0025J	mg/L	0.0050	08/27/21 16:23	
EPA 6020B	Lithium	0.032	mg/L	0.030	08/30/21 17:25	
EPA 6020B	Molybdenum	0.063	mg/L	0.010	08/27/21 16:23	
SM 2540C-2011	Total Dissolved Solids	628	mg/L	20.0	08/25/21 19:26	
EPA 300.0 Rev 2.1 1993	Chloride	2.3	mg/L	1.0	08/26/21 04:21	
EPA 300.0 Rev 2.1 1993	Fluoride	0.25	mg/L	0.10	08/26/21 04:21	
EPA 300.0 Rev 2.1 1993	Sulfate	173	mg/L	5.0	08/28/21 16:19	
<b>92555938006</b>	<b>MW-32</b>					
	Performed by	CUSTOMER			08/19/21 17:01	
	pH	6.89	Std. Units		08/19/21 17:01	
EPA 6010D	Calcium	155	mg/L	1.0	08/20/21 18:51	
EPA 6020B	Barium	0.054	mg/L	0.0050	08/27/21 16:29	
EPA 6020B	Boron	1.2	mg/L	0.040	08/30/21 17:31	
EPA 6020B	Cobalt	0.0036J	mg/L	0.0050	08/27/21 16:29	
EPA 6020B	Lithium	0.031	mg/L	0.030	08/30/21 17:31	
EPA 6020B	Molybdenum	0.061	mg/L	0.010	08/27/21 16:29	
SM 2540C-2011	Total Dissolved Solids	554	mg/L	20.0	08/25/21 19:26	
EPA 300.0 Rev 2.1 1993	Chloride	2.2	mg/L	1.0	08/26/21 04:36	
EPA 300.0 Rev 2.1 1993	Fluoride	0.24	mg/L	0.10	08/26/21 04:36	
EPA 300.0 Rev 2.1 1993	Sulfate	162	mg/L	4.0	08/28/21 16:36	
<b>92555938007</b>	<b>MW-41</b>					
	Performed by	CUSTOMER			08/19/21 17:01	
	pH	6.93	Std. Units		08/19/21 17:01	
EPA 6010D	Calcium	175	mg/L	1.0	08/20/21 19:05	
EPA 6020B	Barium	0.064	mg/L	0.0050	08/27/21 17:48	
EPA 6020B	Boron	1.1	mg/L	0.040	08/30/21 17:37	
EPA 6020B	Cobalt	0.00064J	mg/L	0.0050	08/27/21 17:48	
EPA 6020B	Lithium	0.029J	mg/L	0.030	08/30/21 17:37	
EPA 6020B	Molybdenum	0.042	mg/L	0.010	08/27/21 17:48	
SM 2540C-2011	Total Dissolved Solids	602	mg/L	20.0	08/25/21 19:26	
EPA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	08/26/21 04:52	
EPA 300.0 Rev 2.1 1993	Fluoride	0.20	mg/L	0.10	08/26/21 04:52	
EPA 300.0 Rev 2.1 1993	Sulfate	180	mg/L	5.0	08/28/21 16:54	

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**SUMMARY OF DETECTION**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92555938008</b>	<b>HGWC-126</b>					
	Performed by	CUSTOME			08/20/21 15:31	
		R				
	pH	7.32	Std. Units		08/20/21 15:31	
EPA 6010D	Calcium	139	mg/L	1.0	08/26/21 12:52	M1
EPA 6020B	Barium	0.27	mg/L	0.0050	08/31/21 14:26	
EPA 6020B	Boron	0.011J	mg/L	0.040	08/31/21 14:26	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	08/31/21 14:26	
SM 2540C-2011	Total Dissolved Solids	488	mg/L	20.0	08/26/21 18:47	
EPA 300.0 Rev 2.1 1993	Chloride	7.8	mg/L	1.0	08/27/21 12:41	
EPA 300.0 Rev 2.1 1993	Fluoride	0.43	mg/L	0.10	08/27/21 12:41	
EPA 300.0 Rev 2.1 1993	Sulfate	64.4	mg/L	1.0	08/27/21 12:41	
<b>92555938009</b>	<b>HGWC-125</b>					
	Performed by	CUSTOME			08/20/21 15:31	
		R				
	pH	7.24	Std. Units		08/20/21 15:31	
EPA 6010D	Calcium	196	mg/L	1.0	08/26/21 13:11	
EPA 6020B	Barium	0.044	mg/L	0.0050	08/31/21 14:49	
EPA 6020B	Boron	1.5	mg/L	0.040	08/31/21 14:49	
EPA 6020B	Cobalt	0.0054	mg/L	0.0050	08/31/21 14:49	
EPA 6020B	Lithium	0.0074J	mg/L	0.030	08/31/21 14:49	
EPA 6020B	Molybdenum	0.021	mg/L	0.010	08/31/21 14:49	
SM 2540C-2011	Total Dissolved Solids	732	mg/L	20.0	08/26/21 18:46	
EPA 300.0 Rev 2.1 1993	Chloride	4.5	mg/L	1.0	08/27/21 12:57	
EPA 300.0 Rev 2.1 1993	Fluoride	0.17	mg/L	0.10	08/27/21 12:57	
EPA 300.0 Rev 2.1 1993	Sulfate	264	mg/L	6.0	08/27/21 21:06	M1
<b>92555938010</b>	<b>DUP-3</b>					
EPA 6010D	Calcium	186	mg/L	1.0	08/26/21 13:16	
EPA 6020B	Barium	0.043	mg/L	0.0050	08/31/21 14:54	
EPA 6020B	Boron	1.5	mg/L	0.040	08/31/21 14:54	
EPA 6020B	Cobalt	0.0054	mg/L	0.0050	08/31/21 14:54	
EPA 6020B	Lithium	0.0077J	mg/L	0.030	08/31/21 14:54	
EPA 6020B	Molybdenum	0.020	mg/L	0.010	08/31/21 14:54	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/27/21 14:32	B
SM 2540C-2011	Total Dissolved Solids	700	mg/L	20.0	08/26/21 18:47	
EPA 300.0 Rev 2.1 1993	Chloride	4.6	mg/L	1.0	08/27/21 14:14	
EPA 300.0 Rev 2.1 1993	Fluoride	0.18	mg/L	0.10	08/27/21 14:14	
EPA 300.0 Rev 2.1 1993	Sulfate	265	mg/L	6.0	08/27/21 21:52	
<b>92555938011</b>	<b>EB-3</b>					
EPA 7470A	Mercury	0.00020	mg/L	0.00020	08/27/21 14:35	B
<b>92555938012</b>	<b>FB-3</b>					
EPA 7470A	Mercury	0.00011J	mg/L	0.00020	08/27/21 14:37	B

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

**Sample: HGWA-1**      **Lab ID: 92555514001**      Collected: 08/11/21 17:00      Received: 08/13/21 14:55      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/16/21 11:17		
pH	<b>6.98</b>	Std. Units			1		08/16/21 11:17		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>113</b>	mg/L	1.0	0.12	1	08/18/21 09:54	08/18/21 18:00	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/18/21 09:57	08/19/21 19:05	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:05	7440-38-2	
Barium	<b>0.030</b>	mg/L	0.0050	0.00067	1	08/18/21 09:57	08/19/21 19:05	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/18/21 09:57	08/19/21 19:05	7440-41-7	
Boron	<b>0.020J</b>	mg/L	0.040	0.0086	1	08/18/21 09:57	08/19/21 19:05	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/18/21 09:57	08/19/21 19:05	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:05	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/18/21 09:57	08/19/21 19:05	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/18/21 09:57	08/19/21 19:05	7439-92-1	
Lithium	<b>0.00078J</b>	mg/L	0.030	0.00073	1	08/18/21 09:57	08/19/21 19:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/18/21 09:57	08/19/21 19:05	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/18/21 09:57	08/19/21 19:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/18/21 09:57	08/19/21 19:05	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 12:50	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>366</b>	mg/L	10.0	10.0	1		08/18/21 08:29		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>9.6</b>	mg/L	1.0	0.60	1		08/20/21 06:28	16887-00-6	
Fluoride	<b>0.058J</b>	mg/L	0.10	0.050	1		08/20/21 06:28	16984-48-8	
Sulfate	<b>48.9</b>	mg/L	1.0	0.50	1		08/20/21 06:28	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

**Sample: HGWA-43D**      **Lab ID: 92555514002**      Collected: 08/11/21 17:03      Received: 08/13/21 14:55      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
 Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		08/16/21 11:18		
pH	<b>7.40</b>	Std. Units			1		08/16/21 11:18		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
 Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>61.0</b>	mg/L	1.0	0.12	1	08/18/21 09:54	08/18/21 18:04	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
 Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	08/18/21 09:57	08/19/21 19:10	7440-36-0	
Arsenic	<b>0.0015J</b>	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:10	7440-38-2	
Barium	<b>0.28</b>	mg/L	0.0050	0.00067	1	08/18/21 09:57	08/19/21 19:10	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/18/21 09:57	08/19/21 19:10	7440-41-7	
Boron	<b>0.042</b>	mg/L	0.040	0.0086	1	08/18/21 09:57	08/19/21 19:10	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/18/21 09:57	08/19/21 19:10	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/18/21 09:57	08/19/21 19:10	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/18/21 09:57	08/19/21 19:10	7439-92-1	
Lithium	<b>0.0024J</b>	mg/L	0.030	0.00073	1	08/18/21 09:57	08/19/21 19:10	7439-93-2	
Molybdenum	<b>0.0034J</b>	mg/L	0.010	0.00074	1	08/18/21 09:57	08/19/21 19:10	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/18/21 09:57	08/19/21 19:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/18/21 09:57	08/19/21 19:10	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	0.000078	1	08/25/21 08:10	08/25/21 12:53	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2011  
 Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>277</b>	mg/L	10.0	10.0	1		08/18/21 08:29		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
 Pace Analytical Services - Asheville

Chloride	<b>3.5</b>	mg/L	1.0	0.60	1		08/20/21 07:13	16887-00-6	
Fluoride	<b>0.15</b>	mg/L	0.10	0.050	1		08/20/21 07:13	16984-48-8	
Sulfate	<b>30.5</b>	mg/L	1.0	0.50	1		08/20/21 07:13	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

Sample: **HGWA-2** Lab ID: **92555514003** Collected: 08/12/21 15:35 Received: 08/13/21 14:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/16/21 11:18		
pH	<b>5.05</b>	Std. Units			1		08/16/21 11:18		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>21.9</b>	mg/L	1.0	0.12	1	08/18/21 09:54	08/18/21 18:09	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/18/21 09:57	08/19/21 19:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:16	7440-38-2	
Barium	<b>0.12</b>	mg/L	0.0050	0.00067	1	08/18/21 09:57	08/19/21 19:16	7440-39-3	
Beryllium	<b>0.00014J</b>	mg/L	0.00050	0.000054	1	08/18/21 09:57	08/19/21 19:16	7440-41-7	
Boron	<b>0.044</b>	mg/L	0.040	0.0086	1	08/18/21 09:57	08/19/21 19:16	7440-42-8	
Cadmium	<b>0.00014J</b>	mg/L	0.00050	0.00011	1	08/18/21 09:57	08/19/21 19:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:16	7440-47-3	
Cobalt	<b>0.022</b>	mg/L	0.0050	0.00039	1	08/18/21 09:57	08/19/21 19:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/18/21 09:57	08/19/21 19:16	7439-92-1	
Lithium	<b>0.0012J</b>	mg/L	0.030	0.00073	1	08/18/21 09:57	08/19/21 19:16	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/18/21 09:57	08/19/21 19:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/18/21 09:57	08/19/21 19:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/18/21 09:57	08/19/21 19:16	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 12:56	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>118</b>	mg/L	10.0	10.0	1		08/19/21 15:09		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>5.2</b>	mg/L	1.0	0.60	1		08/20/21 08:28	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/20/21 08:28	16984-48-8	
Sulfate	<b>47.4</b>	mg/L	1.0	0.50	1		08/20/21 08:28	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

**Sample: HGWA-3**      **Lab ID: 92555514004**      Collected: 08/12/21 10:17      Received: 08/13/21 14:55      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		08/16/21 11:18		
pH	<b>7.31</b>	Std. Units			1		08/16/21 11:18		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>84.0</b>	mg/L	1.0	0.12	1	08/18/21 09:54	08/18/21 18:14	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	08/18/21 09:57	08/19/21 19:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:22	7440-38-2	
Barium	<b>0.11</b>	mg/L	0.0050	0.00067	1	08/18/21 09:57	08/19/21 19:22	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/18/21 09:57	08/19/21 19:22	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/18/21 09:57	08/19/21 19:22	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/18/21 09:57	08/19/21 19:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:22	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/18/21 09:57	08/19/21 19:22	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/18/21 09:57	08/19/21 19:22	7439-92-1	
Lithium	<b>0.0028J</b>	mg/L	0.030	0.00073	1	08/18/21 09:57	08/19/21 19:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/18/21 09:57	08/19/21 19:22	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/18/21 09:57	08/19/21 19:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/18/21 09:57	08/19/21 19:22	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 12:58	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2011  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>265</b>	mg/L	10.0	10.0	1		08/19/21 15:09		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>4.8</b>	mg/L	1.0	0.60	1		08/20/21 08:43	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/20/21 08:43	16984-48-8	
Sulfate	<b>38.6</b>	mg/L	1.0	0.50	1		08/20/21 08:43	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

Sample: HGWA-45D		Lab ID: 92555514005		Collected: 08/13/21 12:07		Received: 08/16/21 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/16/21 17:38		
pH	<b>7.42</b>	Std. Units			1		08/16/21 17:38		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>53.0</b>	mg/L	1.0	0.12	1	08/18/21 09:54	08/18/21 18:19	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/18/21 09:57	08/19/21 19:28	7440-36-0	
Arsenic	<b>0.0012J</b>	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:28	7440-38-2	
Barium	<b>0.51</b>	mg/L	0.0050	0.00067	1	08/18/21 09:57	08/19/21 19:28	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/18/21 09:57	08/19/21 19:28	7440-41-7	
Boron	<b>0.15</b>	mg/L	0.040	0.0086	1	08/18/21 09:57	08/19/21 19:28	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/18/21 09:57	08/19/21 19:28	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:28	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/18/21 09:57	08/19/21 19:28	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/18/21 09:57	08/19/21 19:28	7439-92-1	
Lithium	<b>0.0044J</b>	mg/L	0.030	0.00073	1	08/18/21 09:57	08/19/21 19:28	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/18/21 09:57	08/19/21 19:28	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/18/21 09:57	08/19/21 19:28	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/18/21 09:57	08/19/21 19:28	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 13:01	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>272</b>	mg/L	10.0	10.0	1		08/19/21 15:11		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>3.3</b>	mg/L	1.0	0.60	1		08/20/21 21:01	16887-00-6	
Fluoride	<b>0.20</b>	mg/L	0.10	0.050	1		08/20/21 21:01	16984-48-8	
Sulfate	<b>8.1</b>	mg/L	1.0	0.50	1		08/20/21 21:01	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

Sample: HGWA-122		Lab ID: 92555514006		Collected: 08/13/21 10:22		Received: 08/16/21 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/16/21 17:38		
pH	<b>6.56</b>	Std. Units			1		08/16/21 17:38		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>62.9</b>	mg/L	1.0	0.12	1	08/18/21 09:54	08/18/21 18:24	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/18/21 09:57	08/19/21 19:33	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:33	7440-38-2	
Barium	<b>0.033</b>	mg/L	0.0050	0.00067	1	08/18/21 09:57	08/19/21 19:33	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/18/21 09:57	08/19/21 19:33	7440-41-7	
Boron	<b>0.19</b>	mg/L	0.040	0.0086	1	08/18/21 09:57	08/19/21 19:33	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/18/21 09:57	08/19/21 19:33	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:33	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/18/21 09:57	08/19/21 19:33	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/18/21 09:57	08/19/21 19:33	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/18/21 09:57	08/19/21 19:33	7439-93-2	
Molybdenum	<b>0.0022J</b>	mg/L	0.010	0.00074	1	08/18/21 09:57	08/19/21 19:33	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/18/21 09:57	08/19/21 19:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/18/21 09:57	08/19/21 19:33	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 13:04	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>201</b>	mg/L	10.0	10.0	1		08/19/21 15:11		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.6</b>	mg/L	1.0	0.60	1		08/20/21 21:16	16887-00-6	
Fluoride	<b>0.065J</b>	mg/L	0.10	0.050	1		08/20/21 21:16	16984-48-8	
Sulfate	<b>42.1</b>	mg/L	1.0	0.50	1		08/20/21 21:16	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

Sample: HGWA-44D		Lab ID: 92555514007		Collected: 08/13/21 11:25		Received: 08/16/21 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/16/21 17:39		
pH	<b>7.77</b>	Std. Units			1		08/16/21 17:39		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>28.9</b>	mg/L	1.0	0.12	1	08/18/21 09:54	08/18/21 18:29	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/18/21 09:57	08/19/21 19:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:39	7440-38-2	
Barium	<b>0.22</b>	mg/L	0.0050	0.00067	1	08/18/21 09:57	08/19/21 19:39	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/18/21 09:57	08/19/21 19:39	7440-41-7	
Boron	<b>0.31</b>	mg/L	0.040	0.0086	1	08/18/21 09:57	08/19/21 19:39	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/18/21 09:57	08/19/21 19:39	7440-43-9	
Chromium	<b>0.0016J</b>	mg/L	0.0050	0.0011	1	08/18/21 09:57	08/19/21 19:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/18/21 09:57	08/19/21 19:39	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/18/21 09:57	08/19/21 19:39	7439-92-1	
Lithium	<b>0.032</b>	mg/L	0.030	0.00073	1	08/18/21 09:57	08/19/21 19:39	7439-93-2	
Molybdenum	<b>0.0051J</b>	mg/L	0.010	0.00074	1	08/18/21 09:57	08/19/21 19:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/18/21 09:57	08/19/21 19:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/18/21 09:57	08/19/21 19:39	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 13:07	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>436</b>	mg/L	20.0	20.0	1		08/19/21 15:11		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>39.9</b>	mg/L	1.0	0.60	1		08/20/21 22:01	16887-00-6	
Fluoride	<b>0.87</b>	mg/L	0.10	0.050	1		08/20/21 22:01	16984-48-8	
Sulfate	<b>56.1</b>	mg/L	1.0	0.50	1		08/20/21 22:01	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

**Sample: HGWC-121A**      **Lab ID: 92555938001**      Collected: 08/16/21 16:10      Received: 08/17/21 11:25      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by: **CUSTOMER**      1      08/17/21 16:31

pH: **6.74** Std. Units      1      08/17/21 16:31

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium: **162** mg/L      1.0      0.12      1      08/19/21 10:05      08/19/21 17:35      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	0.00078	1	08/19/21 10:05	08/20/21 18:20	7440-36-0	
Arsenic	<b>0.0014J</b>	mg/L	0.0050	0.0011	1	08/19/21 10:05	08/20/21 18:20	7440-38-2	
Barium	<b>0.060</b>	mg/L	0.0050	0.00067	1	08/19/21 10:05	08/20/21 18:20	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/19/21 10:05	08/20/21 18:20	7440-41-7	
Boron	<b>2.0</b>	mg/L	0.040	0.0086	1	08/19/21 10:05	08/20/21 18:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/19/21 10:05	08/20/21 18:20	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/19/21 10:05	08/20/21 18:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/19/21 10:05	08/20/21 18:20	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/19/21 10:05	08/20/21 18:20	7439-92-1	
Lithium	<b>0.0075J</b>	mg/L	0.030	0.00073	1	08/19/21 10:05	08/20/21 18:20	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/19/21 10:05	08/20/21 18:20	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/19/21 10:05	08/20/21 18:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/19/21 10:05	08/20/21 18:20	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
Pace Analytical Services - Peachtree Corners, GA

Mercury: ND mg/L      0.00020      0.000078      1      08/25/21 08:10      08/25/21 13:09      7439-97-6

**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2011  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids: **626** mg/L      20.0      20.0      1      08/20/21 16:39

**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>18.0</b>	mg/L	1.0	0.60	1	08/23/21 00:32	16887-00-6
Fluoride	<b>0.15</b>	mg/L	0.10	0.050	1	08/23/21 00:32	16984-48-8
Sulfate	<b>158</b>	mg/L	4.0	2.0	4	08/23/21 12:59	14808-79-8

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

**Sample: HGWC-120**      **Lab ID: 92555938002**      Collected: 08/16/21 12:15      Received: 08/17/21 11:25      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/17/21 16:31		
pH	<b>6.92</b>	Std. Units			1		08/17/21 16:31		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>171</b>	mg/L	1.0	0.12	1	08/19/21 10:05	08/19/21 17:54	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/19/21 10:05	08/20/21 18:26	7440-36-0	
Arsenic	<b>0.0015J</b>	mg/L	0.0050	0.0011	1	08/19/21 10:05	08/20/21 18:26	7440-38-2	
Barium	<b>0.052</b>	mg/L	0.0050	0.00067	1	08/19/21 10:05	08/20/21 18:26	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/19/21 10:05	08/20/21 18:26	7440-41-7	
Boron	<b>1.1</b>	mg/L	0.040	0.0086	1	08/19/21 10:05	08/20/21 18:26	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/19/21 10:05	08/20/21 18:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/19/21 10:05	08/20/21 18:26	7440-47-3	
Cobalt	<b>0.0037J</b>	mg/L	0.0050	0.00039	1	08/19/21 10:05	08/20/21 18:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/19/21 10:05	08/20/21 18:26	7439-92-1	
Lithium	<b>0.025J</b>	mg/L	0.030	0.00073	1	08/19/21 10:05	08/20/21 18:26	7439-93-2	
Molybdenum	<b>0.035</b>	mg/L	0.010	0.00074	1	08/19/21 10:05	08/20/21 18:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/19/21 10:05	08/20/21 18:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/19/21 10:05	08/20/21 18:26	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 13:12	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>632</b>	mg/L	20.0	20.0	1		08/20/21 16:39		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.4</b>	mg/L	1.0	0.60	1		08/23/21 00:47	16887-00-6	
Fluoride	<b>0.39</b>	mg/L	0.10	0.050	1		08/23/21 00:47	16984-48-8	
Sulfate	<b>211</b>	mg/L	5.0	2.5	5		08/23/21 13:14	14808-79-8	M1

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

**Sample: HGWC-124**      **Lab ID: 92555938003**      Collected: 08/16/21 10:09      Received: 08/17/21 11:25      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		08/17/21 16:32		
pH	<b>7.09</b>	Std. Units			1		08/17/21 16:32		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>106</b>	mg/L	1.0	0.12	1	08/19/21 10:05	08/19/21 17:59	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	08/19/21 10:05	08/20/21 18:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/19/21 10:05	08/20/21 18:32	7440-38-2	
Barium	<b>0.069</b>	mg/L	0.0050	0.00067	1	08/19/21 10:05	08/20/21 18:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/19/21 10:05	08/20/21 18:32	7440-41-7	
Boron	<b>0.44</b>	mg/L	0.040	0.0086	1	08/19/21 10:05	08/20/21 18:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/19/21 10:05	08/20/21 18:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/19/21 10:05	08/20/21 18:32	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/19/21 10:05	08/20/21 18:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/19/21 10:05	08/20/21 18:32	7439-92-1	
Lithium	<b>0.0011J</b>	mg/L	0.030	0.00073	1	08/19/21 10:05	08/20/21 18:32	7439-93-2	
Molybdenum	<b>0.00091J</b>	mg/L	0.010	0.00074	1	08/19/21 10:05	08/20/21 18:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/19/21 10:05	08/20/21 18:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/19/21 10:05	08/20/21 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	0.000078	1	08/25/21 08:10	08/25/21 13:21	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2011  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>352</b>	mg/L	10.0	10.0	1		08/20/21 16:40		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>2.6</b>	mg/L	1.0	0.60	1		08/23/21 01:31	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/23/21 01:31	16984-48-8	
Sulfate	<b>74.0</b>	mg/L	1.0	0.50	1		08/23/21 01:31	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

**Sample: MW-46D**      **Lab ID: 92555938004**      Collected: 08/16/21 14:36      Received: 08/17/21 11:25      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
 Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		08/17/21 16:32		
pH	<b>7.65</b>	Std. Units			1		08/17/21 16:32		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
 Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>45.8</b>	mg/L	1.0	0.12	1	08/19/21 10:05	08/19/21 18:04	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
 Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	08/19/21 10:05	08/20/21 18:38	7440-36-0	
Arsenic	<b>0.0032J</b>	mg/L	0.0050	0.0011	1	08/19/21 10:05	08/20/21 18:38	7440-38-2	
Barium	<b>0.026</b>	mg/L	0.0050	0.00067	1	08/19/21 10:05	08/20/21 18:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/19/21 10:05	08/20/21 18:38	7440-41-7	
Boron	<b>0.87</b>	mg/L	0.040	0.0086	1	08/19/21 10:05	08/20/21 18:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/19/21 10:05	08/20/21 18:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/19/21 10:05	08/20/21 18:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/19/21 10:05	08/20/21 18:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/19/21 10:05	08/20/21 18:38	7439-92-1	
Lithium	<b>0.0062J</b>	mg/L	0.030	0.00073	1	08/19/21 10:05	08/20/21 18:38	7439-93-2	
Molybdenum	<b>0.0012J</b>	mg/L	0.010	0.00074	1	08/19/21 10:05	08/20/21 18:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/19/21 10:05	08/20/21 18:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/19/21 10:05	08/20/21 18:38	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
 Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 13:23	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2011  
 Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>516</b>	mg/L	20.0	20.0	1		08/20/21 16:40		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
 Pace Analytical Services - Asheville

Chloride	<b>3.7</b>	mg/L	1.0	0.60	1		08/23/21 01:46	16887-00-6	
Fluoride	<b>1.0</b>	mg/L	0.10	0.050	1		08/23/21 01:46	16984-48-8	
Sulfate	<b>144</b>	mg/L	3.0	1.5	3		08/23/21 13:59	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

Sample: MW-39		Lab ID: 92555938005		Collected: 08/18/21 09:10		Received: 08/19/21 12:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/19/21 17:01		
pH	<b>6.90</b>	Std. Units			1		08/19/21 17:01		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>171</b>	mg/L	1.0	0.12	1	08/20/21 11:15	08/20/21 18:46	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/20/21 11:15	08/27/21 16:23	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/20/21 11:15	08/27/21 16:23	7440-38-2	
Barium	<b>0.060</b>	mg/L	0.0050	0.00067	1	08/20/21 11:15	08/27/21 16:23	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/20/21 11:15	08/30/21 17:25	7440-41-7	
Boron	<b>1.2</b>	mg/L	0.040	0.0086	1	08/20/21 11:15	08/30/21 17:25	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/20/21 11:15	08/27/21 16:23	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/20/21 11:15	08/27/21 16:23	7440-47-3	
Cobalt	<b>0.0025J</b>	mg/L	0.0050	0.00039	1	08/20/21 11:15	08/27/21 16:23	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/20/21 11:15	08/27/21 16:23	7439-92-1	
Lithium	<b>0.032</b>	mg/L	0.030	0.00073	1	08/20/21 11:15	08/30/21 17:25	7439-93-2	
Molybdenum	<b>0.063</b>	mg/L	0.010	0.00074	1	08/20/21 11:15	08/27/21 16:23	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/20/21 11:15	08/27/21 16:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/20/21 11:15	08/27/21 16:23	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 13:26	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>628</b>	mg/L	20.0	20.0	1		08/25/21 19:26		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.3</b>	mg/L	1.0	0.60	1		08/26/21 04:21	16887-00-6	
Fluoride	<b>0.25</b>	mg/L	0.10	0.050	1		08/26/21 04:21	16984-48-8	
Sulfate	<b>173</b>	mg/L	5.0	2.5	5		08/28/21 16:19	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

Sample: MW-32		Lab ID: 92555938006		Collected: 08/18/21 11:45		Received: 08/19/21 12:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/19/21 17:01		
pH	<b>6.89</b>	Std. Units			1		08/19/21 17:01		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>155</b>	mg/L	1.0	0.12	1	08/20/21 11:15	08/20/21 18:51	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/20/21 11:15	08/27/21 16:29	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/20/21 11:15	08/27/21 16:29	7440-38-2	
Barium	<b>0.054</b>	mg/L	0.0050	0.00067	1	08/20/21 11:15	08/27/21 16:29	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/20/21 11:15	08/30/21 17:31	7440-41-7	
Boron	<b>1.2</b>	mg/L	0.040	0.0086	1	08/20/21 11:15	08/30/21 17:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/20/21 11:15	08/27/21 16:29	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/20/21 11:15	08/27/21 16:29	7440-47-3	
Cobalt	<b>0.0036J</b>	mg/L	0.0050	0.00039	1	08/20/21 11:15	08/27/21 16:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/20/21 11:15	08/27/21 16:29	7439-92-1	
Lithium	<b>0.031</b>	mg/L	0.030	0.00073	1	08/20/21 11:15	08/30/21 17:31	7439-93-2	
Molybdenum	<b>0.061</b>	mg/L	0.010	0.00074	1	08/20/21 11:15	08/27/21 16:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/20/21 11:15	08/27/21 16:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/20/21 11:15	08/27/21 16:29	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 13:29	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>554</b>	mg/L	20.0	20.0	1		08/25/21 19:26		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.2</b>	mg/L	1.0	0.60	1		08/26/21 04:36	16887-00-6	
Fluoride	<b>0.24</b>	mg/L	0.10	0.050	1		08/26/21 04:36	16984-48-8	
Sulfate	<b>162</b>	mg/L	4.0	2.0	4		08/28/21 16:36	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

**Sample: MW-41**      **Lab ID: 92555938007**      Collected: 08/18/21 13:20      Received: 08/19/21 12:40      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
 Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		08/19/21 17:01		
pH	<b>6.93</b>	Std. Units			1		08/19/21 17:01		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
 Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>175</b>	mg/L	1.0	0.12	1	08/20/21 11:15	08/20/21 19:05	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
 Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	08/20/21 11:15	08/27/21 17:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/20/21 11:15	08/27/21 17:48	7440-38-2	
Barium	<b>0.064</b>	mg/L	0.0050	0.00067	1	08/20/21 11:15	08/27/21 17:48	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/20/21 11:15	08/30/21 17:37	7440-41-7	
Boron	<b>1.1</b>	mg/L	0.040	0.0086	1	08/20/21 11:15	08/30/21 17:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/20/21 11:15	08/27/21 17:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/20/21 11:15	08/27/21 17:48	7440-47-3	
Cobalt	<b>0.00064J</b>	mg/L	0.0050	0.00039	1	08/20/21 11:15	08/27/21 17:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/20/21 11:15	08/27/21 17:48	7439-92-1	
Lithium	<b>0.029J</b>	mg/L	0.030	0.00073	1	08/20/21 11:15	08/30/21 17:37	7439-93-2	
Molybdenum	<b>0.042</b>	mg/L	0.010	0.00074	1	08/20/21 11:15	08/27/21 17:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/20/21 11:15	08/27/21 17:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/20/21 11:15	08/27/21 17:48	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	0.000078	1	08/25/21 08:10	08/25/21 13:32	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2011  
 Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>602</b>	mg/L	20.0	20.0	1		08/25/21 19:26		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
 Pace Analytical Services - Asheville

Chloride	<b>2.8</b>	mg/L	1.0	0.60	1		08/26/21 04:52	16887-00-6	
Fluoride	<b>0.20</b>	mg/L	0.10	0.050	1		08/26/21 04:52	16984-48-8	
Sulfate	<b>180</b>	mg/L	5.0	2.5	5		08/28/21 16:54	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

**Sample: HGWC-126**      **Lab ID: 92555938008**      Collected: 08/19/21 09:45      Received: 08/20/21 12:15      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by **CUSTOMER**      1      08/20/21 15:31

pH **7.32** Std. Units      1      08/20/21 15:31

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium **139** mg/L      1.0      0.12      1      08/26/21 09:58      08/26/21 12:52      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	0.00078	1	08/26/21 09:56	08/31/21 14:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 14:26	7440-38-2	
Barium	<b>0.27</b>	mg/L	0.0050	0.00067	1	08/26/21 09:56	08/31/21 14:26	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/26/21 09:56	08/31/21 14:26	7440-41-7	
Boron	<b>0.011J</b>	mg/L	0.040	0.0086	1	08/26/21 09:56	08/31/21 14:26	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/26/21 09:56	08/31/21 14:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 14:26	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/26/21 09:56	08/31/21 14:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/26/21 09:56	08/31/21 14:26	7439-92-1	
Lithium	<b>0.0032J</b>	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 14:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/26/21 09:56	08/31/21 14:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/26/21 09:56	08/31/21 14:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/26/21 09:56	08/31/21 14:26	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
Pace Analytical Services - Peachtree Corners, GA

Mercury ND mg/L      0.00020      0.000078      1      08/25/21 08:10      08/25/21 13:35      7439-97-6

**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2011  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids **488** mg/L      20.0      20.0      1      08/26/21 18:47

**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>7.8</b>	mg/L	1.0	0.60	1	08/27/21 12:41	16887-00-6	
Fluoride	<b>0.43</b>	mg/L	0.10	0.050	1	08/27/21 12:41	16984-48-8	
Sulfate	<b>64.4</b>	mg/L	1.0	0.50	1	08/27/21 12:41	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

Sample: <b>HGWC-125</b>	Lab ID: <b>92555938009</b>	Collected: 08/19/21 11:14	Received: 08/20/21 12:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		08/20/21 15:31		
pH	<b>7.24</b>	Std. Units			1		08/20/21 15:31		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>196</b>	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:11	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/26/21 09:56	08/31/21 14:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 14:49	7440-38-2	
Barium	<b>0.044</b>	mg/L	0.0050	0.00067	1	08/26/21 09:56	08/31/21 14:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/26/21 09:56	08/31/21 14:49	7440-41-7	
Boron	<b>1.5</b>	mg/L	0.040	0.0086	1	08/26/21 09:56	08/31/21 14:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/26/21 09:56	08/31/21 14:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 14:49	7440-47-3	
Cobalt	<b>0.0054</b>	mg/L	0.0050	0.00039	1	08/26/21 09:56	08/31/21 14:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/26/21 09:56	08/31/21 14:49	7439-92-1	
Lithium	<b>0.0074J</b>	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 14:49	7439-93-2	
Molybdenum	<b>0.021</b>	mg/L	0.010	0.00074	1	08/26/21 09:56	08/31/21 14:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/26/21 09:56	08/31/21 14:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/26/21 09:56	08/31/21 14:49	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/25/21 08:10	08/25/21 13:37	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>732</b>	mg/L	20.0	20.0	1		08/26/21 18:46		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>4.5</b>	mg/L	1.0	0.60	1		08/27/21 12:57	16887-00-6	
Fluoride	<b>0.17</b>	mg/L	0.10	0.050	1		08/27/21 12:57	16984-48-8	
Sulfate	<b>264</b>	mg/L	6.0	3.0	6		08/27/21 21:06	14808-79-8	M1

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

**Sample: DUP-3**      **Lab ID: 92555938010**      Collected: 08/19/21 00:00      Received: 08/20/21 12:15      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D    Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>186</b>	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:16	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/26/21 09:56	08/31/21 14:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 14:54	7440-38-2	
Barium	<b>0.043</b>	mg/L	0.0050	0.00067	1	08/26/21 09:56	08/31/21 14:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/26/21 09:56	08/31/21 14:54	7440-41-7	
Boron	<b>1.5</b>	mg/L	0.040	0.0086	1	08/26/21 09:56	08/31/21 14:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/26/21 09:56	08/31/21 14:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 14:54	7440-47-3	
Cobalt	<b>0.0054</b>	mg/L	0.0050	0.00039	1	08/26/21 09:56	08/31/21 14:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/26/21 09:56	08/31/21 14:54	7439-92-1	
Lithium	<b>0.0077J</b>	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 14:54	7439-93-2	
Molybdenum	<b>0.020</b>	mg/L	0.010	0.00074	1	08/26/21 09:56	08/31/21 14:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/26/21 09:56	08/31/21 14:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/26/21 09:56	08/31/21 14:54	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A    Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	<b>0.00015J</b>	mg/L	0.00020	0.000078	1	08/26/21 15:30	08/27/21 14:32	7439-97-6	B
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>700</b>	mg/L	20.0	20.0	1		08/26/21 18:47		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>4.6</b>	mg/L	1.0	0.60	1		08/27/21 14:14	16887-00-6	
Fluoride	<b>0.18</b>	mg/L	0.10	0.050	1		08/27/21 14:14	16984-48-8	
Sulfate	<b>265</b>	mg/L	6.0	3.0	6		08/27/21 21:52	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

**Sample: EB-3**      **Lab ID: 92555938011**      Collected: 08/19/21 12:05      Received: 08/20/21 12:15      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D    Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	ND	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:21	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/26/21 09:56	08/31/21 15:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:00	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/26/21 09:56	08/31/21 15:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/26/21 09:56	08/31/21 15:00	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/26/21 09:56	08/31/21 15:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/26/21 09:56	08/31/21 15:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/26/21 09:56	08/31/21 15:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/26/21 09:56	08/31/21 15:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 15:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/26/21 09:56	08/31/21 15:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/26/21 09:56	08/31/21 15:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/26/21 09:56	08/31/21 15:00	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A    Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	<b>0.00020</b>	mg/L	0.00020	0.000078	1	08/26/21 15:30	08/27/21 14:35	7439-97-6	B
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		08/26/21 18:47		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		08/27/21 14:29	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/27/21 14:29	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/27/21 14:29	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

**Sample: FB-3**      **Lab ID: 92555938012**      Collected: 08/19/21 12:00      Received: 08/20/21 12:15      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D    Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	ND	mg/L	1.0	0.12	1	08/26/21 09:58	08/26/21 13:35	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	08/26/21 09:56	08/31/21 15:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/26/21 09:56	08/31/21 15:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/26/21 09:56	08/31/21 15:06	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/26/21 09:56	08/31/21 15:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/26/21 09:56	08/31/21 15:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/26/21 09:56	08/31/21 15:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/26/21 09:56	08/31/21 15:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/26/21 09:56	08/31/21 15:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/26/21 09:56	08/31/21 15:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/26/21 09:56	08/31/21 15:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/26/21 09:56	08/31/21 15:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/26/21 09:56	08/31/21 15:06	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A    Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	<b>0.00011J</b>	mg/L	0.00020	0.000078	1	08/26/21 15:30	08/27/21 14:37	7439-97-6	B
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		08/26/21 18:47		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		08/27/21 14:45	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/27/21 14:45	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/27/21 14:45	14808-79-8	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

QC Batch: 641193 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92555514001, 92555514002, 92555514003, 92555514004, 92555514005, 92555514006, 92555514007

METHOD BLANK: 3365273 Matrix: Water  
 Associated Lab Samples: 92555514001, 92555514002, 92555514003, 92555514004, 92555514005, 92555514006, 92555514007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/18/21 16:31	

LABORATORY CONTROL SAMPLE: 3365274

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3365275 3365276

Parameter	Units	92555504001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	5.4	1	1	6.6	6.4	113	103	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3  
 Pace Project No.: 9255514

QC Batch: 641498 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92555938001, 92555938002, 92555938003, 92555938004

METHOD BLANK: 3367016 Matrix: Water  
 Associated Lab Samples: 92555938001, 92555938002, 92555938003, 92555938004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/19/21 16:38	

LABORATORY CONTROL SAMPLE: 3367017

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3367018 3367019

Parameter	Units	3367018		3367019		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	162	1	1	156	157	-579	-524	75-125	0	20 M1

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 9255514

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QC Batch:	641912	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92555938005, 92555938006, 92555938007

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METHOD BLANK: 3368995 Matrix: Water  
 Associated Lab Samples: 92555938005, 92555938006, 92555938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/20/21 17:38	

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LABORATORY CONTROL SAMPLE: 3368996

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

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MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3368997 3368998

Parameter	Units	92555504006		3368998		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	281	1	1	282	275	124	-592	75-125	3	20 M1

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3  
 Pace Project No.: 9255514

QC Batch: 643161 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92555938008, 92555938009, 92555938010, 92555938011, 92555938012

METHOD BLANK: 3374851 Matrix: Water  
 Associated Lab Samples: 92555938008, 92555938009, 92555938010, 92555938011, 92555938012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/26/21 12:37	

LABORATORY CONTROL SAMPLE: 3374852

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3374853 3374854

Parameter	Units	3374853		3374854		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555938008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	139	1	1	137	134	-232	-508	75-125	2	20 M1

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

QC Batch: 641199 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92555514001, 92555514002, 92555514003, 92555514004, 92555514005, 92555514006, 92555514007

METHOD BLANK: 3365292 Matrix: Water  
 Associated Lab Samples: 92555514001, 92555514002, 92555514003, 92555514004, 92555514005, 92555514006, 92555514007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	08/19/21 17:50	
Arsenic	mg/L	ND	0.0050	0.0011	08/19/21 17:50	
Barium	mg/L	ND	0.0050	0.00067	08/19/21 17:50	
Beryllium	mg/L	ND	0.00050	0.000054	08/19/21 17:50	
Boron	mg/L	ND	0.040	0.0086	08/19/21 17:50	
Cadmium	mg/L	ND	0.00050	0.00011	08/19/21 17:50	
Chromium	mg/L	ND	0.0050	0.0011	08/19/21 17:50	
Cobalt	mg/L	ND	0.0050	0.00039	08/19/21 17:50	
Lead	mg/L	ND	0.0010	0.00089	08/19/21 17:50	
Lithium	mg/L	ND	0.030	0.00073	08/19/21 17:50	
Molybdenum	mg/L	ND	0.010	0.00074	08/19/21 17:50	
Selenium	mg/L	ND	0.0050	0.0014	08/19/21 17:50	
Thallium	mg/L	ND	0.0010	0.00018	08/19/21 17:50	

LABORATORY CONTROL SAMPLE: 3365293

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.098	98	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.95	95	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.094	94	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3365294 3365295

Parameter	Units	92555504001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.099	0.097	98	97	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 9255514

Parameter	Units	3365294		3365295		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		9255504001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.034	0.1	0.1	0.13	0.13	99	98	75-125	1	20		
Beryllium	mg/L	0.00021J	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Boron	mg/L	0.014J	1	1	1.0	1.0	102	101	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	110	107	75-125	2	20		
Cobalt	mg/L	0.00070J	0.1	0.1	0.11	0.11	110	106	75-125	4	20		
Lead	mg/L	ND	0.1	0.1	0.096	0.095	96	94	75-125	2	20		
Lithium	mg/L	0.0013J	0.1	0.1	0.11	0.11	106	104	75-125	1	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	3	20		
Selenium	mg/L	ND	0.1	0.1	0.093	0.094	93	94	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	1	20		

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

QC Batch:	641502	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92555938001, 92555938002, 92555938003, 92555938004

METHOD BLANK: 3367021 Matrix: Water

Associated Lab Samples: 92555938001, 92555938002, 92555938003, 92555938004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00081J	0.0030	0.00078	08/20/21 18:08	
Arsenic	mg/L	ND	0.0050	0.0011	08/20/21 18:08	
Barium	mg/L	ND	0.0050	0.00067	08/20/21 18:08	
Beryllium	mg/L	ND	0.00050	0.000054	08/20/21 18:08	
Boron	mg/L	ND	0.040	0.0086	08/20/21 18:08	
Cadmium	mg/L	ND	0.00050	0.00011	08/20/21 18:08	
Chromium	mg/L	ND	0.0050	0.0011	08/20/21 18:08	
Cobalt	mg/L	ND	0.0050	0.00039	08/20/21 18:08	
Lead	mg/L	ND	0.0010	0.00089	08/20/21 18:08	
Lithium	mg/L	ND	0.030	0.00073	08/20/21 18:08	
Molybdenum	mg/L	ND	0.010	0.00074	08/20/21 18:08	
Selenium	mg/L	ND	0.0050	0.0014	08/20/21 18:08	
Thallium	mg/L	ND	0.0010	0.00018	08/20/21 18:08	

LABORATORY CONTROL SAMPLE: 3367022

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.093	93	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3367023 3367024

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555948001 Result	Spike Conc.	Spike Conc.	MS Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	100	104	75-125	3	20
Arsenic	mg/L	ND	0.1	0.1	0.098	0.098	98	97	75-125	1	20

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 9255514

Parameter	Units	3367023		3367024		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555948001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.13	0.1	0.1	0.23	0.24	104	107	75-125	1	20		
Beryllium	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20		
Boron	mg/L	0.013J	1	1	1.0	1.0	99	100	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	103	103	75-125	0	20		
Cobalt	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20		
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	99	103	75-125	3	20		
Selenium	mg/L	ND	0.1	0.1	0.097	0.098	97	97	75-125	1	20		
Thallium	mg/L	0.00019J	0.1	0.1	0.097	0.097	96	97	75-125	1	20		

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

QC Batch:	641913	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92555938005, 92555938006, 92555938007

METHOD BLANK: 3368999 Matrix: Water

Associated Lab Samples: 92555938005, 92555938006, 92555938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	08/27/21 14:27	
Arsenic	mg/L	ND	0.0050	0.0011	08/27/21 14:27	
Barium	mg/L	ND	0.0050	0.00067	08/27/21 14:27	
Beryllium	mg/L	ND	0.00050	0.000054	08/27/21 14:27	
Boron	mg/L	ND	0.040	0.0086	08/27/21 14:27	
Cadmium	mg/L	ND	0.00050	0.00011	08/27/21 14:27	
Chromium	mg/L	ND	0.0050	0.0011	08/27/21 14:27	
Cobalt	mg/L	ND	0.0050	0.00039	08/27/21 14:27	
Lead	mg/L	ND	0.0010	0.00089	08/27/21 14:27	
Lithium	mg/L	ND	0.030	0.00073	08/27/21 14:27	
Molybdenum	mg/L	ND	0.010	0.00074	08/27/21 14:27	
Selenium	mg/L	ND	0.0050	0.0014	08/27/21 14:27	
Thallium	mg/L	ND	0.0010	0.00018	08/27/21 14:27	

LABORATORY CONTROL SAMPLE: 3369000

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Boron	mg/L	1	0.95	95	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.096	96	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3369001 3369002

Parameter	Units	92555504007 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20	
Arsenic	mg/L	0.0035J	0.1	0.1	0.11	0.11	108	106	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 9255514

Parameter	Units	3369001		3369002		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		9255504007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.018	0.1	0.1	0.11	0.11	96	94	75-125	1	20		
Beryllium	mg/L	0.00039J	0.1	0.1	0.085	0.084	85	84	75-125	1	20		
Boron	mg/L	8.6	1	1	9.1	9.3	51	71	75-125	2	20	M1	
Cadmium	mg/L	0.00013J	0.1	0.1	0.098	0.095	98	95	75-125	3	20		
Chromium	mg/L	ND	0.1	0.1	0.098	0.094	98	94	75-125	4	20		
Cobalt	mg/L	0.033	0.1	0.1	0.13	0.12	95	90	75-125	4	20		
Lead	mg/L	0.0015	0.1	0.1	0.097	0.095	96	93	75-125	3	20		
Lithium	mg/L	ND	0.1	0.1	0.087	0.085	87	85	75-125	2	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.098	103	98	75-125	5	20		
Selenium	mg/L	0.0077	0.1	0.1	0.12	0.12	112	110	75-125	1	20		
Thallium	mg/L	0.00027J	0.1	0.1	0.095	0.092	95	92	75-125	4	20		

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

QC Batch:	643162	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92555938008, 92555938009, 92555938010, 92555938011, 92555938012

METHOD BLANK: 3374855 Matrix: Water

Associated Lab Samples: 92555938008, 92555938009, 92555938010, 92555938011, 92555938012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	08/31/21 14:14	
Arsenic	mg/L	ND	0.0050	0.0011	08/31/21 14:14	
Barium	mg/L	ND	0.0050	0.00067	08/31/21 14:14	
Beryllium	mg/L	ND	0.00050	0.000054	08/31/21 14:14	
Boron	mg/L	ND	0.040	0.0086	08/31/21 14:14	
Cadmium	mg/L	ND	0.00050	0.00011	08/31/21 14:14	
Chromium	mg/L	ND	0.0050	0.0011	08/31/21 14:14	
Cobalt	mg/L	ND	0.0050	0.00039	08/31/21 14:14	
Lead	mg/L	ND	0.0010	0.00089	08/31/21 14:14	
Lithium	mg/L	ND	0.030	0.00073	08/31/21 14:14	
Molybdenum	mg/L	ND	0.010	0.00074	08/31/21 14:14	
Selenium	mg/L	ND	0.0050	0.0014	08/31/21 14:14	
Thallium	mg/L	ND	0.0010	0.00018	08/31/21 14:14	

LABORATORY CONTROL SAMPLE: 3374856

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	0.099	99	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.097	97	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3374857 3374858

Parameter	Units	92555938008 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 9255514

Parameter	Units	3374857		3374858		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555938008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.27	0.1	0.1	0.36	0.35	89	86	75-125	1	20		
Beryllium	mg/L	ND	0.1	0.1	0.090	0.093	90	93	75-125	3	20		
Boron	mg/L	0.011J	1	1	0.90	0.92	89	91	75-125	2	20		
Cadmium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.11	101	105	75-125	4	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20		
Lithium	mg/L	0.0032J	0.1	0.1	0.096	0.099	93	96	75-125	3	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20		
Selenium	mg/L	ND	0.1	0.1	0.099	0.098	98	97	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20		

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

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QC Batch: 642527 Analysis Method: EPA 7470A  
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92555514001, 92555514002, 92555514003, 92555514004, 92555514005, 92555514006, 92555514007, 92555938001, 92555938002, 92555938003, 92555938004, 92555938005, 92555938006, 92555938007, 92555938008, 92555938009

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METHOD BLANK: 3371936 Matrix: Water  
 Associated Lab Samples: 92555514001, 92555514002, 92555514003, 92555514004, 92555514005, 92555514006, 92555514007, 92555938001, 92555938002, 92555938003, 92555938004, 92555938005, 92555938006, 92555938007, 92555938008, 92555938009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	08/25/21 12:16	

LABORATORY CONTROL SAMPLE: 3371937

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: 3371938 3371939

Parameter	Units	3371938		3371939		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0018	0.0023	71	89	75-125	23	20	M1,R1

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3  
 Pace Project No.: 9255514

QC Batch: 643221 Analysis Method: EPA 7470A  
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92555938010, 92555938011, 92555938012

METHOD BLANK: 3375102 Matrix: Water  
 Associated Lab Samples: 92555938010, 92555938011, 92555938012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.00010J	0.00020	0.000078	08/27/21 13:14	

LABORATORY CONTROL SAMPLE: 3375103

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0021	84	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3375104 3375105

Parameter	Units	3375104		3375105		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	0.000081J	0.0025	0.0021	0.0022	81	85	75-125	4	20	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

QC Batch: 640931 Analysis Method: SM 2540C-2011  
 QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92555514001, 92555514002

METHOD BLANK: 3363778 Matrix: Water  
 Associated Lab Samples: 92555514001, 92555514002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/18/21 08:29	

LABORATORY CONTROL SAMPLE: 3363779

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	388	97	90-111	

SAMPLE DUPLICATE: 3363780

Parameter	Units	92555514001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	366	378	3	10	

SAMPLE DUPLICATE: 3363781

Parameter	Units	92555501001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	212	217	2	10	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

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QC Batch: 641466	Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92555514003, 92555514004, 92555514005, 92555514006, 92555514007

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METHOD BLANK: 3366949 Matrix: Water  
 Associated Lab Samples: 92555514003, 92555514004, 92555514005, 92555514006, 92555514007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/19/21 15:09	

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LABORATORY CONTROL SAMPLE: 3366950

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	401	100	90-111	

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SAMPLE DUPLICATE: 3366951

Parameter	Units	92555514003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	118	131	10	10	

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SAMPLE DUPLICATE: 3366952

Parameter	Units	92555514005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	272	268	1	10	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

QC Batch: 642065 Analysis Method: SM 2540C-2011  
 QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92555938001, 92555938002, 92555938003, 92555938004

METHOD BLANK: 3369958 Matrix: Water  
 Associated Lab Samples: 92555938001, 92555938002, 92555938003, 92555938004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/20/21 16:39	

LABORATORY CONTROL SAMPLE: 3369959

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	90-111	

SAMPLE DUPLICATE: 3369960

Parameter	Units	92555938001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	626	678	8	10	

SAMPLE DUPLICATE: 3369961

Parameter	Units	92555948005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	298	314	5	10	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

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QC Batch: 642673	Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011	Analysis Description: 2540C Total Dissolved Solids
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92555938005, 92555938006, 92555938007

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METHOD BLANK: 3372850 Matrix: Water  
 Associated Lab Samples: 92555938005, 92555938006, 92555938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/25/21 19:25	

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LABORATORY CONTROL SAMPLE: 3372851

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	392	98	90-111	

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SAMPLE DUPLICATE: 3372852

Parameter	Units	92555504010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2390	2610	9	10	

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SAMPLE DUPLICATE: 3372853

Parameter	Units	92555948008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	666	696	4	10	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

QC Batch: 643140 Analysis Method: SM 2540C-2011  
 QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92555938008, 92555938009, 92555938010, 92555938011, 92555938012

METHOD BLANK: 3374769 Matrix: Water  
 Associated Lab Samples: 92555938008, 92555938009, 92555938010, 92555938011, 92555938012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/26/21 18:46	

LABORATORY CONTROL SAMPLE: 3374770

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	409	102	90-111	

SAMPLE DUPLICATE: 3374771

Parameter	Units	92555504015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	816	876	7	10	

SAMPLE DUPLICATE: 3374772

Parameter	Units	92555938012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

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### QUALITY CONTROL DATA

Project: HAMMOND ASH POND #3

Pace Project No.: 9255514

QC Batch: 641753	Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993	Analysis Description: 300.0 IC Anions
	Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 9255514001

METHOD BLANK: 3368331 Matrix: Water

Associated Lab Samples: 9255514001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/19/21 22:58	
Fluoride	mg/L	ND	0.10	0.050	08/19/21 22:58	
Sulfate	mg/L	ND	1.0	0.50	08/19/21 22:58	

LABORATORY CONTROL SAMPLE: 3368332

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.2	100	90-110	
Fluoride	mg/L	2.5	2.5	102	90-110	
Sulfate	mg/L	50	50.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3368333 3368334

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92554551025 Result	Spike Conc.	Spike Conc.	Result								
Chloride	mg/L	3.4	50	50	56.6	56.8	106	107	90-110	0	10		
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	99	100	90-110	2	10		
Sulfate	mg/L	6.9	50	50	59.8	60.3	106	107	90-110	1	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3368335 3368336

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555501002 Result	Spike Conc.	Spike Conc.	Result								
Chloride	mg/L	2.2	50	50	50.0	54.8	95	105	90-110	9	10		
Fluoride	mg/L	0.064J	2.5	2.5	2.4	2.6	92	102	90-110	10	10		
Sulfate	mg/L	4.3	50	50	51.7	56.7	95	105	90-110	9	10		

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

QC Batch:	641754	Analysis Method:	EPA 300.0 Rev 2.1 1993
QC Batch Method:	EPA 300.0 Rev 2.1 1993	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92555514002, 92555514003, 92555514004		

METHOD BLANK: 3368337 Matrix: Water  
 Associated Lab Samples: 92555514002, 92555514003, 92555514004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/20/21 06:43	
Fluoride	mg/L	ND	0.10	0.050	08/20/21 06:43	
Sulfate	mg/L	ND	1.0	0.50	08/20/21 06:43	

LABORATORY CONTROL SAMPLE: 3368338

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	47.9	96	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	47.3	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3368339 3368340

Parameter	Units	92555514002		3368339		3368340		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	3.5	3.5	50	50	53.7	54.7	100	102	90-110	2	10	
Fluoride	mg/L	0.15	0.15	2.5	2.5	2.6	2.6	98	99	90-110	1	10	
Sulfate	mg/L	30.5	30.5	50	50	81.4	81.9	102	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3368341 3368342

Parameter	Units	92555652002		3368341		3368342		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	2.3	2.3	50	50	52.0	56.1	99	108	90-110	8	10	
Fluoride	mg/L	ND	ND	2.5	2.5	2.4	2.7	96	105	90-110	9	10	
Sulfate	mg/L	8.3	8.3	50	50	58.0	62.4	99	108	90-110	7	10	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

QC Batch: 641887 Analysis Method: EPA 300.0 Rev 2.1 1993  
 QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92555514005, 92555514006, 92555514007

METHOD BLANK: 3368749 Matrix: Water  
 Associated Lab Samples: 92555514005, 92555514006, 92555514007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/20/21 15:20	
Fluoride	mg/L	ND	0.10	0.050	08/20/21 15:20	
Sulfate	mg/L	ND	1.0	0.50	08/20/21 15:20	

LABORATORY CONTROL SAMPLE: 3368750

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.5	103	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3368751 3368752

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92556598001	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	13.8	50	50	63.6	64.6	100	102	90-110	2	10		
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	107	108	90-110	1	10		
Sulfate	mg/L	2.1	50	50	52.0	52.9	100	102	90-110	2	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3368753 3368754

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555514006	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	2.6	50	50	53.3	54.0	101	103	90-110	1	10		
Fluoride	mg/L	0.065J	2.5	2.5	2.6	2.6	102	103	90-110	1	10		
Sulfate	mg/L	42.1	50	50	90.9	91.6	98	99	90-110	1	10		

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 9255514

QC Batch: 642138 Analysis Method: EPA 300.0 Rev 2.1 1993  
 QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92555938001, 92555938002, 92555938003, 92555938004

METHOD BLANK: 3370171 Matrix: Water  
 Associated Lab Samples: 92555938001, 92555938002, 92555938003, 92555938004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/22/21 20:47	
Fluoride	mg/L	ND	0.10	0.050	08/22/21 20:47	
Sulfate	mg/L	ND	1.0	0.50	08/22/21 20:47	

LABORATORY CONTROL SAMPLE: 3370172

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.1	98	90-110	
Fluoride	mg/L	2.5	2.4	98	90-110	
Sulfate	mg/L	50	48.8	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3370173 3370174

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555535001 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	14.0	50	50	65.0	66.6	102	105	90-110	2	10		
Fluoride	mg/L	0.19	2.5	2.5	2.7	2.8	102	104	90-110	2	10		
Sulfate	mg/L	35.2	50	50	84.4	85.9	98	101	90-110	2	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3370177 3370178

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555938002 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	2.4	50	50	54.7	55.6	104	106	90-110	2	10		
Fluoride	mg/L	0.39	2.5	2.5	3.0	3.0	104	106	90-110	2	10		
Sulfate	mg/L	211	50	50	255	257	88	92	90-110	1	10 M1		

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 9255514

QC Batch: 642990 Analysis Method: EPA 300.0 Rev 2.1 1993  
 QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92555938005, 92555938006, 92555938007

METHOD BLANK: 3374032 Matrix: Water  
 Associated Lab Samples: 92555938005, 92555938006, 92555938007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/26/21 00:53	
Fluoride	mg/L	ND	0.10	0.050	08/26/21 00:53	
Sulfate	mg/L	ND	1.0	0.50	08/26/21 00:53	

LABORATORY CONTROL SAMPLE: 3374033

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.8	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	48.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3374034 3374035

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92557349005	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	248	50	50	144	155	-207	-187	90-110	7	10	M1	
Fluoride	mg/L	8.9	2.5	2.5	5.4	5.7	-139	-128	90-110	5	10	M1	
Sulfate	mg/L	1040	50	50	1040	1090	-16	89	90-110	5	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3374036 3374037

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92555945011	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	14.3	50	50	65.1	67.7	101	107	90-110	4	10		
Fluoride	mg/L	0.12	2.5	2.5	2.4	2.5	91	97	90-110	6	10		
Sulfate	mg/L	219	50	50	321	254	204	68	90-110	24	10	M1,R1	

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**QUALITY CONTROL DATA**

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

QC Batch: 643306 Analysis Method: EPA 300.0 Rev 2.1 1993  
 QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92555938008, 92555938009, 92555938010, 92555938011, 92555938012

METHOD BLANK: 3375691 Matrix: Water  
 Associated Lab Samples: 92555938008, 92555938009, 92555938010, 92555938011, 92555938012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/27/21 07:35	
Fluoride	mg/L	ND	0.10	0.050	08/27/21 07:35	
Sulfate	mg/L	ND	1.0	0.50	08/27/21 07:35	

LABORATORY CONTROL SAMPLE: 3375692

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	47.1	94	90-110	
Fluoride	mg/L	2.5	2.4	95	90-110	
Sulfate	mg/L	50	47.6	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3375693 3375694

Parameter	Units	92555504012		3375693		3375694		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	118	50	50	160	160	84	85	90-110	0	10	M1	
Fluoride	mg/L	ND	2.5	2.5	2.3	2.4	92	94	90-110	2	10		
Sulfate	mg/L	412	50	50	453	454	84	85	90-110	0	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3375695 3375696

Parameter	Units	92555938009		3375695		3375696		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	4.5	50	50	52.3	52.6	96	96	90-110	1	10		
Fluoride	mg/L	0.17	2.5	2.5	2.5	2.6	95	96	90-110	1	10		
Sulfate	mg/L	264	50	50	305	306	82	83	90-110	0	10	M1	

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## QUALIFIERS

Project: HAMMOND ASH POND #3

Pace Project No.: 92555514

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### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92555514001	HGWA-1				
92555514002	HGWA-43D				
92555514003	HGWA-2				
92555514004	HGWA-3				
92555514005	HGWA-45D				
92555514006	HGWA-122				
92555514007	HGWA-44D				
92555938001	HGWC-121A				
92555938002	HGWC-120				
92555938003	HGWC-124				
92555938004	MW-46D				
92555938005	MW-39				
92555938006	MW-32				
92555938007	MW-41				
92555938008	HGWC-126				
92555938009	HGWC-125				
92555514001	HGWA-1	EPA 3010A	641193	EPA 6010D	641263
92555514002	HGWA-43D	EPA 3010A	641193	EPA 6010D	641263
92555514003	HGWA-2	EPA 3010A	641193	EPA 6010D	641263
92555514004	HGWA-3	EPA 3010A	641193	EPA 6010D	641263
92555514005	HGWA-45D	EPA 3010A	641193	EPA 6010D	641263
92555514006	HGWA-122	EPA 3010A	641193	EPA 6010D	641263
92555514007	HGWA-44D	EPA 3010A	641193	EPA 6010D	641263
92555938001	HGWC-121A	EPA 3010A	641498	EPA 6010D	641630
92555938002	HGWC-120	EPA 3010A	641498	EPA 6010D	641630
92555938003	HGWC-124	EPA 3010A	641498	EPA 6010D	641630
92555938004	MW-46D	EPA 3010A	641498	EPA 6010D	641630
92555938005	MW-39	EPA 3010A	641912	EPA 6010D	641995
92555938006	MW-32	EPA 3010A	641912	EPA 6010D	641995
92555938007	MW-41	EPA 3010A	641912	EPA 6010D	641995
92555938008	HGWC-126	EPA 3010A	643161	EPA 6010D	643227
92555938009	HGWC-125	EPA 3010A	643161	EPA 6010D	643227
92555938010	DUP-3	EPA 3010A	643161	EPA 6010D	643227
92555938011	EB-3	EPA 3010A	643161	EPA 6010D	643227
92555938012	FB-3	EPA 3010A	643161	EPA 6010D	643227
92555514001	HGWA-1	EPA 3005A	641199	EPA 6020B	641271
92555514002	HGWA-43D	EPA 3005A	641199	EPA 6020B	641271
92555514003	HGWA-2	EPA 3005A	641199	EPA 6020B	641271
92555514004	HGWA-3	EPA 3005A	641199	EPA 6020B	641271
92555514005	HGWA-45D	EPA 3005A	641199	EPA 6020B	641271
92555514006	HGWA-122	EPA 3005A	641199	EPA 6020B	641271
92555514007	HGWA-44D	EPA 3005A	641199	EPA 6020B	641271
92555938001	HGWC-121A	EPA 3005A	641502	EPA 6020B	641654
92555938002	HGWC-120	EPA 3005A	641502	EPA 6020B	641654
92555938003	HGWC-124	EPA 3005A	641502	EPA 6020B	641654
92555938004	MW-46D	EPA 3005A	641502	EPA 6020B	641654

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92555938005	MW-39	EPA 3005A	641913	EPA 6020B	642062
92555938006	MW-32	EPA 3005A	641913	EPA 6020B	642062
92555938007	MW-41	EPA 3005A	641913	EPA 6020B	642062
92555938008	HGWC-126	EPA 3005A	643162	EPA 6020B	643244
92555938009	HGWC-125	EPA 3005A	643162	EPA 6020B	643244
92555938010	DUP-3	EPA 3005A	643162	EPA 6020B	643244
92555938011	EB-3	EPA 3005A	643162	EPA 6020B	643244
92555938012	FB-3	EPA 3005A	643162	EPA 6020B	643244
92555514001	HGWA-1	EPA 7470A	642527	EPA 7470A	642786
92555514002	HGWA-43D	EPA 7470A	642527	EPA 7470A	642786
92555514003	HGWA-2	EPA 7470A	642527	EPA 7470A	642786
92555514004	HGWA-3	EPA 7470A	642527	EPA 7470A	642786
92555514005	HGWA-45D	EPA 7470A	642527	EPA 7470A	642786
92555514006	HGWA-122	EPA 7470A	642527	EPA 7470A	642786
92555514007	HGWA-44D	EPA 7470A	642527	EPA 7470A	642786
92555938001	HGWC-121A	EPA 7470A	642527	EPA 7470A	642786
92555938002	HGWC-120	EPA 7470A	642527	EPA 7470A	642786
92555938003	HGWC-124	EPA 7470A	642527	EPA 7470A	642786
92555938004	MW-46D	EPA 7470A	642527	EPA 7470A	642786
92555938005	MW-39	EPA 7470A	642527	EPA 7470A	642786
92555938006	MW-32	EPA 7470A	642527	EPA 7470A	642786
92555938007	MW-41	EPA 7470A	642527	EPA 7470A	642786
92555938008	HGWC-126	EPA 7470A	642527	EPA 7470A	642786
92555938009	HGWC-125	EPA 7470A	642527	EPA 7470A	642786
92555938010	DUP-3	EPA 7470A	643221	EPA 7470A	643598
92555938011	EB-3	EPA 7470A	643221	EPA 7470A	643598
92555938012	FB-3	EPA 7470A	643221	EPA 7470A	643598
92555514001	HGWA-1	SM 2540C-2011	640931		
92555514002	HGWA-43D	SM 2540C-2011	640931		
92555514003	HGWA-2	SM 2540C-2011	641466		
92555514004	HGWA-3	SM 2540C-2011	641466		
92555514005	HGWA-45D	SM 2540C-2011	641466		
92555514006	HGWA-122	SM 2540C-2011	641466		
92555514007	HGWA-44D	SM 2540C-2011	641466		
92555938001	HGWC-121A	SM 2540C-2011	642065		
92555938002	HGWC-120	SM 2540C-2011	642065		
92555938003	HGWC-124	SM 2540C-2011	642065		
92555938004	MW-46D	SM 2540C-2011	642065		
92555938005	MW-39	SM 2540C-2011	642673		
92555938006	MW-32	SM 2540C-2011	642673		
92555938007	MW-41	SM 2540C-2011	642673		
92555938008	HGWC-126	SM 2540C-2011	643140		
92555938009	HGWC-125	SM 2540C-2011	643140		
92555938010	DUP-3	SM 2540C-2011	643140		

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: HAMMOND ASH POND #3  
 Pace Project No.: 92555514

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92555938011	EB-3	SM 2540C-2011	643140		
92555938012	FB-3	SM 2540C-2011	643140		
92555514001	HGWA-1	EPA 300.0 Rev 2.1 1993	641753		
92555514002	HGWA-43D	EPA 300.0 Rev 2.1 1993	641754		
92555514003	HGWA-2	EPA 300.0 Rev 2.1 1993	641754		
92555514004	HGWA-3	EPA 300.0 Rev 2.1 1993	641754		
92555514005	HGWA-45D	EPA 300.0 Rev 2.1 1993	641887		
92555514006	HGWA-122	EPA 300.0 Rev 2.1 1993	641887		
92555514007	HGWA-44D	EPA 300.0 Rev 2.1 1993	641887		
92555938001	HGWC-121A	EPA 300.0 Rev 2.1 1993	642138		
92555938002	HGWC-120	EPA 300.0 Rev 2.1 1993	642138		
92555938003	HGWC-124	EPA 300.0 Rev 2.1 1993	642138		
92555938004	MW-46D	EPA 300.0 Rev 2.1 1993	642138		
92555938005	MW-39	EPA 300.0 Rev 2.1 1993	642990		
92555938006	MW-32	EPA 300.0 Rev 2.1 1993	642990		
92555938007	MW-41	EPA 300.0 Rev 2.1 1993	642990		
92555938008	HGWC-126	EPA 300.0 Rev 2.1 1993	643306		
92555938009	HGWC-125	EPA 300.0 Rev 2.1 1993	643306		
92555938010	DUP-3	EPA 300.0 Rev 2.1 1993	643306		
92555938011	EB-3	EPA 300.0 Rev 2.1 1993	643306		
92555938012	FB-3	EPA 300.0 Rev 2.1 1993	643306		

**REPORT OF LABORATORY ANALYSIS**

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**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition:  
Upon Receipt

Client Name:

Project #:

**WO# : 92555514**



Cons/Initials Person Examining Contents: 3/13/21 LK/ML

Courier:  Commercial  Fed Ex  UPS  USPS  Other  Client

Custody Seal Present?  Yes  No Seal Intact?  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:  In Use ID: THE083 Type of log:  Paper  Print  None

Cooler Temp: 1.3 Correction Factor: Add/Subtract (°C) 0

Temp should be above freezing to 5°C

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

Cooler Temp Corrected (°C): 1.3

USDA Regulated Soil ( VOA, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check mass)?

Yes  No

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

\_\_\_\_\_

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Project Manager SCUR Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRP Review: \_\_\_\_\_

Date: \_\_\_\_\_



Document Name:  
 Sample Condition Upon Receipt (SCUR)  
 Document No.:  
 F-CAR-CS-081-Rev.07

Document Revised: October 28, 2020  
 Page 2 of 2  
 Issuing Authority:  
 Pace Carolina Quality Office

\*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, DRDS/SD15 (water) DOC, LUG

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

Project

**WO#: 92555514**

PH: N/A

Due Date: 08/27/21

CLIENT: GR-GR Power

Row #	Sample Description	1	2	3	4	5	6	7	8	9	10	11	12
1	BP40-125 ml, Plastic, Unpreserved (N/A) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
2	BP50-250 ml, Plastic, Unpreserved (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
3	BP50-500 ml, Plastic, Unpreserved (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
4	BP50-1 liter, Plastic, Unpreserved (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
5	BP40-125 ml, Plastic, H2SO4 (pH < 2) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
6	BP40-250 ml, plastic, HNO3 (pH < 2)	/	/	/	/	/	/	/	/	/	/	/	/
7	BP40-125 ml, Plastic, 2N Acetic & NaOH (pH)	/	/	/	/	/	/	/	/	/	/	/	/
8	BP40-125 ml, Plastic, NaOH (pH < 12) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
9	Water, whole unfiltered (from jar) Unpreserved	/	/	/	/	/	/	/	/	/	/	/	/
10	AG10-1 liter Amber Unpreserved (N/A) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
11	AG10-1 liter Amber Unpreserved (N/A) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
12	AG10-1 liter Amber H2SO4 (pH < 2)	/	/	/	/	/	/	/	/	/	/	/	/
13	AG10-250 ml, Amber, Unpreserved (N/A) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
14	AG10-1 liter Amber H2SO4 (pH < 2)	/	/	/	/	/	/	/	/	/	/	/	/
15	AG10-250 ml, Amber, H2SO4 (pH < 2)	/	/	/	/	/	/	/	/	/	/	/	/
16	AG10(250ml)-250 ml, Amber HNO3 (N/A) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
17	DO50-40 ml, VOA, HC (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
18	VO50-40 ml, VOA, Na2SO3 (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
19	VO50-40 ml, VOA, Tap (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
20	DO50-40 ml, VOA, H2PO4 (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
21	VO50 (8 vials per bag) 5015 (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
22	VO50 (8 vials per bag) 5015 (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
23	BP50-125 ml, Sterile Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
24	BP50-250 ml, Sterile Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
25	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
26	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
27	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
28	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
29	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
30	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
31	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
32	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
33	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
34	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
35	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
36	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
37	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
38	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
39	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
40	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
41	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
42	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
43	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
44	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
45	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
46	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
47	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
48	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
49	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
50	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
51	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
52	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
53	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
54	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
55	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
56	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
57	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
58	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
59	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
60	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
61	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
62	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
63	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
64	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
65	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
66	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
67	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
68	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
69	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
70	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
71	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
72	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
73	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
74	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
75	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
76	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
77	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
78	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
79	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
80	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
81	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
82	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
83	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
84	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
85	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
86	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
87	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
88	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
89	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
90	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
91	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
92	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
93	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
94	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
95	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
96	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
97	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
98	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
99	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/
100	BP50-250 ml, Plastic, (N/A - 14)	/	/	/	/	/	/	/	/	/	/	/	/

**pH Adjustment Log for Preserved Samples**

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

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

**CHAIN-OF-CUSTODY / Analytical Request Document**  
 This Chain-of-Custody is a legal document. All stated steps must be followed accurately.

Page 1 of 1

<b>Section A</b> Requester Name/Institution City/State	<b>Section B</b> Requester Contact Information Phone No. Email Address	<b>Section C</b> Requester Address City/State	<b>RECEIVING AGENCY</b> Agency Name City/State
Requester Name/Institution City/State	Requester Contact Information Phone No. Email Address	Requester Address City/State	Agency Name City/State
Requester Name/Institution City/State	Requester Contact Information Phone No. Email Address	Requester Address City/State	Agency Name City/State

Item #	Description	Quantity	Unit	Date	Time	Collector	Sample Type	Sample Temp at Collection	# of Containers	Analysis Test		Residual Chlorine (Y/N)	Requester Signature (Y/N)
										Method	Result		
1	<b>SAMPLE ID</b> No. of / A Sample Description												
1	NON-ALI	1	WT	8/18/21	1445	Corner Sam / Pass	Water Code		2	Chloride / Turbidity			
2	NON-ALI	1	WT	8/18/21	1455	Corner Sam / Pass	Water Code		2	Chloride / Turbidity			
3	NON-ALI	1	WT	8/18/21	1455	Corner Sam / Pass	Water Code		2	Chloride / Turbidity			
4	NON-ALI	1	WT	8/18/21	1455	Corner Sam / Pass	Water Code		2	Chloride / Turbidity			
5	NON-ALI	1	WT	8/18/21	1455	Corner Sam / Pass	Water Code		2	Chloride / Turbidity			
6	NON-ALI	1	WT	8/18/21	1455	Corner Sam / Pass	Water Code		2	Chloride / Turbidity			
7	NON-ALI	1	WT	8/18/21	1455	Corner Sam / Pass	Water Code		2	Chloride / Turbidity			
8	NON-ALI	1	WT	8/18/21	1455	Corner Sam / Pass	Water Code		2	Chloride / Turbidity			
9	NON-ALI	1	WT	8/18/21	1455	Corner Sam / Pass	Water Code		2	Chloride / Turbidity			
10	NON-ALI	1	WT	8/18/21	1455	Corner Sam / Pass	Water Code		2	Chloride / Turbidity			

**ADDITIONAL COMMENTS:**

Requester Name/Institution: Thomas Wood, Esq  
 Date: 8/18/21 Time: 1445  
 Collector: Corner Sam / Pass  
 Sample Type: Water Code  
 Sample Temp at Collection: 1455  
 # of Containers: 2  
 Analysis Test: Chloride / Turbidity  
 Residual Chlorine (Y/N): Y  
 Requester Signature (Y/N): Y

**LABORATORY USE ONLY:**

Requester Name/Institution: Thomas Wood, Esq  
 Date: 8/18/21 Time: 1445  
 Collector: Corner Sam / Pass  
 Sample Type: Water Code  
 Sample Temp at Collection: 1455  
 # of Containers: 2  
 Analysis Test: Chloride / Turbidity  
 Residual Chlorine (Y/N): Y  
 Requester Signature (Y/N): Y







Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-CS-003-Rev.07

Document Revised: October 28, 2020  
Page 1 of 2  
Issuing Authority:  
Pace Analytical Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
(Wood/Shell)

Client Name:

Project #:

WO#: 92555514

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Other

PR: NRG Due Date: 08/27/21  
CLIENT: GR-GR Power

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initial Person Examining Contents: 8/14/21 KRW

Packing Material:  Bubble Wrap  Bubble Bags  Ice  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

Date due to: THR 230

Type of Ice:

Dry  Blue  None

Cooler Temp:

4.3/24

Correction Factor:  
Add/Subtract (°C)

+0.1

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C):

4.4/55

USDA Regulated Soil?  No, water sample?

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

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

	Comments/Discrepancy		
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Samples Analyzed within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Short Hold Time Analysis (N72 for J)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
Batch Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Right Container Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
-Includes Date/Time/ID/Analysis Matrix:	W		
Headspace in VOA Vials (1.5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager (SCUR) Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager (RF) Review: \_\_\_\_\_

Date: \_\_\_\_\_







Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020  
Page 1 of 2  
Issuing Authority:  
Pace Carolina Quality Office

Laboratory receiving samples:

Ashville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Collection  
Upon Receipt

Client Name:

GA Power

Project #:

**WO#: 92555514**

PR: NRG

Due Date: 08/27/21

CLIENT: GA-GA Power

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initial Person Examining Contents: 8/17/21 KNW

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Present?

Yes  No  N/A

Thermometer:

Brand: JHECO

Type of Ice:  Dry  Blue  None

Cooler Temp:

4.5

Correction Factor:

Add/Subtract (°C)

+0.1

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C):

4.4

USDA Regulated Soil (  MOA, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check mark)?

Yes  No

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

					Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2	
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	3	
Batch Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4	<u>10 Day</u>
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7	
Development analysis: Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	8	
Sample Labels Match COCP?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9	
-Includes Date/Time/ID/Analysis Matrix:	<u>W</u>				
Headspace in MOA Vials (0.5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	10	
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time

Project Manager SCUR Review:

Date:

Project Manager SRF Review:

Date:







Document Name:  
Sample Condition Upon Receipt (SCUR)

Document Revised: October 28, 2020  
Page 1 of 2

Document No.:  
A-CAR-CI-033-Rev.07

Issuing Authority:  
Pace Carolina Quality Office

Laboratory receiving samples:

Ashville  Eden  Greenwood  Huntersville  Raleigh  Mechanicville  Atlanta  Kernersville

Single Condition  
Upon Receipt

Client Name:

*G.A. Review*

Project #:

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Piece  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *8/19/21*  
*CS*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  At Quota: *083* Type of Ice:  Wet  Blue  None

Cooler Temp: *1.8* 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): *1.8*

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, HI, or SC (check maps)?  Yes  No

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCUR Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRP Review: \_\_\_\_\_ Date: \_\_\_\_\_





Document Name:  
 Sample Condition Upon Receipt(SOUR)  
 Document No.:  
 T-CAR-CS-033-Rev.07

Document Revised: October 13, 2020  
 Page 2 of 2  
 Issuing Authority:  
 Pace Carolina Quality Office

\*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, DRD/ROIS (water) DOC, UHP  
 \*\* Bottom half of box is to list number of bottles

Project #

Preserv	BP00-125 ml. Plastic (Unpreserved) (N/A) (2-1)	BP00-250 ml. Plastic (Unpreserved) (N/A)	BP00-500 ml. Plastic (Unpreserved) (N/A)	BP10-1 liter Plastic (Unpreserved) (N/A)	BP05-125 ml. Plastic HDPE (per = 2) (2-1)	BP05-250 ml. plastic HDPE (per = 2)	BP05-125 ml. Plastic 24 Acetate & Acetic (N/A)	BP05-125 ml. Plastic HDPE (per = 12) (2-1)	BP05-1 liter Amber Unpreserved (N/A) (2-1)	AD05-1 liter Amber HD (per = 1)	AD05-250 ml. Amber Unpreserved (N/A) (2-1)	AD05-1 liter Amber HDPE (per = 2)	AD05-250 ml. Amber HDPE (per = 2)	AG05(AD05M) 250 ml. Amber HDPE (N/A) (2-1)	DO05-40 ml. VOA HD (N/A)	VO05-40 ml. VOA HD(200) (N/A)	VO05-40 ml. VOA HD (N/A)	DO05-40 ml. VOA HDPE (N/A)	VO05 (5 vials per 100-100) (N/A)	V105 (3 vials per 100-100) (N/A)	SP05-125 ml. Sample Plastic (N/A - 100)	SP10-250 ml. Sample Plastic (N/A - 500)	BP15-250 ml. Plastic (200-250) (2-1-1)	AD05-125 ml. Amber Unpreserved vials (N/A)	V105-10 ml. Scintillation vials (N/A)	DO05-40 ml. Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

**pH Adjustment Log for Preserved Samples**

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

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

<b>Section A</b> Request Date/Time: 04/18/21 Location: 404 River Project: 404/18/21		<b>Section B</b> Request Project Name: River C-200 Control Request Date/Time: 04/18/21 Request Location: 404/18/21		<b>Section C</b> Request Location: 404/18/21 Request Project Name: River C-200 Control Request Date/Time: 04/18/21	
Project Name: 404/18/21 Request Date/Time: 04/18/21		Project Name: 404/18/21 Request Date/Time: 04/18/21		Project Name: 404/18/21 Request Date/Time: 04/18/21	

ID	MATERIAL CODE	SAMPLE TYPE	ANALYSIS DATE		ANALYSIS TIME	ANALYSIS METHOD	ANALYSIS RESULT	ANALYSIS UNIT	ANALYSIS RANGE	ANALYSIS TOLERANCE	ANALYSIS COMMENTS
			DATE	TIME							
1	404-08	WT-0	04/18/21	09:15	1500	Gravimetric	0.0000	g	0.0000 - 0.0000	±0.0001	
2	404-12	WT-0	04/18/21	11:45	1500	Gravimetric	0.0000	g	0.0000 - 0.0000	±0.0001	
3	404-11	WT-0	04/18/21	12:30	1500	Gravimetric	0.0000	g	0.0000 - 0.0000	±0.0001	
4											
5											
6											
7											
8											
9											
10											
11											
12											

**ADDITIONAL COMMENTS:**

Request Date/Time: 04/18/21  
 Request Location: 404/18/21  
 Request Project Name: River C-200 Control  
 Request Date/Time: 04/18/21  
 Request Location: 404/18/21

**LABORATORY NAME AND LOCATION:**

Request Date/Time: 04/18/21  
 Request Location: 404/18/21  
 Request Project Name: River C-200 Control  
 Request Date/Time: 04/18/21  
 Request Location: 404/18/21

LABORATORY NAME AND LOCATION: 404/18/21  
 Request Date/Time: 04/18/21  
 Request Location: 404/18/21  
 Request Project Name: River C-200 Control  
 Request Date/Time: 04/18/21  
 Request Location: 404/18/21

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

**Sample Condition Upon Receipt**

Client Name: GA Howell Project #:

Courier:  Fed Ex  UPS  USPS  Other  
 Commercial  Private  Truck

Custody Seal Present?  Yes  No Seal Intact?  Yes  No

Pooling Material:  Bubble Wrap  Bubble Bags  None  Other  
 Thermometer:  IR Gun ID: 053 Type of Ice:  Dry  Snow  None

Cooler Temp: 4.4 Correction Factor: Add/Subtract (°C) ±0

Cooler Temp Corrected (°C): 4.4

USDA Regulated Soil?  N/A, water sample  
 Did samples originate in a quarantine zone within the United States (CA, NY or SC check first)?  Yes  No

Project #:

Date Initial Person Examining Contents: MLT 8/20/13

Biological Tissue Present?  
 Yes  No  N/A

Temp should be above freezing to 5°C  
 Temp below of some criteria. Samples or cooling packs had begun

Did samples originate from a foreign country (International, including Mexico and Puerto Rico)?  Yes  No  
 (Complete for International)

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2
Short Hold Time Analysis (x70 hr.?)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	3
Batch Turn Around Time Requested?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	4
S. Pallet Volume?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	5
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6
Phase Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7
Biological analysis, Samples Field P Bagged?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	8
Sample Labels Match CDC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9
Includes Date/Time/ID Analysis Matrix	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	10
Headspace in YDA Vials (x5-Govs)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	12
Trip Blank Custody Seal Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13

COMMENTS/SAMPLE DISCREPANCY: \_\_\_\_\_ Final Data Received?  Yes  No

CLIENT NOTIFICATION/RESOLUTION: \_\_\_\_\_ Lot ID of split containers: \_\_\_\_\_

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCUR Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager IRI Review: \_\_\_\_\_ Date: \_\_\_\_\_



Document Name:  
Sample Condition Upon Receipt (SCUR)

Document Revised: October 28, 2020  
Page 2 of 2

Document No.:  
F-CAR-CS-003-Rev.07

Issuing Authority:  
Pace Carolina Quality Office

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

Project #

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Exceptions: VOA, Coliform, TOC, Oil and Grease, DRQ/ROD (water) DOC, UHg

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

Item #	Description	1	2	3	4	5	6	7	8	9	10	11	12
BP4A-125 ml Plastic Unpreserved (N/A) (C1)		/	/	/	/	/	/	/	/	/	/	/	/
BP4B-250 ml Plastic Unpreserved (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
BP5A-500 ml Plastic Unpreserved (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
BP5B-1 liter Plastic Unpreserved (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
BP4C-125 ml Plastic H2SO4 (pH < 2) (C1)		/	/	/	/	/	/	/	/	/	/	/	/
BP5C-250 ml plastic H2SO4 (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
BP4D-125 ml Plastic 2% Acetic Acid & NaOH (C1)		/	/	/	/	/	/	/	/	/	/	/	/
BP4E-125 ml Plastic NaOH (pH > 12) (C1)		/	/	/	/	/	/	/	/	/	/	/	/
BP4F-1 liter acid-washed Glass jar Unpreserved		/	/	/	/	/	/	/	/	/	/	/	/
AG11A-1 liter Amber Unpreserved (N/A) (C1)		/	/	/	/	/	/	/	/	/	/	/	/
AG11B-1 liter Amber HCl (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
AG11C-250 ml Amber Unpreserved (N/A) (C1)		/	/	/	/	/	/	/	/	/	/	/	/
AG11D-1 liter Amber H2SO4 (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
AG11E-250 ml Amber H2SO4 (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
AG11F (DQMS) 250 ml Amber H2SO4 (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
DO200-40 ml VOA HCl (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
VO201-40 ml VOA H2SO4 (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
VO202-40 ml VOA Tap (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
DO203-40 ml VOA H2PO4 (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
VO204 (8 vials per bag) 100-1000 ml (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
VO205 (2 vials per bag) 100-1000 ml (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
SP201-125 ml Sterile Plastic (N/A) - 1000		/	/	/	/	/	/	/	/	/	/	/	/
SP202-250 ml Sterile Plastic (N/A) - 1000		/	/	/	/	/	/	/	/	/	/	/	/
BP11A-250 ml Plastic (pH < 2) (N/A) (C1)		/	/	/	/	/	/	/	/	/	/	/	/
AG200-100 ml Amber Unpreserved vials (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
VO206-20 ml, Isolation vials (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
DO206-40 ml Amber Unpreserved vials (N/A)		/	/	/	/	/	/	/	/	/	/	/	/

**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 Division of Environmental and Natural Resources (DENR) as Out of Field, incorrect preservative, out of temp, incorrect containers.





September 29, 2021

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: HAMMOND ASH POND #3 RADS  
Pace Project No.: 92555510

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between August 13, 2021 and August 20, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Christine Hug, Geosyntec Consultants, Inc.  
Kristen Jurinko  
Thomas Kessler, Geosyntec  
Whitney Law, Geosyntec Consultants  
Noelia Muskus, Geosyntec Consultants  
Ms. Lauren Petty, Southern Company  
Nardos Tilahun, GeoSyntec  
Dawit Yifru, Geosyntec Consultants, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: HAMMOND ASH POND #3 RADS  
Pace Project No.: 92555510

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### Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 391  
Kansas/TNI Certification #: E-10358  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
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 #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
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 #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
Vermont Dept. of Health: ID# VT-0282  
Virgin Island/PADEP Certification  
Virginia/VELAP Certification #: 9526  
Washington Certification #: C868  
West Virginia DEP Certification #: 143  
West Virginia DHHR Certification #: 9964C  
Wisconsin Approve List for Rad  
Wyoming Certification #: 8TMS-L

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: HAMMOND ASH POND #3 RADS  
Pace Project No.: 92555510

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92555510001	HGWA-1	Water	08/11/21 17:00	08/13/21 14:55
92555510002	HGWA-43D	Water	08/11/21 17:03	08/13/21 14:55
92555510003	HGWA-2	Water	08/12/21 15:35	08/13/21 14:55
92555510004	HGWA-3	Water	08/12/21 10:17	08/13/21 14:55
92555510005	HGWA-45D	Water	08/13/21 12:07	08/16/21 13:25
92555510006	HGWA-122	Water	08/13/21 10:22	08/16/21 13:25
92555510007	HGWA-44D	Water	08/13/21 11:25	08/16/21 13:25
92555924001	HGWC-121A	Water	08/16/21 16:10	08/17/21 11:25
92555924002	HGWC-120	Water	08/16/21 12:15	08/17/21 11:25
92555924003	HGWC-124	Water	08/16/21 10:09	08/17/21 11:25
92555924004	MW-46D	Water	08/16/21 14:36	08/17/21 11:25
92555924005	MW-39	Water	08/18/21 09:10	08/19/21 12:40
92555924006	MW-32	Water	08/18/21 11:45	08/19/21 12:40
92555924007	MW-41	Water	08/18/21 13:20	08/19/21 12:40
92555924008	HGWC-126	Water	08/19/21 09:45	08/20/21 12:15
92555924009	HGWC-125	Water	08/19/21 11:14	08/20/21 12:15
92555924010	DUP-3	Water	08/19/21 00:00	08/20/21 12:15
92555924011	EB-3	Water	08/19/21 12:05	08/20/21 12:15
92555924012	FB-3	Water	08/19/21 12:00	08/20/21 12:15

### REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 9255510

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92555510001	HGWA-1	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555510002	HGWA-43D	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555510003	HGWA-2	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555510004	HGWA-3	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555510005	HGWA-45D	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555510006	HGWA-122	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555510007	HGWA-44D	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555924001	HGWC-121A	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555924002	HGWC-120	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555924003	HGWC-124	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555924004	MW-46D	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92555924005	MW-39	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92555924006	MW-32	EPA 9315	LAL	1	PASI-PA

**REPORT OF LABORATORY ANALYSIS**

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### SAMPLE ANALYTE COUNT

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 9255510

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92555924007	MW-41	EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92555924008	HGWC-126	Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92555924009	HGWC-125	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
92555924010	DUP-3	EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92555924011	EB-3	Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92555924012	FB-3	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
		EPA 9315	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92555510001</b>	<b>HGWA-1</b>					
EPA 9315	Radium-226	0.115 ± 0.118 (0.222)	pCi/L		09/17/21 07:27	
EPA 9320	Radium-228	-0.0659 ± 0.329 (0.785) C:88% T:NA	pCi/L		09/03/21 14:23	
Total Radium Calculation	Total Radium	0.115 ± 0.447 (1.01)	pCi/L		09/17/21 16:27	
<b>92555510002</b>	<b>HGWA-43D</b>					
EPA 9315	Radium-226	0.101 ± 0.153 (0.337)	pCi/L		09/16/21 08:31	
EPA 9320	Radium-228	0.293 ± 0.366 (0.775) C:82% T:NA	pCi/L		09/03/21 14:23	
Total Radium Calculation	Total Radium	0.394 ± 0.519 (1.11)	pCi/L		09/17/21 16:27	
<b>92555510003</b>	<b>HGWA-2</b>					
EPA 9315	Radium-226	0.283 ± 0.170 (0.239)	pCi/L		09/17/21 07:27	
EPA 9320	Radium-228	0.463 ± 0.383 (0.759) C:80% T:NA	pCi/L		09/03/21 14:23	
Total Radium Calculation	Total Radium	0.746 ± 0.553 (0.998)	pCi/L		09/17/21 16:27	
<b>92555510004</b>	<b>HGWA-3</b>					
EPA 9315	Radium-226	0.179 ± 0.153 (0.265)	pCi/L		09/16/21 08:31	
EPA 9320	Radium-228	0.319 ± 0.393 (0.831) C:79% T:NA	pCi/L		09/03/21 14:23	
Total Radium Calculation	Total Radium	0.498 ± 0.546 (1.10)	pCi/L		09/17/21 16:27	

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### SUMMARY OF DETECTION

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92555510005</b>	<b>HGWA-45D</b>					
EPA 9315	Radium-226	0.319 ± 0.198 (0.285) C:73% T:NA	pCi/L		09/16/21 08:30	
EPA 9320	Radium-228	0.878 ± 0.486 (0.892) C:67% T:85%	pCi/L		09/03/21 11:26	
Total Radium Calculation	Total Radium	1.20 ± 0.684 (1.18)	pCi/L		09/17/21 16:27	
<b>92555510006</b>	<b>HGWA-122</b>					
EPA 9315	Radium-226	0.0404 ± 0.101 (0.245) C:84% T:NA	pCi/L		09/16/21 08:30	
EPA 9320	Radium-228	0.874 ± 0.487 (0.889) C:66% T:82%	pCi/L		09/03/21 11:26	
Total Radium Calculation	Total Radium	0.914 ± 0.588 (1.13)	pCi/L		09/17/21 16:27	
<b>92555510007</b>	<b>HGWA-44D</b>					
EPA 9315	Radium-226	0.188 ± 0.150 (0.238) C:74% T:NA	pCi/L		09/16/21 08:30	
EPA 9320	Radium-228	0.771 ± 0.451 (0.843) C:67% T:89%	pCi/L		09/03/21 11:26	
Total Radium Calculation	Total Radium	0.959 ± 0.601 (1.08)	pCi/L		09/17/21 16:27	
<b>92555924001</b>	<b>HGWC-121A</b>					
EPA 9315	Radium-226	0.0928 ± 0.122 (0.252) C:79% T:NA	pCi/L		09/16/21 14:23	
EPA 9320	Radium-228	0.0996 ± 0.364 (0.825) C:61% T:91%	pCi/L		09/07/21 14:31	
Total Radium Calculation	Total Radium	0.192 ± 0.486 (1.08)	pCi/L		09/17/21 16:29	

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### SUMMARY OF DETECTION

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92555924002</b>	<b>HGWC-120</b>					
EPA 9315	Radium-226	0.153 ± 0.139 (0.246)	pCi/L		09/16/21 14:23	
EPA 9320	Radium-228	C:77% T:NA 1.10 ± 0.503 (0.836)	pCi/L		09/07/21 14:31	
Total Radium Calculation	Total Radium	C:61% T:91% 1.25 ± 0.642 (1.08)	pCi/L		09/17/21 16:29	
<b>92555924003</b>	<b>HGWC-124</b>					
EPA 9315	Radium-226	0.240 ± 0.174 (0.300)	pCi/L		09/16/21 14:24	
EPA 9320	Radium-228	C:87% T:NA 0.494 ± 0.402 (0.797)	pCi/L		09/07/21 14:31	
Total Radium Calculation	Total Radium	C:67% T:82% 0.734 ± 0.576 (1.10)	pCi/L		09/17/21 16:29	
<b>92555924004</b>	<b>MW-46D</b>					
EPA 9315	Radium-226	0.128 ± 0.134 (0.262)	pCi/L		09/16/21 14:24	
EPA 9320	Radium-228	C:91% T:NA 0.497 ± 0.348 (0.657)	pCi/L		09/07/21 14:31	
Total Radium Calculation	Total Radium	C:66% T:88% 0.625 ± 0.482 (0.919)	pCi/L		09/17/21 16:29	
<b>92555924005</b>	<b>MW-39</b>					
EPA 9315	Radium-226	0.185 ± 0.137 (0.222)	pCi/L		09/20/21 07:38	
EPA 9320	Radium-228	C:93% T:NA 0.434 ± 0.375 (0.752)	pCi/L		09/16/21 14:11	
Total Radium Calculation	Total Radium	C:68% T:90% 0.619 ± 0.512 (0.974)	pCi/L		09/21/21 16:13	

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### SUMMARY OF DETECTION

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92555924006</b>	<b>MW-32</b>					
EPA 9315	Radium-226	0.409 ± 0.186 (0.218)	pCi/L		09/20/21 07:39	
EPA 9320	Radium-228	C:94% T:NA 0.735 ± 0.395 (0.682)	pCi/L		09/16/21 14:11	
Total Radium Calculation	Total Radium	C:68% T:86% 1.14 ± 0.581 (0.900)	pCi/L		09/21/21 16:13	
<b>92555924007</b>	<b>MW-41</b>					
EPA 9315	Radium-226	0.240 ± 0.156 (0.256)	pCi/L		09/20/21 07:39	
EPA 9320	Radium-228	C:99% T:NA 0.940 ± 0.459 (0.778)	pCi/L		09/16/21 14:11	
Total Radium Calculation	Total Radium	C:67% T:86% 1.18 ± 0.615 (1.03)	pCi/L		09/21/21 16:13	
<b>92555924008</b>	<b>HGWC-126</b>					
EPA 9315	Radium-226	0.709 ± 0.251 (0.244)	pCi/L		09/20/21 07:39	
EPA 9320	Radium-228	C:94% T:NA 0.404 ± 0.369 (0.749)	pCi/L		09/16/21 14:11	
Total Radium Calculation	Total Radium	C:73% T:87% 1.11 ± 0.620 (0.993)	pCi/L		09/21/21 16:13	
<b>92555924009</b>	<b>HGWC-125</b>					
EPA 9315	Radium-226	0.192 ± 0.138 (0.226)	pCi/L		09/20/21 07:39	
EPA 9320	Radium-228	C:94% T:NA 0.529 ± 0.409 (0.809)	pCi/L		09/16/21 14:11	
Total Radium Calculation	Total Radium	C:69% T:92% 0.721 ± 0.547 (1.04)	pCi/L		09/21/21 16:13	

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### SUMMARY OF DETECTION

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92555924010</b>	<b>DUP-3</b>					
EPA 9315	Radium-226	0.224 ± 0.172 (0.312)	pCi/L		09/20/21 07:39	
EPA 9320	Radium-228	C:96% T:NA 0.591 ± 0.407 (0.777)	pCi/L		09/16/21 14:11	
Total Radium Calculation	Total Radium	C:73% T:81% 0.815 ± 0.579 (1.09)	pCi/L		09/21/21 16:13	
<b>92555924011</b>	<b>EB-3</b>					
EPA 9315	Radium-226	0.119 ± 0.130 (0.261)	pCi/L		09/20/21 07:39	
EPA 9320	Radium-228	C:98% T:NA 0.310 ± 0.426 (0.913)	pCi/L		09/16/21 14:11	
Total Radium Calculation	Total Radium	C:66% T:86% 0.429 ± 0.556 (1.17)	pCi/L		09/21/21 16:29	
<b>92555924012</b>	<b>FB-3</b>					
EPA 9315	Radium-226	0.170 ± 0.138 (0.242)	pCi/L		09/20/21 07:39	
EPA 9320	Radium-228	C:97% T:NA 0.218 ± 0.373 (0.814)	pCi/L		09/16/21 14:11	
Total Radium Calculation	Total Radium	C:70% T:79% 0.388 ± 0.511 (1.06)	pCi/L		09/21/21 16:29	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWA-1</b> <b>Lab ID: 92555510001</b> Collected: 08/11/21 17:00      Received: 08/13/21 14:55      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.115 ± 0.118 (0.222)</b> <b>C:88% T:NA</b>	pCi/L	09/17/21 07:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.0659 ± 0.329 (0.785)</b> <b>C:71% T:87%</b>	pCi/L	09/03/21 14:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.115 ± 0.447 (1.01)</b>	pCi/L	09/17/21 16:27	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWA-43D</b> <b>Lab ID: 92555510002</b> Collected: 08/11/21 17:03      Received: 08/13/21 14:55      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.101 ± 0.153 (0.337)</b> <b>C:82% T:NA</b>	pCi/L	09/16/21 08:31	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.293 ± 0.366 (0.775)</b> <b>C:71% T:87%</b>	pCi/L	09/03/21 14:23	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.394 ± 0.519 (1.11)</b>	pCi/L	09/17/21 16:27	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWA-2</b> <b>Lab ID: 92555510003</b> Collected: 08/12/21 15:35      Received: 08/13/21 14:55      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.283 ± 0.170 (0.239)</b> <b>C:80% T:NA</b>	pCi/L	09/17/21 07:27	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.463 ± 0.383 (0.759)</b> <b>C:80% T:81%</b>	pCi/L	09/03/21 14:23	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.746 ± 0.553 (0.998)</b>	pCi/L	09/17/21 16:27	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

**Sample: HGWA-3**      **Lab ID: 92555510004**      Collected: 08/12/21 10:17      Received: 08/13/21 14:55      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	<b>0.179 ± 0.153 (0.265)</b> <b>C:79% T:NA</b>	pCi/L	09/16/21 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.319 ± 0.393 (0.831)</b> <b>C:75% T:82%</b>	pCi/L	09/03/21 14:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.498 ± 0.546 (1.10)</b>	pCi/L	09/17/21 16:27	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWA-45D</b> <b>Lab ID: 92555510005</b> Collected: 08/13/21 12:07      Received: 08/16/21 13:25      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.319 ± 0.198 (0.285)</b> <b>C:73% T:NA</b>	pCi/L	09/16/21 08:30	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.878 ± 0.486 (0.892)</b> <b>C:67% T:85%</b>	pCi/L	09/03/21 11:26	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.20 ± 0.684 (1.18)</b>	pCi/L	09/17/21 16:27	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWA-122</b> <b>Lab ID: 92555510006</b> Collected: 08/13/21 10:22      Received: 08/16/21 13:25      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0404 ± 0.101 (0.245)</b> <b>C:84% T:NA</b>	pCi/L	09/16/21 08:30	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.874 ± 0.487 (0.889)</b> <b>C:66% T:82%</b>	pCi/L	09/03/21 11:26	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.914 ± 0.588 (1.13)</b>	pCi/L	09/17/21 16:27	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWA-44D</b> <b>Lab ID: 92555510007</b> Collected: 08/13/21 11:25      Received: 08/16/21 13:25      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.188 ± 0.150 (0.238)</b> <b>C:74% T:NA</b>	pCi/L	09/16/21 08:30	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.771 ± 0.451 (0.843)</b> <b>C:67% T:89%</b>	pCi/L	09/03/21 11:26	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.959 ± 0.601 (1.08)</b>	pCi/L	09/17/21 16:27	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWC-121A</b> <b>Lab ID: 92555924001</b> Collected: 08/16/21 16:10      Received: 08/17/21 11:25      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0928 ± 0.122 (0.252)</b> <b>C:79% T:NA</b>	pCi/L	09/16/21 14:23	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.0996 ± 0.364 (0.825)</b> <b>C:61% T:91%</b>	pCi/L	09/07/21 14:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.192 ± 0.486 (1.08)</b>	pCi/L	09/17/21 16:29	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWC-120</b> <b>Lab ID: 92555924002</b> Collected: 08/16/21 12:15      Received: 08/17/21 11:25      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.153 ± 0.139 (0.246)</b> <b>C:77% T:NA</b>	pCi/L	09/16/21 14:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.10 ± 0.503 (0.836)</b> <b>C:61% T:91%</b>	pCi/L	09/07/21 14:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.25 ± 0.642 (1.08)</b>	pCi/L	09/17/21 16:29	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWC-124</b> <b>Lab ID: 92555924003</b> Collected: 08/16/21 10:09      Received: 08/17/21 11:25      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.240 ± 0.174 (0.300)</b> <b>C:87% T:NA</b>	pCi/L	09/16/21 14:24	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.494 ± 0.402 (0.797)</b> <b>C:67% T:82%</b>	pCi/L	09/07/21 14:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.734 ± 0.576 (1.10)</b>	pCi/L	09/17/21 16:29	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: MW-46D</b> <b>Lab ID: 92555924004</b> Collected: 08/16/21 14:36      Received: 08/17/21 11:25      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.128 ± 0.134 (0.262)</b> <b>C:91% T:NA</b>	pCi/L	09/16/21 14:24	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.497 ± 0.348 (0.657)</b> <b>C:66% T:88%</b>	pCi/L	09/07/21 14:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.625 ± 0.482 (0.919)</b>	pCi/L	09/17/21 16:29	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.185 ± 0.137 (0.222)</b> <b>C:93% T:NA</b>	pCi/L	09/20/21 07:38	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.434 ± 0.375 (0.752)</b> <b>C:68% T:90%</b>	pCi/L	09/16/21 14:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.619 ± 0.512 (0.974)</b>	pCi/L	09/21/21 16:13	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: MW-32</b> <b>Lab ID: 92555924006</b> Collected: 08/18/21 11:45      Received: 08/19/21 12:40      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.409 ± 0.186 (0.218)</b> <b>C:94% T:NA</b>	pCi/L	09/20/21 07:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.735 ± 0.395 (0.682)</b> <b>C:68% T:86%</b>	pCi/L	09/16/21 14:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.14 ± 0.581 (0.900)</b>	pCi/L	09/21/21 16:13	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

**Sample: MW-41**      **Lab ID: 92555924007**      Collected: 08/18/21 13:20      Received: 08/19/21 12:40      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	<b>0.240 ± 0.156 (0.256)</b> <b>C:99% T:NA</b>	pCi/L	09/20/21 07:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.940 ± 0.459 (0.778)</b> <b>C:67% T:86%</b>	pCi/L	09/16/21 14:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.18 ± 0.615 (1.03)</b>	pCi/L	09/21/21 16:13	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWC-126</b> <b>Lab ID: 92555924008</b> Collected: 08/19/21 09:45      Received: 08/20/21 12:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.709 ± 0.251 (0.244)</b> <b>C:94% T:NA</b>	pCi/L	09/20/21 07:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.404 ± 0.369 (0.749)</b> <b>C:73% T:87%</b>	pCi/L	09/16/21 14:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.11 ± 0.620 (0.993)</b>	pCi/L	09/21/21 16:13	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWC-125</b> <b>Lab ID: 92555924009</b> Collected: 08/19/21 11:14      Received: 08/20/21 12:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.192 ± 0.138 (0.226)</b> <b>C:94% T:NA</b>	pCi/L	09/20/21 07:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.529 ± 0.409 (0.809)</b> <b>C:69% T:92%</b>	pCi/L	09/16/21 14:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.721 ± 0.547 (1.04)</b>	pCi/L	09/21/21 16:13	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: DUP-3</b> <b>Lab ID: 92555924010</b> Collected: 08/19/21 00:00      Received: 08/20/21 12:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.224 ± 0.172 (0.312)</b> <b>C:96% T:NA</b>	pCi/L	09/20/21 07:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.591 ± 0.407 (0.777)</b> <b>C:73% T:81%</b>	pCi/L	09/16/21 14:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.815 ± 0.579 (1.09)</b>	pCi/L	09/21/21 16:13	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: EB-3</b> <b>Lab ID: 92555924011</b> Collected: 08/19/21 12:05      Received: 08/20/21 12:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.119 ± 0.130 (0.261)</b> <b>C:98% T:NA</b>	pCi/L	09/20/21 07:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.310 ± 0.426 (0.913)</b> <b>C:66% T:86%</b>	pCi/L	09/16/21 14:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.429 ± 0.556 (1.17)</b>	pCi/L	09/21/21 16:29	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

**Sample: FB-3**      **Lab ID: 92555924012**      Collected: 08/19/21 12:00      Received: 08/20/21 12:15      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	<b>0.170 ± 0.138 (0.242)</b> <b>C:97% T:NA</b>	pCi/L	09/20/21 07:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.218 ± 0.373 (0.814)</b> <b>C:70% T:79%</b>	pCi/L	09/16/21 14:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.388 ± 0.511 (1.06)</b>	pCi/L	09/21/21 16:29	7440-14-4	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

QC Batch: 463298

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92555510005, 92555510006, 92555510007

METHOD BLANK: 2236861

Matrix: Water

Associated Lab Samples: 92555510005, 92555510006, 92555510007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.204 ± 0.329 (0.713) C:63% T:88%	pCi/L	09/03/21 11:28	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

QC Batch: 463428

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92555924001, 92555924002, 92555924003, 92555924004

METHOD BLANK: 2237365

Matrix: Water

Associated Lab Samples: 92555924001, 92555924002, 92555924003, 92555924004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.109 ± 0.124 (0.437) C:58% T:NA	pCi/L	09/16/21 14:23	

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**QUALITY CONTROL - RADIOCHEMISTRY**

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

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QC Batch:	463426	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92555510001, 92555510002, 92555510003, 92555510004, 92555510005, 92555510006, 92555510007

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METHOD BLANK: 2237360 Matrix: Water

Associated Lab Samples: 92555510001, 92555510002, 92555510003, 92555510004, 92555510005, 92555510006, 92555510007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.250 ± 0.184 (0.307) C:77% T:NA	pCi/L	09/16/21 08:31	

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**QUALITY CONTROL - RADIOCHEMISTRY**

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

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QC Batch:	463380	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92555924005, 92555924006, 92555924007, 92555924008, 92555924009, 92555924010, 92555924011, 92555924012

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METHOD BLANK: 2237271 Matrix: Water

Associated Lab Samples: 92555924005, 92555924006, 92555924007, 92555924008, 92555924009, 92555924010, 92555924011, 92555924012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.141 ± 0.135 (0.261) C:99% T:NA	pCi/L	09/20/21 07:37	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

QC Batch: 461961

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92555510001, 92555510002, 92555510003, 92555510004

METHOD BLANK: 2230398

Matrix: Water

Associated Lab Samples: 92555510001, 92555510002, 92555510003, 92555510004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.353 ± 0.350 (0.718) C:73% T:86%	pCi/L	09/03/21 14:24	

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**QUALITY CONTROL - RADIOCHEMISTRY**

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

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QC Batch:	463379	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92555924005, 92555924006, 92555924007, 92555924008, 92555924009, 92555924010, 92555924011, 92555924012

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METHOD BLANK: 2237270 Matrix: Water

Associated Lab Samples: 92555924005, 92555924006, 92555924007, 92555924008, 92555924009, 92555924010, 92555924011, 92555924012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.257 ± 0.278 (0.577) C:77% T:86%	pCi/L	09/16/21 11:10	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

QC Batch:	461962	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92555924001, 92555924002, 92555924003, 92555924004

METHOD BLANK: 2230399 Matrix: Water

Associated Lab Samples: 92555924001, 92555924002, 92555924003, 92555924004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.385 ± 0.334 (0.668) C:68% T:94%	pCi/L	09/07/21 11:39	

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## QUALIFIERS

Project: HAMMOND ASH POND #3 RADS  
Pace Project No.: 92555510

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### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

Act - Activity

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

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: HAMMOND ASH POND #3 RADS  
 Pace Project No.: 92555510

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92555510001	HGWA-1	EPA 9315	463426		
92555510002	HGWA-43D	EPA 9315	463426		
92555510003	HGWA-2	EPA 9315	463426		
92555510004	HGWA-3	EPA 9315	463426		
92555510005	HGWA-45D	EPA 9315	463426		
92555510006	HGWA-122	EPA 9315	463426		
92555510007	HGWA-44D	EPA 9315	463426		
92555924001	HGWC-121A	EPA 9315	463428		
92555924002	HGWC-120	EPA 9315	463428		
92555924003	HGWC-124	EPA 9315	463428		
92555924004	MW-46D	EPA 9315	463428		
92555924005	MW-39	EPA 9315	463380		
92555924006	MW-32	EPA 9315	463380		
92555924007	MW-41	EPA 9315	463380		
92555924008	HGWC-126	EPA 9315	463380		
92555924009	HGWC-125	EPA 9315	463380		
92555924010	DUP-3	EPA 9315	463380		
92555924011	EB-3	EPA 9315	463380		
92555924012	FB-3	EPA 9315	463380		
92555510001	HGWA-1	EPA 9320	461961		
92555510002	HGWA-43D	EPA 9320	461961		
92555510003	HGWA-2	EPA 9320	461961		
92555510004	HGWA-3	EPA 9320	461961		
92555510005	HGWA-45D	EPA 9320	463298		
92555510006	HGWA-122	EPA 9320	463298		
92555510007	HGWA-44D	EPA 9320	463298		
92555924001	HGWC-121A	EPA 9320	461962		
92555924002	HGWC-120	EPA 9320	461962		
92555924003	HGWC-124	EPA 9320	461962		
92555924004	MW-46D	EPA 9320	461962		
92555924005	MW-39	EPA 9320	463379		
92555924006	MW-32	EPA 9320	463379		
92555924007	MW-41	EPA 9320	463379		
92555924008	HGWC-126	EPA 9320	463379		
92555924009	HGWC-125	EPA 9320	463379		
92555924010	DUP-3	EPA 9320	463379		
92555924011	EB-3	EPA 9320	463379		
92555924012	FB-3	EPA 9320	463379		
92555510001	HGWA-1	Total Radium Calculation	464617		
92555510002	HGWA-43D	Total Radium Calculation	464617		
92555510003	HGWA-2	Total Radium Calculation	464617		
92555510004	HGWA-3	Total Radium Calculation	464617		
92555510005	HGWA-45D	Total Radium Calculation	464617		
92555510006	HGWA-122	Total Radium Calculation	464617		
92555510007	HGWA-44D	Total Radium Calculation	464617		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND ASH POND #3 RADS

Pace Project No.: 92555510

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92555924001	HGWC-121A	Total Radium Calculation	464618		
92555924002	HGWC-120	Total Radium Calculation	464618		
92555924003	HGWC-124	Total Radium Calculation	464618		
92555924004	MW-46D	Total Radium Calculation	464618		
92555924005	MW-39	Total Radium Calculation	464961		
92555924006	MW-32	Total Radium Calculation	464961		
92555924007	MW-41	Total Radium Calculation	464961		
92555924008	HGWC-126	Total Radium Calculation	464961		
92555924009	HGWC-125	Total Radium Calculation	464961		
92555924010	DUP-3	Total Radium Calculation	464961		
92555924011	EB-3	Total Radium Calculation	464972		
92555924012	FB-3	Total Radium Calculation	464972		

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Document Name:  
**Sample Condition Upon Receipt (SCURF)**  
 Document No.:  
**PCAR-CS-033-Rev.07**

Document Revised: October 18, 2020  
 Page 1 of 2  
 Issuing Authority:  
 Pace Carolinas Quality Office

**Laboratory receiving samples:**

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

**WO#: 9255510**



Date/Initials Person Examining Contents: 9/3/20 KPC

**Sample Condition Upon Receipt**

Client Name:

CPD POWER

Project #:

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Other  Other

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer:  In Use TH2083 Type of Ice:  Clear  Blue  None

Biological Tissue Frozen?

Yes  No  N/A

Cooler Temp: 1.3 Correction Factor: Add/Subtract (°C) 0

Temp should be above freezing to 4°C

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

Cooler Temp Corrected (°C): 1.3

USDA Regulated Soil ( Yes,  No, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check map)?

Yes  No

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

Comments/Discrepancy

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



Document Name:  
 Sample Collection Upon Receipt (SCUR)  
 Document No.:  
 FICAR-03-033-Rev 07

Document Revised: October 28, 2020  
 Page 1 of 2  
 Issuing Authority:  
 Providence Quality Office

\*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, GAO/MSDS (water) BOC, Lling

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

Project #

**WO# : 92555510**

PR: NRC

Due Date: 09/03/21

CLIENT: CA-CA Power

Bottle	Material	1	2	3	4	5	6	7	8	9	10	11	12
BP40-125 ml. Plastic Unpreserved (N/A) (D-1)		/	/	/	/	/	/	/	/	/	/	/	/
BP100-250 ml. Plastic Unpreserved (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
BP200-500 ml. Plastic Unpreserved (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
BP100-1 liter Plastic Unpreserved (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
BP40-125 ml. Plastic H2SO4 (pH < 2) (D-1)		/	/	/	/	/	/	/	/	/	/	/	/
BP100-250 ml. plastic HNO3 (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
BP40-125 ml. Plastic 2N Acetate & NaOH (D)		/	/	/	/	/	/	/	/	/	/	/	/
BP40-125 ml. Plastic NaOH (pH > 12) (D-1)		/	/	/	/	/	/	/	/	/	/	/	/
Weight-White mouthed Glass jar Unpreserved		/	/	/	/	/	/	/	/	/	/	/	/
AG10-1 liter Amber Unpreserved (N/A) (D-1)		/	/	/	/	/	/	/	/	/	/	/	/
AG100-1 liter Amber HCl (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
AG200-250 ml. Amber Unpreserved (N/A) (D-1)		/	/	/	/	/	/	/	/	/	/	/	/
AG10-1 liter Amber H2SO4 (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
AG100-250 ml. Amber H2SO4 (pH < 2)		/	/	/	/	/	/	/	/	/	/	/	/
AG100(200ml)-250 ml. Amber HNO3 (N/A) (D-1)		/	/	/	/	/	/	/	/	/	/	/	/
GC000-40 ml. VOA HCl (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
V001T-40 ml. VOA Na2S2O3 (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
V000-40 ml. VOA Long (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
B000-40 ml. VOA H2PO4 (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
V000 (6 vials per kit) V000 kit (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
V000 (3 vials per kit) V000 kit (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
BP10-125 ml. Sterile Plastic (N/A - 10)		/	/	/	/	/	/	/	/	/	/	/	/
BP20-250 ml. Sterile Plastic (N/A - 10)		/	/	/	/	/	/	/	/	/	/	/	/
BP100-250 ml. Plastic (N/A) (3, 5, 6, 7)		/	/	/	/	/	/	/	/	/	/	/	/
AG100-500 ml. Amber Unpreserved vials (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
V000-20 ml. Substrate vials (N/A)		/	/	/	/	/	/	/	/	/	/	/	/
GC000-40 ml. Amber Unpreserved vials (N/A)		/	/	/	/	/	/	/	/	/	/	/	/

V.P. K. H. G. B.P.M.

**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 DPHH Certification Office (i.e. Out of field, incorrect preservative, out of temp, incorrect containers).









Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-CS-003-Rev.07

Document Revised: October 28, 2020  
Page 1 of 2  
Issuing Authority:  
Pace Carolina Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition:  
SCUR (SCUR)

Client Name:

Project #:

WO#: 92555510

Carrier:  
 Commercial

GA Power  
 Fed Ex  UPS  USPS  Other: \_\_\_\_\_  
 Direct

PR: NPG Due Date: 08/03/21  
CLIENT: GA-GA Power

Custom Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/16/21 KBW

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

Dist. Qu. ID: TH220 Type of Ice:  Dry  Blue  None

Cooler Temp: 4.3/54 Correction Factor: Add/Subtract (°C) +0.1

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

Cooler Temp Corrected (°C): 4.4/55

USDA Regulated Soil (DMA, water sample)  
Did samples originate in a quarantine zone within the United States: CA, HI, or SC (check maps)?

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

	Chain of Custody Present?			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Short Hold Time Analysis (RT2 hr)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Bank Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6.
Flow Control Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Divided analysis: Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>				
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of soil containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCUR Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRP Review: \_\_\_\_\_

Date: \_\_\_\_\_



Document Name:  
 Sample Condition Upon Receipt (SCUR)  
 Document No:  
 F-CAR-05-083-Rev.07

Document Revised: October 18, 2010  
 Page 2 of 2  
 Issuing Authority:  
 Face Carolina Quality Office

\*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/RODS (water) DOC, LU-g  
 \*\*Bottom half of box is to list number of bottles

Project #

**WO#: 92555510**

PR: NYS

Due Date: 09/03/21

CLIENT: CR-CR Power

Sample	1	2	3	4	5	6	7	8	9	10	11	12
BP40-125 ml Plastic Unpreserved (N/A) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
BP70-125 ml Plastic Unpreserved (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
BP70-500 ml Plastic Unpreserved (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
BP70-1 liter Plastic Unpreserved (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
BP40-125 ml Plastic v31004 (pH < 2) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
BP70-125 ml Plastic v31004 (pH < 2)	/	/	/	/	/	/	/	/	/	/	/	/
BP40-125 ml Plastic 26 Acetate & NaOH (v4)	/	/	/	/	/	/	/	/	/	/	/	/
BP40-125 ml Plastic NaOH (pH < 12) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
WSP70-Whole unashed Glass jar Unpreserved	/	/	/	/	/	/	/	/	/	/	/	/
A011U-1 liter Amber Unpreserved (N/A) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
A011H-1 liter Amber (D) (pH < 2)	/	/	/	/	/	/	/	/	/	/	/	/
A010A-125 ml Amber Unpreserved (N/A) (D-1)	/	/	/	/	/	/	/	/	/	/	/	/
A012B-1 liter Amber v12504 (pH < 2)	/	/	/	/	/	/	/	/	/	/	/	/
A012C-125 ml Amber v12504 (pH < 2)	/	/	/	/	/	/	/	/	/	/	/	/
A013A(D0304)-125 ml Amber (v40) (N/A)(D-1)	/	/	/	/	/	/	/	/	/	/	/	/
D008-40 ml VOA (D) (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
W007-40 ml VOA NaOH (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
V00U-40 ml VOA Usp (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
D008-40 ml VOA v4004 (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
V004K (8 vials per kit)-2015 kit (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
V004L (8 vials per kit)-VFA kit (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
SP07-125 ml Sterile Plastic (N/A - kit)	/	/	/	/	/	/	/	/	/	/	/	/
SP21-250 ml Sterile Plastic (N/A - kit)	/	/	/	/	/	/	/	/	/	/	/	/
BP70-125 ml Plastic (v31004 (pH < 2))	/	/	/	/	/	/	/	/	/	/	/	/
A000A-125 ml Amber Unpreserved vials (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
V000A-20 ml Sonication vials (N/A)	/	/	/	/	/	/	/	/	/	/	/	/
D000A-40 ml Amber Unpreserved vials (N/A)	/	/	/	/	/	/	/	/	/	/	/	/

9/2/20  
 SPIN

**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 Division Certification Office (i.e. Out of field, incorrect preservative, out of time, incorrect containers).





Document Name:  
Sample Condition Upon Receipt(SCUR)  
Document No.:  
F-CAR-CI-003-Rev.07

Document Revised: October 28, 2020  
Page 1 of 2  
Issuing Authority:  
Pace Carolina Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt:

Client Name:

GA POWER

Project #:

**WO#: 92555510**

Courier:  Fed Ex  UPS  USPS  Client  Other: \_\_\_\_\_

PM: NRG Due Date: 09/03/21  
CLIENT: GA-GA Power

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initial Person Examining Contents: 3/17/21 NRG

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:  4-in ID: THK330 Type of Ice:  Clear  Blue  None

Cooler Temp: 4.3 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): 4.2

USDA Regulated Soil (  MHA, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check mark)?

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of soil containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



Document Name:  
 Sample Condition Upon Receipt (SCUR)  
 Document No.:  
 F-CAR-03-033-Rev.07

Document Revised: October 28, 2020  
 Page 2 of 2  
 Issuing Authority:

**WO#: 92555924**

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

Project #

PH: NRG

Due Date: 08/08/21

CLIENT: GR-CR Power

(Exceptions: VOA, Coliform, TOC, Oil and Grease, DRQ/ROCS (water) DOC, UAG)

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

Sample	BP40-175 ml, Plastic, Unpreserved (N/A) (C-1)	BP10-250 ml, Plastic, Unpreserved (N/A)	BP20-500 ml, Plastic, Unpreserved (N/A)	BP10-1 liter Plastic Unpreserved (N/A)	BP40-175 ml, Plastic w/DOE (pH < 7) (C-1)	BP10-250 ml, plastic w/DOE (pH < 7)	BP40-575 ml, Plastic 2N Acetic & NaOH (pH)	BP40-125 ml, Plastic NaOH (pH < 12) (C-1)	W01U-Water matched Glass jar, Unpreserved	AG10-1 liter Amber Unpreserved (N/A) (C-1)	AG10-1 liter Amber (C) (pH < 7)	AG10-250 ml, Amber, Unpreserved (N/A) (C-1)	AG10-1 liter Amber w/DOE (pH < 7)	AG10-250 ml, Amber w/DOE (N/A) (C-1)	DO00-40 ml, VOA (C)	VO00-40 ml, VOA w/DOE (N/A)	VO00-40 ml, VOA (C) (pH)	DO00-40 ml, VOA w/DOE (N/A)	VO00 (5 vials per bag) (N/A)	VO00 (3 vials per bag) w/DOE (N/A)	SP10-175 ml, Sorbic Plastic (N/A - pH)	SP10-250 ml, Sorbic Plastic (N/A - pH)	SP10-250 ml, Plastic (pH 7.0-8.5)	AG00-100 ml, Amber Unpreserved vials (N/A)	VO00-20 ml, Sorbition vials (N/A)	DO00-40 ml, Amber Unpreserved vials (N/A)
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

**pH Adjustment Log for Preserved Samples**

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

Note: Whenever there is a discrepancy affecting North Carolina coastal area samples, a copy of this form will be sent to the North Carolina DWHM Central Office (i.e., out of hold, incorrect preservation, out of temp, incorrect containers).





Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-45-013-Rev.07

Document Revised: October 28, 2010  
Page 1 of 2  
Issuing Authority:  
Face Analytical Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
Upon Receipt

Client Name:

*GA Power*

Project #:

**WO#: 92555510**

PM: NMG

Due Date: 09/03/21

CLIENT: GA-GA Power

Courier:  Commercial  Fed Ex  UPS  USPS  Other  Client

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *5/19/21*  
*CS*

Packing Material:  Bubble Wrap  Bubble Bags  Foam  Other  
Thermometer:  of this lot: *083* Type of lot:  Wet  Dry  None

Biological Tissue Frozen?  Yes  No  N/A

Cooler Temp: *1.8* Correction factor: Add/Subtract (°C) *0.0*

Temp should be above freezing to 8°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 map)?

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

				Comments/Discrepancy:
Chain of Custody Preserved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Short Hold Time Analysis (472 hr.)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Blank Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6.
Face Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
Includes Date/Time/D/Analysis Matrix:	<i>[Signature]</i>			
Headspace in VOA Vials (V5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCUR Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRP Review: \_\_\_\_\_

Date: \_\_\_\_\_









Document Name:  
 Sample Condition Upon Receipt (SCUR)  
 Document No.:  
 F-CAR-CS-003-Rev.07

Document Expiry: October 28, 2023  
 Page 1 of 2  
 Issuing Authority:  
 Page Control: Out of Control

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Client Name:

GA Power

Project #:

**W0#: 92555510**

PM: NAC

Due Date: 09/03/21

CLIENT: GA-GR Power

Container:  Commercial  250ml  500ml  1000ml  Other

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer:  In Use ID: 053 Type of Ice:  Dry Ice  Dry  None

Cooler Temp: 4.4 Correction Factor Add/Subtract (%): ±0

Cooler Temp Corrected (°C): 4.4

USDA Regulated Soil?  FVA, water sample

C-2 samples or greater in a quarantine zone within the United States, CA, NY, or SC (track mail)?

Temp should be above freezing to 6°C

Temp is out of range either in Sample or in cooling process (no log-in)

Do samples originate from a foreign source (internationally, including Mexico and Puerto Rico)?  Yes  No

Comments/Discrepancy:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1
Temp on Arrival within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2
Short Hold Time Analysis (≤30 hr.)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	3
Wash Turns Around Time Requested?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	4
Sufficient Volume?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	5
Correct Containers Used?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6
Phase Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	8
Direct vent analysis, Sample Field F Barred?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	9
Sample Label's Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	10
Includes Data/Time/ID/Analysis Method				11
Headspace in VOA Vials (±5-6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	12
Temp Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13
Temp Blank Custody Seal Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14

COMMON TO/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of spill container:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCUR Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager S&P Review: \_\_\_\_\_

Date: \_\_\_\_\_



Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-45-033-Rev.07

Document Revised: October 28, 2020  
Page 2 of 2  
Issuing Authority:  
Face Carolina Quality Office

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

Project #

WO#: 92555510

PR: NRG

Due Date: 09/23/21

CLIENT: GA-GA Power

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/DO15 (water), DOC, LUM

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

Preserv	BP40-125 ml Plastic Unpreserved (N/A) (OH)	BP50-250 ml Plastic Unpreserved (N/A)	BP50-500 ml Plastic Unpreserved (N/A)	BP10-1 liter Plastic Unpreserved (N/A)	BP40-125 ml Plastic W/DO4 (pH < 7) (DO)	BP50-250 ml plastic W/DO4 (pH < 7)	BP40-125 ml Plastic 2M Acetate & NaOH (pH)	BP40-125 ml Plastic NaOH (pH > 12) (DO)	WORM wide mouthed Glass jar Unpreserved	AG50-1 liter Amber Unpreserved (N/A) (CL)	AG50-1 liter Amber (DO) (pH < 7)	AG50-250 ml Amber Unpreserved (N/A) (DO)	AG50-1 liter Amber W/DO4 (pH < 7)	AG50-250 ml Amber W/DO4 (pH < 7)	AG50(ORCA) 250 ml Amber W/DO4 (N/A)(DO)	DO50-40 ml VOA (DO) (N/A)	VO50-40 ml VOA NaF/DO4 (N/A)	VO50-40 ml VOA Temp (N/A)	DO50-40 ml VOA W/DO4 (N/A)	VO40 (4 vials per lot) W/DO4 (N/A)	VO40 (4 vials per lot) W/DO4 (N/A)	BP50-125 ml Sterile Plastic (N/A) - (DO)	BP50-250 ml Sterile Plastic (N/A) - (DO)	BP50-250 ml Plastic (DO)(DO4 (pH < 7))	AG50-500 ml Amber Unpreserved vials (N/A)	VO50-20 ml Scintillation vials (N/A)	DO50-40 ml Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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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 field, incorrect preservative, out of temp, incorrect containers).









# September 2021 (Surface Water Sampling)





September 21, 2021

Kelley Sharpe  
ARCADIS - Atlanta  
2839 Paces Ferry Rd  
STE 900  
Atlanta, GA 30339

RE: Project: Plant Hammond-CCR Ash Pond-Revised Report  
Pace Project No.: 92560961

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on September 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Asheville
- Pace Analytical Services - Peachtree Corners, GA

Rev. 1 - Boron was missing from the original data reported. Final report was revised, no other changes were made to this report.

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

Sincerely,

Maiya Parks  
maiya.parks@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Ben Hodges, Georgia Power  
Warren Johnson, ARCADIS - Atlanta  
Allison Keefer, Southern Company



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

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### 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 Certification #: 99030001

Virginia/VELAP Certification #: 460222

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### 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

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92560961001	H-SCC NBR	Water	09/13/21 14:55	09/14/21 08:19
92560961002	H-SCC E41	Water	09/13/21 14:40	09/14/21 08:19
92560961003	H-SCC	Water	09/13/21 12:45	09/14/21 08:19

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### SAMPLE ANALYTE COUNT

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92560961001	H-SCC NBR	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92560961002	H-SCC E41	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92560961003	H-SCC	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2011	ALW	1	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

PASI-A = Pace Analytical Services - Asheville

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

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

Sample: H-SCC NBR	Lab ID: 92560961001	Collected: 09/13/21 14:55	Received: 09/14/21 08:19	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	0.92	mg/L	0.20	1	09/16/21 10:54	09/20/21 15:14	7440-09-7	
Sodium	1.8	mg/L	1.0	1	09/16/21 10:54	09/20/21 15:14	7440-23-5	
Calcium	27.8	mg/L	1.0	1	09/16/21 10:54	09/20/21 15:14	7440-70-2	M1
Magnesium	5.6	mg/L	0.050	1	09/16/21 10:54	09/20/21 15:14	7439-95-4	M1
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	0.081	mg/L	0.040	1	09/16/21 11:40	09/17/21 15:51	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	09/16/21 11:40	09/17/21 15:51	7439-98-7	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2011								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	123	mg/L	10.0	1		09/17/21 17:35		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	94.5	mg/L	5.0	1		09/16/21 17:58		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		09/16/21 17:58		
Alkalinity, Total as CaCO3	94.5	mg/L	5.0	1		09/16/21 17:58		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	1.5	mg/L	1.0	1		09/15/21 13:32	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/15/21 13:32	16984-48-8	
Sulfate	9.7	mg/L	1.0	1		09/15/21 13:32	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

Sample: H-SCC E41	Lab ID: 92560961002	Collected: 09/13/21 14:40	Received: 09/14/21 08:19	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	1.3	mg/L	0.20	1	09/16/21 10:54	09/20/21 15:33	7440-09-7	
Sodium	2.5	mg/L	1.0	1	09/16/21 10:54	09/20/21 15:33	7440-23-5	
Calcium	38.8	mg/L	1.0	1	09/16/21 10:54	09/20/21 15:33	7440-70-2	
Magnesium	6.8	mg/L	0.050	1	09/16/21 10:54	09/20/21 15:33	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	0.15	mg/L	0.040	1	09/16/21 11:40	09/17/21 15:57	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	09/16/21 11:40	09/17/21 15:57	7439-98-7	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2011								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	173	mg/L	10.0	1		09/17/21 17:35		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	117	mg/L	5.0	1		09/16/21 18:06		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		09/16/21 18:06		
Alkalinity, Total as CaCO3	117	mg/L	5.0	1		09/16/21 18:06		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	1.7	mg/L	1.0	1		09/15/21 13:47	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/15/21 13:47	16984-48-8	
Sulfate	19.5	mg/L	1.0	1		09/15/21 13:47	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

Sample: H-SCC	Lab ID: 92560961003	Collected: 09/13/21 12:45	Received: 09/14/21 08:19	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	1.7	mg/L	0.20	1	09/16/21 10:54	09/20/21 15:38	7440-09-7	
Sodium	4.7	mg/L	1.0	1	09/16/21 10:54	09/20/21 15:38	7440-23-5	
Calcium	25.9	mg/L	1.0	1	09/16/21 10:54	09/20/21 15:38	7440-70-2	
Magnesium	4.9	mg/L	0.050	1	09/16/21 10:54	09/20/21 15:38	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	0.082	mg/L	0.040	1	09/16/21 11:40	09/17/21 16:21	7440-42-8	
Molybdenum	ND	mg/L	0.010	1	09/16/21 11:40	09/17/21 16:21	7439-98-7	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2011								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	118	mg/L	10.0	1		09/17/21 17:35		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	85.2	mg/L	5.0	1		09/16/21 18:14		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		09/16/21 18:14		
Alkalinity, Total as CaCO3	85.2	mg/L	5.0	1		09/16/21 18:14		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	3.0	mg/L	1.0	1		09/15/21 14:02	16887-00-6	
Fluoride	ND	mg/L	0.10	1		09/15/21 14:02	16984-48-8	
Sulfate	11.4	mg/L	1.0	1		09/15/21 14:02	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

QC Batch: 647652 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92560961001, 92560961002, 92560961003

METHOD BLANK: 3396836 Matrix: Water  
 Associated Lab Samples: 92560961001, 92560961002, 92560961003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	09/20/21 15:05	
Magnesium	mg/L	ND	0.050	09/20/21 15:05	
Potassium	mg/L	ND	0.20	09/20/21 15:05	
Sodium	mg/L	ND	1.0	09/20/21 15:05	

LABORATORY CONTROL SAMPLE: 3396837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	105	80-120	
Magnesium	mg/L	1	1.1	109	80-120	
Potassium	mg/L	1	1.1	105	80-120	
Sodium	mg/L	1	1.1	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3396838 3396839

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560961001 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	27.8	1	1	29.9	30.1	207	230	75-125	1	20 M1
Magnesium	mg/L	5.6	1	1	6.8	6.9	122	126	75-125	1	20 M1
Potassium	mg/L	0.92	1	1	1.9	2.0	102	103	75-125	1	20
Sodium	mg/L	1.8	1	1	2.9	3.0	111	111	75-125	0	20

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

QC Batch: 647663 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92560961001, 92560961002, 92560961003

METHOD BLANK: 3396946 Matrix: Water  
 Associated Lab Samples: 92560961001, 92560961002, 92560961003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	09/17/21 15:39	
Molybdenum	mg/L	ND	0.010	09/17/21 15:39	

LABORATORY CONTROL SAMPLE: 3396947

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	1.0	104	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3396948 3396949

Parameter	Units	92560961002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	0.15	1	1	1.1	1.1	95	94	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.095	0.094	94	93	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond-Revised Report  
 Pace Project No.: 92560961

QC Batch: 647940 Analysis Method: SM 2540C-2011  
 QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92560961001, 92560961002, 92560961003

METHOD BLANK: 3398525 Matrix: Water  
 Associated Lab Samples: 92560961001, 92560961002, 92560961003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	09/17/21 17:32	

LABORATORY CONTROL SAMPLE: 3398526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	400	100	90-111	

SAMPLE DUPLICATE: 3400012

Parameter	Units	92560858001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	62.0	52.0	18	10	D6

SAMPLE DUPLICATE: 3400013

Parameter	Units	92560961003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	118	122	3	10	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

QC Batch: 647623 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92560961001, 92560961002, 92560961003

METHOD BLANK: 3396696 Matrix: Water  
 Associated Lab Samples: 92560961001, 92560961002, 92560961003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	09/16/21 15:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	09/16/21 15:56	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	09/16/21 15:56	

LABORATORY CONTROL SAMPLE: 3396697

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

LABORATORY CONTROL SAMPLE: 3396698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.4	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3396699 3396700

Parameter	Units	92558254017		3396700		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Alkalinity, Total as CaCO3	mg/L	112	50	165	50	106	108	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3396701 3396702

Parameter	Units	92560963002		3396702		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Alkalinity, Total as CaCO3	mg/L	125	50	174	50	97	103	80-120	2	25	

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

**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

QC Batch: 647236 Analysis Method: EPA 300.0 Rev 2.1 1993  
 QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92560961001, 92560961002, 92560961003

METHOD BLANK: 3394945 Matrix: Water  
 Associated Lab Samples: 92560961001, 92560961002, 92560961003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	09/15/21 12:17	
Fluoride	mg/L	ND	0.10	09/15/21 12:17	
Sulfate	mg/L	ND	1.0	09/15/21 12:17	

LABORATORY CONTROL SAMPLE: 3394946

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.3	99	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	49.2	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394947 3394948

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560964004 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	3.2	50	50	54.7	55.8	103	105	90-110	2	10		
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	98	101	90-110	2	10		
Sulfate	mg/L	10.0	50	50	61.5	62.8	103	106	90-110	2	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394949 3394950

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92560774020 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	2.4	50	50	54.5	55.3	104	106	90-110	1	10		
Fluoride	mg/L	0.22	2.5	2.5	2.2	2.3	79	81	90-110	3	10	M1	
Sulfate	mg/L	123	50	50	175	169	104	92	90-110	3	10		

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

**REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92560961

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### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Plant Hammond-CCR Ash Pond-Revised Report  
 Pace Project No.: 92560961

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560961001	H-SCC NBR	EPA 3010A	647652	EPA 6010D	647717
92560961002	H-SCC E41	EPA 3010A	647652	EPA 6010D	647717
92560961003	H-SCC	EPA 3010A	647652	EPA 6010D	647717
92560961001	H-SCC NBR	EPA 3005A	647663	EPA 6020B	647976
92560961002	H-SCC E41	EPA 3005A	647663	EPA 6020B	647976
92560961003	H-SCC	EPA 3005A	647663	EPA 6020B	647976
92560961001	H-SCC NBR	SM 2540C-2011	647940		
92560961002	H-SCC E41	SM 2540C-2011	647940		
92560961003	H-SCC	SM 2540C-2011	647940		
92560961001	H-SCC NBR	SM 2320B-2011	647623		
92560961002	H-SCC E41	SM 2320B-2011	647623		
92560961003	H-SCC	SM 2320B-2011	647623		
92560961001	H-SCC NBR	EPA 300.0 Rev 2.1 1993	647236		
92560961002	H-SCC E41	EPA 300.0 Rev 2.1 1993	647236		
92560961003	H-SCC	EPA 300.0 Rev 2.1 1993	647236		

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Laboratory receiving samples:  
 Asheville  Eden  Greenwood  Huntsville  Raleigh  Mechanicsville  Atlanta  Kernersville

Work Order #:  
 WO# 92560961

Client Name:  
 Ascarifi

Project #:  
 PH: 00  
 Issue Date: 08/21/21  
 CLIENT: CA-Ascarifi

Control:  
 Commercial  
 Pesticide  
 OTC  
 OTC  
 OTC  
 OTC

Quotely Seal Present?  Yes  No  
 Seal Intact?  Yes  No

Packing Material:  
 Bubble wrap  
 Bubble bags  
 None  
 Other

Reagent/Preservative:  
 Acidic  
 Neutral  
 Basic

Cooler Temp: 7.8  
 Cooler Temp Corrected (°C): 2.9

USDA Registered Facility?  Yes  No (with temp)  
 Did samples originate in a quarantined zone within the United States, CA, HI, or SC (select state)?  
 Yes  No

Deployment Person Assigning Comments: NAF 08/21/21  
 Biological Threat Process?  
 Yes  No  N/A  
 Temp should be above freezing (0°C)  
 Samples out of the container, transfer or not, cooling process has begun  
 Did samples originate from a foreign source (import only) within the United States?  Yes  No  
 Comments/Discrepancy:

Order of Custody Transfer?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1
Samples Arrived within Hold Time?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2
Shipment Time Analysis (ETA) Met?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3
Batch Time Arrived (Time Requested)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4
Temperature Intake?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6
Proper Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6
Container Sealed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7
Quarantined analysis - Samples held & tested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8
Sample(s) open, match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8
includes Data/Temp/TA/Analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8
Investigate in hold state (p-Sample)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15
Temp Stable (pre-arrival)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11
Temp Stable (during hold process)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11

comments/Issues/Discrepancy: \_\_\_\_\_  
 Total Time Received?  Yes  No

Use ID of each container: \_\_\_\_\_  
 CLIENT INFORMATION/ISSUES/COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Report generated: \_\_\_\_\_ On: 8/21/21

Project Manager (CUSTOMER): \_\_\_\_\_ Date: \_\_\_\_\_  
 Project Manager (LAB): \_\_\_\_\_ Date: \_\_\_\_\_





January 2022  
(Surface Water Sampling)



February 01, 2022

Kelley Sharpe  
ARCADIS - Atlanta  
2839 Paces Ferry Rd  
STE 900  
Atlanta, GA 30339

RE: Project: Plant Hammond-CCR Ash Pond  
Pace Project No.: 92584177

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on January 25, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

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

- Pace Analytical Services - Asheville
- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

Maiya Parks  
maiya.parks@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Ben Hodges, Georgia Power  
Warren Johnson, ARCADIS - Atlanta  
Allison Keefer, Southern Company



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92584177

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### **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

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### **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

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Plant Hammond-CCR Ash Pond  
Pace Project No.: 92584177

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92584177001	H-SCC NBR	Water	01/24/22 14:05	01/25/22 08:36
92584177002	H-SCC E41	Water	01/24/22 13:55	01/25/22 08:36
92584177003	H-SCC	Water	01/24/22 11:46	01/25/22 08:36

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### SAMPLE ANALYTE COUNT

Project: Plant Hammond-CCR Ash Pond  
 Pace Project No.: 92584177

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92584177001	H-SCC NBR	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	4	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92584177002	H-SCC E41	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	3	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A
92584177003	H-SCC	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	4	PASI-GA
		SM 2540C-2015	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	JCM	3	PASI-A

PASI-A = Pace Analytical Services - Asheville

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

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92584177

Sample: H-SCC NBR	Lab ID: 92584177001	Collected: 01/24/22 14:05	Received: 01/25/22 08:36	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	0.77	mg/L	0.20	1	01/25/22 13:29	01/25/22 21:55	7440-09-7	
Sodium	2.0	mg/L	1.0	1	01/25/22 13:29	01/25/22 21:55	7440-23-5	
Magnesium	3.6	mg/L	0.050	1	01/25/22 13:29	01/25/22 21:55	7439-95-4	
Calcium	19.4	mg/L	1.0	1	01/25/22 13:29	01/26/22 13:34	7440-70-2	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.0050	1	01/27/22 09:40	01/27/22 20:06	7440-38-2	
Boron	0.044	mg/L	0.040	1	01/27/22 09:40	01/27/22 20:06	7440-42-8	
Lithium	ND	mg/L	0.030	1	01/27/22 09:40	01/27/22 20:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/27/22 09:40	01/27/22 20:06	7439-98-7	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	77.0	mg/L	10.0	1		01/31/22 19:09		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	1.4	mg/L	1.0	1		01/26/22 19:57	16887-00-6	
Fluoride	ND	mg/L	0.10	1		01/26/22 19:57	16984-48-8	
Sulfate	10	mg/L	1.0	1		01/26/22 19:57	14808-79-8	

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond  
 Pace Project No.: 92584177

Sample: H-SCC E41	Lab ID: 92584177002	Collected: 01/24/22 13:55	Received: 01/25/22 08:36	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Pace Analytical Services - Peachtree Corners, GA								
Potassium	0.72	mg/L	0.20	1	01/25/22 13:29	01/25/22 22:00	7440-09-7	
Sodium	1.9	mg/L	1.0	1	01/25/22 13:29	01/25/22 22:00	7440-23-5	
Magnesium	3.3	mg/L	0.050	1	01/25/22 13:29	01/25/22 22:00	7439-95-4	
Calcium	17.1	mg/L	1.0	1	01/25/22 13:29	01/26/22 13:38	7440-70-2	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	0.047	mg/L	0.040	1	01/27/22 09:40	01/27/22 20:12	7440-42-8	
Lithium	ND	mg/L	0.030	1	01/27/22 09:40	01/27/22 20:12	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/27/22 09:40	01/27/22 20:12	7439-98-7	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	71.0	mg/L	10.0	1		01/31/22 19:09		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	1.4	mg/L	1.0	1		01/26/22 20:39	16887-00-6	
Fluoride	ND	mg/L	0.10	1		01/26/22 20:39	16984-48-8	
Sulfate	10	mg/L	1.0	1		01/26/22 20:39	14808-79-8	

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond  
 Pace Project No.: 92584177

Sample: H-SCC		Lab ID: 92584177003		Collected: 01/24/22 11:46	Received: 01/25/22 08:36	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA						
Calcium	18.7	mg/L	1.0	1	01/25/22 13:29	01/26/22 13:43	7440-70-2	
Potassium	0.85	mg/L	0.20	1	01/25/22 13:29	01/25/22 22:05	7440-09-7	
Sodium	2.3	mg/L	1.0	1	01/25/22 13:29	01/25/22 22:05	7440-23-5	
Magnesium	3.3	mg/L	0.050	1	01/25/22 13:29	01/25/22 22:05	7439-95-4	
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA						
Arsenic	ND	mg/L	0.0050	1	01/27/22 09:40	01/27/22 20:18	7440-38-2	
Boron	0.042	mg/L	0.040	1	01/27/22 09:40	01/27/22 20:18	7440-42-8	
Lithium	ND	mg/L	0.030	1	01/27/22 09:40	01/27/22 20:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	1	01/27/22 09:40	01/27/22 20:18	7439-98-7	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA						
Total Dissolved Solids	76.0	mg/L	10.0	1		01/31/22 19:09		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville						
Chloride	1.6	mg/L	1.0	1		01/26/22 20:53	16887-00-6	
Fluoride	ND	mg/L	0.10	1		01/26/22 20:53	16984-48-8	
Sulfate	11.0	mg/L	1.0	1		01/26/22 20:53	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond  
 Pace Project No.: 92584177

QC Batch: 673704 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92584177001, 92584177002, 92584177003

METHOD BLANK: 3526379 Matrix: Water  
 Associated Lab Samples: 92584177001, 92584177002, 92584177003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	01/25/22 20:59	
Magnesium	mg/L	ND	0.050	01/25/22 20:59	
Potassium	mg/L	ND	0.20	01/25/22 20:59	
Sodium	mg/L	ND	1.0	01/25/22 20:59	

LABORATORY CONTROL SAMPLE: 3526380

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	110	80-120	
Magnesium	mg/L	1	1.1	110	80-120	
Potassium	mg/L	1	1.1	107	80-120	
Sodium	mg/L	1	1.1	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3526381 3526382

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92584176001 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	17.8	1	1	18.4	19.1	61	127	75-125	4	20
Magnesium	mg/L	5.0	1	1	6.0	6.2	94	114	75-125	3	20
Potassium	mg/L	1.7	1	1	2.7	2.8	105	114	75-125	3	20
Sodium	mg/L	4.3	1	1	5.3	5.5	100	123	75-125	4	20

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

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond  
 Pace Project No.: 92584177

QC Batch: 674073 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92584177001, 92584177002, 92584177003

METHOD BLANK: 3528258 Matrix: Water  
 Associated Lab Samples: 92584177001, 92584177002, 92584177003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.0050	01/27/22 17:31	
Boron	mg/L	ND	0.040	01/27/22 17:31	
Lithium	mg/L	ND	0.030	01/27/22 17:31	
Molybdenum	mg/L	ND	0.010	01/27/22 17:31	

LABORATORY CONTROL SAMPLE: 3528259

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.95	95	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3528260 3528261

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92583944002 Result	Spike Conc.	Spike Conc.	Result						
Arsenic	mg/L	ND	0.1	0.1	0.093	0.094	93	94	75-125	1	20
Boron	mg/L	0.13	1	1	1.0	1.0	87	90	75-125	3	20
Lithium	mg/L	ND	0.1	0.1	0.091	0.089	88	86	75-125	3	20
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	104	75-125	4	20

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

**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92584177

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QC Batch: 674961	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: 92584177001, 92584177002, 92584177003

---

METHOD BLANK: 3532863 Matrix: Water

Associated Lab Samples: 92584177001, 92584177002, 92584177003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	01/31/22 19:09	

---

LABORATORY CONTROL SAMPLE: 3532864

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	384	96	80-120	

---

SAMPLE DUPLICATE: 3532865

Parameter	Units	92583955011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	502	526	5	25	

---

SAMPLE DUPLICATE: 3532866

Parameter	Units	92583953014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	426	422	1	25	

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

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92584177

QC Batch: 673904 Analysis Method: EPA 300.0 Rev 2.1 1993  
 QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92584177001, 92584177002, 92584177003

METHOD BLANK: 3527216 Matrix: Water  
 Associated Lab Samples: 92584177001, 92584177002, 92584177003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/26/22 17:51	
Fluoride	mg/L	ND	0.10	01/26/22 17:51	
Sulfate	mg/L	ND	1.0	01/26/22 17:51	

LABORATORY CONTROL SAMPLE: 3527217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.2	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	48.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3527218 3527219

Parameter	Units	92584141001		MS		MSD		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result								
Chloride	mg/L	18.4	50	50	69.0	69.2	101	102	90-110	0	10			
Fluoride	mg/L	0.41	2.5	2.5	2.9	2.9	100	100	90-110	1	10			
Sulfate	mg/L	14.2	50	50	64.1	64.1	100	100	90-110	0	10			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3527220 3527221

Parameter	Units	92584178003		MS		MSD		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result								
Chloride	mg/L	2.1	50	50	53.4	54.4	102	105	90-110	2	10			
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	93	96	90-110	3	10			
Sulfate	mg/L	11.6	50	50	62.4	63.0	102	103	90-110	1	10			

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

**REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: Plant Hammond-CCR Ash Pond  
Pace Project No.: 92584177

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### 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.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92584177

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92584177001	H-SCC NBR	EPA 3010A	673704	EPA 6010D	673782
92584177002	H-SCC E41	EPA 3010A	673704	EPA 6010D	673782
92584177003	H-SCC	EPA 3010A	673704	EPA 6010D	673782
92584177001	H-SCC NBR	EPA 3005A	674073	EPA 6020B	674293
92584177002	H-SCC E41	EPA 3005A	674073	EPA 6020B	674293
92584177003	H-SCC	EPA 3005A	674073	EPA 6020B	674293
92584177001	H-SCC NBR	SM 2540C-2015	674961		
92584177002	H-SCC E41	SM 2540C-2015	674961		
92584177003	H-SCC	SM 2540C-2015	674961		
92584177001	H-SCC NBR	EPA 300.0 Rev 2.1 1993	673904		
92584177002	H-SCC E41	EPA 300.0 Rev 2.1 1993	673904		
92584177003	H-SCC	EPA 300.0 Rev 2.1 1993	673904		

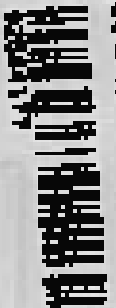
### REPORT OF LABORATORY ANALYSIS

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**CHAIN-OF-CUSTODY / Analytical Request ID**  
 For Use Only by the LSCAL DOCUMENT. All request dates must

**MO# : 92584177**



LABORATORY

Requester: *[Handwritten Name]* Requested: *[Date]* Requested By: *[Signature]*

Requester: <i>[Handwritten Name]</i>	Requester Title: <i>[Handwritten Title]</i>	Requester Agency: <i>[Handwritten Agency]</i>
Request Date: <i>[Date]</i>	Request Location: <i>[Handwritten Location]</i>	Requester Contact: <i>[Handwritten Contact]</i>
Request Description: <i>[Handwritten Description]</i>	Request Method: <i>[Handwritten Method]</i>	Request Status: <i>[Handwritten Status]</i>

SAMPLE ID	ANALYSIS	DATE	TIME	ANALYST	LABORATORY	COUNTS		REMARKS
						NET	GROSS	
1	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...
11	...	...	...	...	...	...	...	...

*[Handwritten Notes and Signatures]*

Requester Signature: *[Signature]*

Analyst Signature: *[Signature]*

Date: *[Date]*





Laboratory receiving samples:

Ashville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Client Name: \_\_\_\_\_

Project #: \_\_\_\_\_

**WO# : 92584177**

PR: # \_\_\_\_\_ Due Date: 02/01/22  
CLIENT - G&B (see sheet)

Cooler  ~~Comerical~~  
 Fed Ex  UPS  USPS  Other \_\_\_\_\_

Confidential Seal Present?  Yes  No Seal Broken?  Yes  No

Padding Material  Bubble Wrap  Bubble Bag  None  Other \_\_\_\_\_

Thermometer:  4.0m? 2.4  4.0m  None  None

Cooler Temp 4.5 Correction Factor Add/Subtract (%) 0.1  Yes  No

Cooler Temp Corrected (°C): 4.6

Water Supplied (gall)  Yes, water samples

Did samples originate in a dry well or area prone within the United States (CA, NY, or TX) which require?  Yes  No

Temp would be above freezing (°C)  Yes  No  None

Did samples originate from a foreign source (i.e. international), including Mexico and Puerto Rico?  Yes  No

			Commercial Discrepancy
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples arrived within hold time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Peak & gross/ground Time Reported?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Is Report Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Lowest Contaminant Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
Flow Controller Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		7.
Comparing to (g/L)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		8.
Emulated Material (EMM) used? (if not, explain why)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
Sample Label Match 100%	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		10.
Includes Date/TIME/ID/Analysis Matrix <u>and T</u>			
measured in (M/L) (e.g. mg/L)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Flow Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Flow Blank Confirmed Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

Comments/Issues/Discrepancy: \_\_\_\_\_ Total Data Reported?  Yes  No

Lot # of split & Conf pieces: \_\_\_\_\_  
 (3) BY SAMPLES FROM/COMPLI FROM: \_\_\_\_\_

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager (CLIENT Review) \_\_\_\_\_ Date: \_\_\_\_\_  
 Project Manager (SPL Review) \_\_\_\_\_ Date: \_\_\_\_\_





January 31, 2022

Maiya Parks  
Pace Analytical Atlanta

110 Technology Pkwy  
Peachtree Corners GA 30092

RE: 92584177

Dear Maiya Parks:

Order No: 2201R36

Analytical Environmental Services, Inc. received 3 samples on 1/26/2022 7:55:00 AM for the analyses presented in following report.

“No problems were encountered during the analyses except as noted in the Case Narrative or by qualifiers in the report or QC Summary. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits.

AES’s accreditations are as follows:

-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/21-06/30/22.

State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective through 06/30/22 and Total Coliforms/ E. coli, effective 04/20/20-04/24/23.

-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Metals and PCM Asbestos), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 11/01/23.

These results relate only to the items tested as received. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Paris Masoudi  
Project Manager

# Chain of Custody

PASI Charlotte Laboratory



22-01836



Workorder: S2584177

Workorder Name: Plant Hammond-CCR Ash Pond

Results Requested By: 2/1/2022

Report/Invoice To		Submitted To				Requested Analysis															
Malysa Parks Pace Analytical Atlanta 170 Technology Parkway Peachtree Corners, GA 30092 Phone (770)734-4200 Email: malysa.parks@pacelabs.com		AES Atlanta P.O. S2584177MP																			
State of Sample Origin: GA						Preserved Containers					Request Analysis	LAB USE ONLY									
Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Unpreserved																
1	H-SOC-NBR	1/24/2022 14:05	S2584177001	Water	1												X				
2	H-SOC-SH1	1/24/2022 13:55	S2584177002	Water	1												X				
3	H-SOC	1/24/2022 11:46	S2584177003	Water	1												X				
4																					
5																					
Transfers		Released By	Date/Time	Received By	Date/Time	Comments															
1		<i>Kyle Williams / Pace</i>	<i>1/24/22 07:55</i>	<i>Dawn Campbell</i>	<i>1/24/22 1:55</i>	Total & B-Carb Alk															
2																					
3																					
Cooler Temperature on Receipt		°C	Custody Seal Y or N		Received on Ice Y or N		Samples Intact Y or N														

<b>Client:</b> Pace Analytical Atlanta	<b>Client Sample ID:</b> H-SCC NBR
<b>Project Name:</b> 92584177	<b>Collection Date:</b> 1/24/2022 2:05:00 PM
<b>Lab ID:</b> 2201R36-001	<b>Matrix:</b> Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>CARBON DIOXIDE</b>								
<b>SM4500-CO2-D</b>								
Bicarbonate Alkalinity	52.8	10.0		mg/L	R476167	1	01/01/1900 00:00	GY
<b>Alkalinity by SM2320B</b>								
Alkalinity, Total (As CaCO3)	52.9	3.00		mg/L	R476167	1	01/28/2022 15:11	GY

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- F Analyzed in the lab which is a deviation from the method
- < Less than Result value
- J Estimated value detected below Reporting Limit

<b>Client:</b> Pace Analytical Atlanta	<b>Client Sample ID:</b> H-SCC E41
<b>Project Name:</b> 92584177	<b>Collection Date:</b> 1/24/2022 1:55:00 PM
<b>Lab ID:</b> 2201R36-002	<b>Matrix:</b> Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>CARBON DIOXIDE</b> <b>SM4500-CO2-D</b>								
Bicarbonate Alkalinity	47.0	10.0		mg/L	R476167	1	01/01/1900 00:00	GY
<b>Alkalinity by SM2320B</b>								
Alkalinity, Total (As CaCO3)	47.0	3.00		mg/L	R476167	1	01/28/2022 15:11	GY

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- F Analyzed in the lab which is a deviation from the method
- < Less than Result value
- J Estimated value detected below Reporting Limit

<b>Client:</b> Pace Analytical Atlanta	<b>Client Sample ID:</b> H-SCC
<b>Project Name:</b> 92584177	<b>Collection Date:</b> 1/24/2022 11:46:00 AM
<b>Lab ID:</b> 2201R36-003	<b>Matrix:</b> Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>CARBON DIOXIDE</b> <b>SM4500-CO2-D</b>								
Bicarbonate Alkalinity	48.2	10.0		mg/L	R476167	1	01/01/1900 00:00	GY
<b>Alkalinity by SM2320B</b>								
Alkalinity, Total (As CaCO3)	48.2	3.00		mg/L	R476167	1	01/28/2022 15:11	GY

**Qualifiers:**

- \* Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- F Analyzed in the lab which is a deviation from the method
- < Less than Result value
- J Estimated value detected below Reporting Limit



Pace Analytical Atlanta

SAMPLE/COOLER RECEIPT CHECKLIST

Clear

Save as

1. Client Name: Pace Analytical Atlanta AES Work Order Number: 2201R36

2. Carrier: FedEx UPS USPS Client Courier Other

Table with 5 columns: Question, Yes, No, N/A, Details, Comments. Contains items 3-12 regarding shipping conditions, temperature, and TAT.

13. Cooler 1 Temperature 3.4 °C Cooler 2 Temperature °C Cooler 3 Temperature °C Cooler 4 Temperature °C
14. Cooler 5 Temperature °C Cooler 6 Temperature °C Cooler 7 Temperature °C Cooler 8 Temperature °C

15. Comments: I certify that I have completed sections 1-15 (dated initials). HM 1/26/22

Table with 5 columns: Question, Yes, No, N/A, Details, Comments. Contains items 16-26 regarding sample containers, COC, and analyses.

27. Comments: I certify that I have completed sections 16-27 (dated initials). HM 1/26/22

Table with 5 columns: Question, Yes, No, N/A, Details, Comments. Contains items 28-30 regarding chemical preservation and pH adjustment.

31. \* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.
32. This also excludes metals by EPA 200.7, 200.8 and 245.1 which will be verified between 16 and 24 hours after preservation.
33. I certify that I have completed sections 28-30 (dated initials). HM 1/26/22



Client: Pace Analytical Atlanta  
 Project Name: 92584177  
 Workorder: 2201R36

**ANALYTICAL QC SUMMARY REPORT**

BatchID: R476167

Sample ID: <b>LCS-R476167</b>	Client ID:	Units: <b>mg/L</b>	Prep Date:	Run No: <b>476167</b>							
SampleType: <b>LCS</b>	TestCode: <b>Alkalinity by SM2320B</b>	BatchID: <b>R476167</b>	Analysis Date: <b>01/28/2022</b>	Seq No: <b>10989463</b>							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Alkalinity, Total (As CaCO3)	130.2	3.00	125.0		104	90	110				
------------------------------	-------	------	-------	--	-----	----	-----	--	--	--	--

Sample ID: <b>2201S46-001CDUP</b>	Client ID:	Units: <b>mg/L</b>	Prep Date:	Run No: <b>476167</b>							
SampleType: <b>DUP</b>	TestCode: <b>Alkalinity by SM2320B</b>	BatchID: <b>R476167</b>	Analysis Date: <b>01/28/2022</b>	Seq No: <b>10989465</b>							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Alkalinity, Total (As CaCO3)	26.46	3.00						27.50	3.83	30	
------------------------------	-------	------	--	--	--	--	--	-------	------	----	--

<b>Qualifiers:</b>	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

End of Report

February 2022



March 22, 2022

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: HAMMOND AP-3  
Pace Project No.: 92586342

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 03, 2022 and February 07, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

Revision 1: This revision was issued on 3/22/22 to include an updated COC.

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

Sincerely,

Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Anna Bottum, ERM  
Andrea Brazell, ERM  
Christine Hug, Geosyntec Consultants, Inc.  
Kristen Jurinko  
Thomas Kessler, Geosyntec  
Whitney Law, Geosyntec Consultants  
Noelia Muskus, Geosyntec Consultants

Ms. Lauren Petty, Southern Company  
Lacy Smith, ERM  
Anthony Szwast, Geosyntec  
Nardos Tilahun, GeoSyntec  
Caitlin Tillema, ERM  
Christine Weaver, ERM  
Dawit Yifru, Geosyntec Consultants, Inc.



### REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: HAMMOND AP-3  
Pace Project No.: 92586342

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### **Pace Analytical Services Charlotte**

South Carolina Laboratory ID: 99006  
9800 Kinsey Ave. Ste 100, Huntersville, NC 28078  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12  
South Carolina Laboratory ID: 99006

South Carolina Certification #: 99006001  
South Carolina Drinking Water Cert. #: 99006003  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Louisiana DoH Drinking Water #: LA029  
Virginia/VELAP Certification #: 460221

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### **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

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### **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

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92586342001	HGWA-122	Water	02/01/22 14:25	02/03/22 12:32
92586342002	HGWA-45D	Water	02/01/22 16:02	02/03/22 12:32
92586342003	HGWC-120	Water	02/02/22 13:33	02/03/22 12:32
92586342004	HGWC-121A	Water	02/02/22 09:47	02/03/22 12:32
92586342005	HGWC-124	Water	02/02/22 11:39	02/03/22 12:32
92586342006	MW-39	Water	02/02/22 16:33	02/03/22 12:32
92586342007	MW-41	Water	02/02/22 15:17	02/03/22 12:32
92586342008	HGWA-44D	Water	02/01/22 13:35	02/03/22 12:32
92586342009	HGWA-2	Water	02/01/22 11:52	02/03/22 12:32
92586342010	HGWA-3	Water	02/01/22 09:58	02/03/22 12:32
92586342011	HGWA-1	Water	02/01/22 12:13	02/03/22 12:32
92586342012	HGWA-43D	Water	02/01/22 10:28	02/03/22 12:32
92586342013	HGWC-125	Water	02/03/22 13:09	02/07/22 12:35
92586342014	HGWC-126	Water	02/03/22 15:04	02/07/22 12:35
92586342015	MW-32	Water	02/03/22 10:29	02/07/22 12:35
92586342016	MW-46D	Water	02/03/22 10:35	02/07/22 12:35
92586342017	DUP-3	Water	02/03/22 00:00	02/07/22 12:35
92586342018	EB-3	Water	02/03/22 15:59	02/07/22 12:35
92586342019	FB-3	Water	02/03/22 15:51	02/07/22 12:35

## REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: HAMMOND AP-3  
 Pace Project No.: 92586342

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92586342001	HGWA-122	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92586342002	HGWA-45D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92586342003	HGWC-120	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92586342004	HGWC-121A	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92586342005	HGWC-124	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92586342006	MW-39	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92586342007	MW-41	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92586342008	HGWA-44D	EPA 6010D	KH	1
		EPA 6020B	CW1	13

**REPORT OF LABORATORY ANALYSIS**

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### SAMPLE ANALYTE COUNT

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92586342009	HGWA-2	EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92586342010	HGWA-3	SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92586342011	HGWA-1	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92586342012	HGWA-43D	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
92586342013	HGWC-125	EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
92586342014	HGWC-126	EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92586342015	MW-32	SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1

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### SAMPLE ANALYTE COUNT

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92586342016	MW-46D	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92586342017	DUP-3	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92586342018	EB-3	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
92586342019	FB-3	EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3

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

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### SUMMARY OF DETECTION

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92586342001</b>	<b>HGWA-122</b>					
	Performed by	CUSTOMER			02/04/22 15:39	
	pH	6.57	Std. Units		02/04/22 15:39	
EPA 6010D	Calcium	57.5	mg/L	1.0	02/17/22 15:43	
EPA 6020B	Barium	0.035	mg/L	0.0050	02/17/22 22:02	
EPA 6020B	Boron	0.17	mg/L	0.040	02/17/22 22:02	
EPA 6020B	Molybdenum	0.0020J	mg/L	0.010	02/17/22 22:02	
SM 2540C-2015	Total Dissolved Solids	203	mg/L	10.0	02/07/22 16:43	
EPA 300.0 Rev 2.1 1993	Chloride	2.2	mg/L	1.0	02/08/22 10:17	
EPA 300.0 Rev 2.1 1993	Fluoride	0.062J	mg/L	0.10	02/08/22 10:17	
EPA 300.0 Rev 2.1 1993	Sulfate	41.1	mg/L	1.0	02/08/22 10:17	
<b>92586342002</b>	<b>HGWA-45D</b>					
	Performed by	CUSTOMER			02/04/22 15:39	
	pH	7.45	Std. Units		02/04/22 15:39	
EPA 6010D	Calcium	51.3	mg/L	1.0	02/17/22 15:48	M1
EPA 6020B	Antimony	0.0018J	mg/L	0.0030	02/17/22 22:26	
EPA 6020B	Barium	0.57	mg/L	0.0050	02/17/22 22:26	
EPA 6020B	Boron	0.14	mg/L	0.040	02/17/22 22:26	
EPA 6020B	Lithium	0.0055J	mg/L	0.030	02/18/22 16:31	
SM 2540C-2015	Total Dissolved Solids	268	mg/L	10.0	02/07/22 16:43	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	02/08/22 10:31	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	02/08/22 10:31	
EPA 300.0 Rev 2.1 1993	Sulfate	2.5	mg/L	1.0	02/08/22 10:31	
<b>92586342003</b>	<b>HGWC-120</b>					
	Performed by	CUSTOMER			02/04/22 15:39	
	pH	7.00	Std. Units		02/04/22 15:39	
EPA 6010D	Calcium	159	mg/L	1.0	02/17/22 16:08	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	02/17/22 22:32	
EPA 6020B	Barium	0.054	mg/L	0.0050	02/17/22 22:32	
EPA 6020B	Boron	0.91	mg/L	0.040	02/17/22 22:32	
EPA 6020B	Cobalt	0.0072	mg/L	0.0050	02/17/22 22:32	
EPA 6020B	Lithium	0.025J	mg/L	0.030	02/18/22 16:37	
EPA 6020B	Molybdenum	0.034	mg/L	0.010	02/17/22 22:32	
SM 2540C-2015	Total Dissolved Solids	612	mg/L	20.0	02/08/22 10:51	
EPA 300.0 Rev 2.1 1993	Chloride	2.5	mg/L	1.0	02/08/22 10:45	
EPA 300.0 Rev 2.1 1993	Fluoride	0.36	mg/L	0.10	02/08/22 10:45	
EPA 300.0 Rev 2.1 1993	Sulfate	201	mg/L	5.0	02/08/22 19:12	M1
<b>92586342004</b>	<b>HGWC-121A</b>					
	Performed by	CUSTOMER			02/04/22 15:39	
	pH	6.92	Std. Units		02/04/22 15:39	
EPA 6010D	Calcium	148	mg/L	1.0	02/17/22 16:12	
EPA 6020B	Barium	0.064	mg/L	0.0050	02/17/22 22:38	
EPA 6020B	Boron	1.6	mg/L	0.040	02/17/22 22:38	
EPA 6020B	Lithium	0.0082J	mg/L	0.030	02/18/22 16:43	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92586342004</b>	<b>HGWC-121A</b>					
SM 2540C-2015	Total Dissolved Solids	638	mg/L	20.0	02/08/22 10:51	
EPA 300.0 Rev 2.1 1993	Chloride	16.8	mg/L	1.0	02/08/22 11:27	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	02/08/22 11:27	
EPA 300.0 Rev 2.1 1993	Sulfate	147	mg/L	3.0	02/08/22 19:55	
<b>92586342005</b>	<b>HGWC-124</b>					
	Performed by	CUSTOME			02/04/22 15:39	
		R				
	pH	7.28	Std. Units		02/04/22 15:39	
EPA 6010D	Calcium	95.9	mg/L	1.0	02/17/22 16:17	
EPA 6020B	Barium	0.072	mg/L	0.0050	02/17/22 22:44	
EPA 6020B	Boron	0.33	mg/L	0.040	02/17/22 22:44	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	02/18/22 16:49	
EPA 6020B	Molybdenum	0.0010J	mg/L	0.010	02/17/22 22:44	
SM 2540C-2015	Total Dissolved Solids	347	mg/L	10.0	02/08/22 10:52	
EPA 300.0 Rev 2.1 1993	Chloride	2.6	mg/L	1.0	02/08/22 11:41	
EPA 300.0 Rev 2.1 1993	Sulfate	70.7	mg/L	1.0	02/08/22 11:41	
<b>92586342006</b>	<b>MW-39</b>					
	Performed by	CUSTOME			02/04/22 15:39	
		R				
	pH	6.96	Std. Units		02/04/22 15:39	
EPA 6010D	Calcium	163	mg/L	1.0	02/17/22 16:22	
EPA 6020B	Arsenic	0.0022J	mg/L	0.0050	02/18/22 17:31	
EPA 6020B	Barium	0.059	mg/L	0.0050	02/18/22 17:31	
EPA 6020B	Boron	1.2	mg/L	0.040	02/18/22 17:31	
EPA 6020B	Cobalt	0.0028J	mg/L	0.0050	02/18/22 17:31	
EPA 6020B	Lithium	0.034	mg/L	0.030	02/18/22 17:31	
EPA 6020B	Molybdenum	0.062	mg/L	0.010	02/18/22 17:31	
SM 2540C-2015	Total Dissolved Solids	608	mg/L	20.0	02/08/22 10:52	
EPA 300.0 Rev 2.1 1993	Chloride	2.5	mg/L	1.0	02/08/22 11:55	
EPA 300.0 Rev 2.1 1993	Fluoride	0.29	mg/L	0.10	02/08/22 11:55	
EPA 300.0 Rev 2.1 1993	Sulfate	201	mg/L	5.0	02/08/22 20:09	
<b>92586342007</b>	<b>MW-41</b>					
	Performed by	CUSTOME			02/04/22 15:40	
		R				
	pH	6.98	Std. Units		02/04/22 15:40	
EPA 6010D	Calcium	159	mg/L	1.0	02/17/22 16:43	
EPA 6020B	Arsenic	0.0023J	mg/L	0.0050	02/18/22 17:37	
EPA 6020B	Barium	0.070	mg/L	0.0050	02/18/22 17:37	
EPA 6020B	Boron	1.3	mg/L	0.040	02/18/22 17:37	
EPA 6020B	Cobalt	0.00056J	mg/L	0.0050	02/18/22 17:37	
EPA 6020B	Lithium	0.033	mg/L	0.030	02/18/22 17:37	
EPA 6020B	Molybdenum	0.047	mg/L	0.010	02/18/22 17:37	
SM 2540C-2015	Total Dissolved Solids	594	mg/L	20.0	02/08/22 10:52	
EPA 300.0 Rev 2.1 1993	Chloride	2.4	mg/L	1.0	02/08/22 12:09	
EPA 300.0 Rev 2.1 1993	Fluoride	0.23	mg/L	0.10	02/08/22 12:09	
EPA 300.0 Rev 2.1 1993	Sulfate	193	mg/L	5.0	02/08/22 20:23	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92586342008</b>	<b>HGWA-44D</b>					
	Performed by	CUSTOME			02/04/22 15:40	
		R				
	pH	8.25	Std. Units		02/04/22 15:40	
EPA 6010D	Calcium	24.8	mg/L	1.0	02/17/22 16:48	
EPA 6020B	Antimony	0.0013J	mg/L	0.0030	02/18/22 17:43	
EPA 6020B	Arsenic	0.0025J	mg/L	0.0050	02/18/22 17:43	
EPA 6020B	Barium	0.23	mg/L	0.0050	02/18/22 17:43	
EPA 6020B	Boron	0.44	mg/L	0.040	02/18/22 17:43	
EPA 6020B	Chromium	0.0013J	mg/L	0.0050	02/18/22 17:43	
EPA 6020B	Lithium	0.048	mg/L	0.030	02/18/22 17:43	
EPA 6020B	Molybdenum	0.0055J	mg/L	0.010	02/18/22 17:43	
SM 2540C-2015	Total Dissolved Solids	444	mg/L	10.0	02/07/22 16:43	
EPA 300.0 Rev 2.1 1993	Chloride	44.8	mg/L	1.0	02/08/22 12:23	
EPA 300.0 Rev 2.1 1993	Fluoride	0.96	mg/L	0.10	02/08/22 12:23	
EPA 300.0 Rev 2.1 1993	Sulfate	56.3	mg/L	1.0	02/08/22 12:23	
<b>92586342009</b>	<b>HGWA-2</b>					
	Performed by	CUSTOME			02/04/22 15:40	
		R				
	pH	5.24	Std. Units		02/04/22 15:40	
EPA 6010D	Calcium	27.2	mg/L	1.0	02/17/22 16:53	
EPA 6020B	Arsenic	0.0023J	mg/L	0.0050	02/18/22 17:49	
EPA 6020B	Barium	0.13	mg/L	0.0050	02/18/22 17:49	
EPA 6020B	Beryllium	0.00020J	mg/L	0.00050	02/18/22 17:49	
EPA 6020B	Boron	0.056	mg/L	0.040	02/18/22 17:49	
EPA 6020B	Cadmium	0.00017J	mg/L	0.00050	02/18/22 17:49	
EPA 6020B	Cobalt	0.025	mg/L	0.0050	02/18/22 17:49	
EPA 6020B	Lithium	0.0017J	mg/L	0.030	02/18/22 17:49	
SM 2540C-2015	Total Dissolved Solids	156	mg/L	10.0	02/07/22 16:43	
EPA 300.0 Rev 2.1 1993	Chloride	7.0	mg/L	1.0	02/08/22 13:36	
EPA 300.0 Rev 2.1 1993	Sulfate	67.1	mg/L	1.0	02/08/22 13:36	
<b>92586342010</b>	<b>HGWA-3</b>					
	Performed by	CUSTOME			02/04/22 15:40	
		R				
	pH	7.45	Std. Units		02/04/22 15:40	
EPA 6010D	Calcium	85.1	mg/L	1.0	02/17/22 16:58	
EPA 6020B	Arsenic	0.0024J	mg/L	0.0050	02/18/22 17:55	
EPA 6020B	Barium	0.12	mg/L	0.0050	02/18/22 17:55	
EPA 6020B	Boron	0.011J	mg/L	0.040	02/18/22 17:55	
EPA 6020B	Lithium	0.0037J	mg/L	0.030	02/18/22 17:55	
SM 2540C-2015	Total Dissolved Solids	350	mg/L	10.0	02/07/22 16:43	
EPA 300.0 Rev 2.1 1993	Chloride	5.7	mg/L	1.0	02/08/22 13:50	
EPA 300.0 Rev 2.1 1993	Sulfate	46.0	mg/L	1.0	02/08/22 13:50	
<b>92586342011</b>	<b>HGWA-1</b>					
	Performed by	CUSTOME			02/04/22 15:40	
		R				
	pH	7.19	Std. Units		02/04/22 15:40	
EPA 6010D	Calcium	106	mg/L	1.0	02/17/22 17:02	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92586342011</b>	<b>HGWA-1</b>					
EPA 6020B	Arsenic	0.0016J	mg/L	0.0050	02/18/22 18:01	
EPA 6020B	Barium	0.031	mg/L	0.0050	02/18/22 18:01	
EPA 6020B	Boron	0.016J	mg/L	0.040	02/18/22 18:01	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	02/18/22 18:01	
SM 2540C-2015	Total Dissolved Solids	270	mg/L	10.0	02/07/22 16:44	
EPA 300.0 Rev 2.1 1993	Chloride	7.5	mg/L	1.0	02/08/22 14:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.064J	mg/L	0.10	02/08/22 14:03	
EPA 300.0 Rev 2.1 1993	Sulfate	43.7	mg/L	1.0	02/08/22 14:03	
<b>92586342012</b>	<b>HGWA-43D</b>					
	Performed by	CUSTOME			02/04/22 15:40	
		R				
	pH	7.52	Std. Units		02/04/22 15:40	
EPA 6010D	Calcium	55.9	mg/L	1.0	02/17/22 17:07	
EPA 6020B	Arsenic	0.0036J	mg/L	0.0050	02/18/22 18:07	
EPA 6020B	Barium	0.29	mg/L	0.0050	02/18/22 18:07	
EPA 6020B	Boron	0.050	mg/L	0.040	02/18/22 18:07	
EPA 6020B	Lithium	0.0024J	mg/L	0.030	02/18/22 18:07	
EPA 6020B	Molybdenum	0.0036J	mg/L	0.010	02/18/22 18:07	
SM 2540C-2015	Total Dissolved Solids	156	mg/L	10.0	02/07/22 16:44	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	02/08/22 14:17	
EPA 300.0 Rev 2.1 1993	Fluoride	0.19	mg/L	0.10	02/08/22 14:17	
EPA 300.0 Rev 2.1 1993	Sulfate	37.5	mg/L	1.0	02/08/22 14:17	
<b>92586342013</b>	<b>HGWC-125</b>					
	Performed by	CUSTOME			02/07/22 15:57	
		R				
	pH	6.56	Std. Units		02/07/22 15:57	
EPA 6010D	Calcium	175	mg/L	1.0	02/17/22 17:12	
EPA 6020B	Arsenic	0.0032J	mg/L	0.0050	02/18/22 18:13	
EPA 6020B	Barium	0.043	mg/L	0.0050	02/18/22 18:13	
EPA 6020B	Boron	1.6	mg/L	0.040	02/18/22 18:13	
EPA 6020B	Cobalt	0.0086	mg/L	0.0050	02/18/22 18:13	
EPA 6020B	Lithium	0.0057J	mg/L	0.030	02/18/22 18:13	
EPA 6020B	Molybdenum	0.0067J	mg/L	0.010	02/18/22 18:13	
SM 2540C-2015	Total Dissolved Solids	726	mg/L	20.0	02/09/22 18:01	
EPA 300.0 Rev 2.1 1993	Chloride	8.1	mg/L	1.0	02/12/22 23:43	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.18	mg/L	0.10	02/12/22 23:43	M1
EPA 300.0 Rev 2.1 1993	Sulfate	304	mg/L	6.0	02/13/22 17:28	
<b>92586342014</b>	<b>HGWC-126</b>					
	Performed by	CUSTOME			02/07/22 15:57	
		R				
	pH	7.01	Std. Units		02/07/22 15:57	
EPA 6010D	Calcium	157	mg/L	1.0	02/17/22 17:17	
EPA 6020B	Arsenic	0.0026J	mg/L	0.0050	02/18/22 18:19	
EPA 6020B	Barium	0.24	mg/L	0.0050	02/18/22 18:19	
EPA 6020B	Boron	0.016J	mg/L	0.040	02/18/22 18:19	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	02/18/22 18:19	

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**SUMMARY OF DETECTION**

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92586342014</b>	<b>HGWC-126</b>					
SM 2540C-2015	Total Dissolved Solids	466	mg/L	20.0	02/09/22 18:01	
EPA 300.0 Rev 2.1 1993	Chloride	8.5	mg/L	1.0	02/13/22 00:58	
EPA 300.0 Rev 2.1 1993	Fluoride	0.51	mg/L	0.10	02/13/22 00:58	
EPA 300.0 Rev 2.1 1993	Sulfate	66.8	mg/L	1.0	02/13/22 00:58	
<b>92586342015</b>	<b>MW-32</b>					
	Performed by	CUSTOME			02/07/22 15:57	
		R				
	pH	6.95	Std. Units		02/07/22 15:57	
EPA 6010D	Calcium	157	mg/L	1.0	02/17/22 17:21	
EPA 6020B	Arsenic	0.0026J	mg/L	0.0050	02/18/22 18:25	
EPA 6020B	Barium	0.055	mg/L	0.0050	02/18/22 18:25	
EPA 6020B	Boron	1.2	mg/L	0.040	02/18/22 18:25	
EPA 6020B	Cobalt	0.0036J	mg/L	0.0050	02/18/22 18:25	
EPA 6020B	Lithium	0.033	mg/L	0.030	02/18/22 18:25	
EPA 6020B	Molybdenum	0.058	mg/L	0.010	02/18/22 18:25	
SM 2540C-2015	Total Dissolved Solids	600	mg/L	20.0	02/09/22 18:01	
EPA 300.0 Rev 2.1 1993	Chloride	2.4	mg/L	1.0	02/13/22 01:13	
EPA 300.0 Rev 2.1 1993	Fluoride	0.32	mg/L	0.10	02/13/22 01:13	
EPA 300.0 Rev 2.1 1993	Sulfate	206	mg/L	4.0	02/13/22 18:12	
<b>92586342016</b>	<b>MW-46D</b>					
	Performed by	CUSTOME			02/07/22 15:57	
		R				
	pH	7.69	Std. Units		02/07/22 15:57	
EPA 6010D	Calcium	44.4	mg/L	1.0	02/17/22 17:26	
EPA 6020B	Arsenic	0.0049J	mg/L	0.0050	02/18/22 18:43	
EPA 6020B	Barium	0.025	mg/L	0.0050	02/18/22 18:43	
EPA 6020B	Boron	0.95	mg/L	0.040	02/18/22 18:43	
EPA 6020B	Lithium	0.0065J	mg/L	0.030	02/18/22 18:43	
SM 2540C-2015	Total Dissolved Solids	588	mg/L	20.0	02/09/22 18:01	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	02/13/22 01:28	
EPA 300.0 Rev 2.1 1993	Fluoride	1.1	mg/L	0.10	02/13/22 01:28	
EPA 300.0 Rev 2.1 1993	Sulfate	164	mg/L	3.0	02/13/22 18:27	
<b>92586342017</b>	<b>DUP-3</b>					
EPA 6010D	Calcium	134	mg/L	1.0	02/17/22 17:43	
EPA 6020B	Arsenic	0.0032J	mg/L	0.0050	02/18/22 18:49	
EPA 6020B	Barium	0.24	mg/L	0.0050	02/18/22 18:49	
EPA 6020B	Boron	0.015J	mg/L	0.040	02/18/22 18:49	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	02/18/22 18:49	
SM 2540C-2015	Total Dissolved Solids	490	mg/L	20.0	02/09/22 18:01	
EPA 300.0 Rev 2.1 1993	Chloride	8.5	mg/L	1.0	02/13/22 01:43	
EPA 300.0 Rev 2.1 1993	Fluoride	0.51	mg/L	0.10	02/13/22 01:43	
EPA 300.0 Rev 2.1 1993	Sulfate	66.7	mg/L	1.0	02/13/22 01:43	
<b>92586342018</b>	<b>EB-3</b>					
EPA 6020B	Arsenic	0.0025J	mg/L	0.0050	02/18/22 19:01	

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### SUMMARY OF DETECTION

Project: HAMMOND AP-3

Pace Project No.: 92586342

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Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92586342019</b>	<b>FB-3</b>					
EPA 6010D	Calcium	0.88J	mg/L	1.0	02/17/22 17:58	
EPA 6020B	Arsenic	0.0022J	mg/L	0.0050	02/18/22 19:07	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: HGWA-122**      **Lab ID: 92586342001**      Collected: 02/01/22 14:25      Received: 02/03/22 12:32      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		02/04/22 15:39		
pH	<b>6.57</b>	Std. Units			1		02/04/22 15:39		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>57.5</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 15:43	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/17/22 22:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/17/22 22:02	7440-38-2	
Barium	<b>0.035</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/17/22 22:02	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/17/22 22:02	7440-41-7	
Boron	<b>0.17</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/17/22 22:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/17/22 22:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/17/22 22:02	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/17/22 22:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/17/22 22:02	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 16:13	7439-93-2	
Molybdenum	<b>0.0020J</b>	mg/L	0.010	0.00074	1	02/17/22 09:52	02/17/22 22:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/17/22 22:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/17/22 22:02	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 08:00	02/15/22 13:00	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2015  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>203</b>	mg/L	10.0	10.0	1		02/07/22 16:43		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>2.2</b>	mg/L	1.0	0.60	1		02/08/22 10:17	16887-00-6	
Fluoride	<b>0.062J</b>	mg/L	0.10	0.050	1		02/08/22 10:17	16984-48-8	
Sulfate	<b>41.1</b>	mg/L	1.0	0.50	1		02/08/22 10:17	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3  
 Pace Project No.: 92586342

Sample: <b>HGWA-45D</b>		Lab ID: <b>92586342002</b>		Collected: 02/01/22 16:02		Received: 02/03/22 12:32		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/04/22 15:39		
pH	<b>7.45</b>	Std. Units			1		02/04/22 15:39		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>51.3</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 15:48	7440-70-2	M1
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	<b>0.0018J</b>	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/17/22 22:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/17/22 22:26	7440-38-2	
Barium	<b>0.57</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/17/22 22:26	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/17/22 22:26	7440-41-7	
Boron	<b>0.14</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/17/22 22:26	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/17/22 22:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/17/22 22:26	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/17/22 22:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/17/22 22:26	7439-92-1	
Lithium	<b>0.0055J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 16:31	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/17/22 09:52	02/17/22 22:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/17/22 22:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/17/22 22:26	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 08:00	02/15/22 13:03	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>268</b>	mg/L	10.0	10.0	1		02/07/22 16:43		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>3.5</b>	mg/L	1.0	0.60	1		02/08/22 10:31	16887-00-6	
Fluoride	<b>0.15</b>	mg/L	0.10	0.050	1		02/08/22 10:31	16984-48-8	
Sulfate	<b>2.5</b>	mg/L	1.0	0.50	1		02/08/22 10:31	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: HGWC-120**      **Lab ID: 92586342003**      Collected: 02/02/22 13:33      Received: 02/03/22 12:32      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/04/22 15:39		
pH	<b>7.00</b>	Std. Units			1		02/04/22 15:39		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>159</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 16:08	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/17/22 22:32	7440-36-0	
Arsenic	<b>0.0014J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/17/22 22:32	7440-38-2	
Barium	<b>0.054</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/17/22 22:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/17/22 22:32	7440-41-7	
Boron	<b>0.91</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/17/22 22:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/17/22 22:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/17/22 22:32	7440-47-3	
Cobalt	<b>0.0072</b>	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/17/22 22:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/17/22 22:32	7439-92-1	
Lithium	<b>0.025J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 16:37	7439-93-2	
Molybdenum	<b>0.034</b>	mg/L	0.010	0.00074	1	02/17/22 09:52	02/17/22 22:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/17/22 22:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/17/22 22:32	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 08:00	02/15/22 13:05	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>612</b>	mg/L	20.0	20.0	1		02/08/22 10:51		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.5</b>	mg/L	1.0	0.60	1		02/08/22 10:45	16887-00-6	
Fluoride	<b>0.36</b>	mg/L	0.10	0.050	1		02/08/22 10:45	16984-48-8	
Sulfate	<b>201</b>	mg/L	5.0	2.5	5		02/08/22 19:12	14808-79-8	M1

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: HGWC-121A**      **Lab ID: 92586342004**      Collected: 02/02/22 09:47      Received: 02/03/22 12:32      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		02/04/22 15:39		
pH	<b>6.92</b>	Std. Units			1		02/04/22 15:39		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>148</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 16:12	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/17/22 22:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/17/22 22:38	7440-38-2	
Barium	<b>0.064</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/17/22 22:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/17/22 22:38	7440-41-7	
Boron	<b>1.6</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/17/22 22:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/17/22 22:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/17/22 22:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/17/22 22:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/17/22 22:38	7439-92-1	
Lithium	<b>0.0082J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 16:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/17/22 09:52	02/17/22 22:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/17/22 22:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/17/22 22:38	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 08:00	02/15/22 13:08	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2015  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>638</b>	mg/L	20.0	20.0	1		02/08/22 10:51		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>16.8</b>	mg/L	1.0	0.60	1		02/08/22 11:27	16887-00-6	
Fluoride	<b>0.15</b>	mg/L	0.10	0.050	1		02/08/22 11:27	16984-48-8	
Sulfate	<b>147</b>	mg/L	3.0	1.5	3		02/08/22 19:55	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: HGWC-124**      **Lab ID: 92586342005**      Collected: 02/02/22 11:39      Received: 02/03/22 12:32      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		02/04/22 15:39		
pH	<b>7.28</b>	Std. Units			1		02/04/22 15:39		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>95.9</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 16:17	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/17/22 22:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/17/22 22:44	7440-38-2	
Barium	<b>0.072</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/17/22 22:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/17/22 22:44	7440-41-7	
Boron	<b>0.33</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/17/22 22:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/17/22 22:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/17/22 22:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/17/22 22:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/17/22 22:44	7439-92-1	
Lithium	<b>0.0012J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 16:49	7439-93-2	
Molybdenum	<b>0.0010J</b>	mg/L	0.010	0.00074	1	02/17/22 09:52	02/17/22 22:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/17/22 22:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/17/22 22:44	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	02/15/22 08:00	02/15/22 13:16	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2015  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>347</b>	mg/L	10.0	10.0	1		02/08/22 10:52		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>2.6</b>	mg/L	1.0	0.60	1		02/08/22 11:41	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/22 11:41	16984-48-8	
Sulfate	<b>70.7</b>	mg/L	1.0	0.50	1		02/08/22 11:41	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3  
 Pace Project No.: 92586342

**Sample: MW-39**      **Lab ID: 92586342006**      Collected: 02/02/22 16:33      Received: 02/03/22 12:32      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/04/22 15:39		
pH	<b>6.96</b>	Std. Units			1		02/04/22 15:39		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>163</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 16:22	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 17:31	7440-36-0	
Arsenic	<b>0.0022J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 17:31	7440-38-2	
Barium	<b>0.059</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 17:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 17:31	7440-41-7	
Boron	<b>1.2</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 17:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 17:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 17:31	7440-47-3	
Cobalt	<b>0.0028J</b>	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 17:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 17:31	7439-92-1	
Lithium	<b>0.034</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 17:31	7439-93-2	
Molybdenum	<b>0.062</b>	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 17:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 17:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 17:31	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 08:00	02/15/22 13:19	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>608</b>	mg/L	20.0	20.0	1		02/08/22 10:52		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.5</b>	mg/L	1.0	0.60	1		02/08/22 11:55	16887-00-6	
Fluoride	<b>0.29</b>	mg/L	0.10	0.050	1		02/08/22 11:55	16984-48-8	
Sulfate	<b>201</b>	mg/L	5.0	2.5	5		02/08/22 20:09	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: MW-41**      **Lab ID: 92586342007**      Collected: 02/02/22 15:17      Received: 02/03/22 12:32      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/04/22 15:40		
pH	<b>6.98</b>	Std. Units			1		02/04/22 15:40		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>159</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 16:43	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 17:37	7440-36-0	
Arsenic	<b>0.0023J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 17:37	7440-38-2	
Barium	<b>0.070</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 17:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 17:37	7440-41-7	
Boron	<b>1.3</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 17:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 17:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 17:37	7440-47-3	
Cobalt	<b>0.00056J</b>	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 17:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 17:37	7439-92-1	
Lithium	<b>0.033</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 17:37	7439-93-2	
Molybdenum	<b>0.047</b>	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 17:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 17:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 17:37	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 08:00	02/15/22 13:21	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>594</b>	mg/L	20.0	20.0	1		02/08/22 10:52		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.4</b>	mg/L	1.0	0.60	1		02/08/22 12:09	16887-00-6	
Fluoride	<b>0.23</b>	mg/L	0.10	0.050	1		02/08/22 12:09	16984-48-8	
Sulfate	<b>193</b>	mg/L	5.0	2.5	5		02/08/22 20:23	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3  
 Pace Project No.: 92586342

Sample: <b>HGWA-44D</b>		Lab ID: <b>92586342008</b>		Collected: 02/01/22 13:35		Received: 02/03/22 12:32		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/04/22 15:40		
pH	<b>8.25</b>	Std. Units			1		02/04/22 15:40		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>24.8</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 16:48	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	<b>0.0013J</b>	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 17:43	7440-36-0	
Arsenic	<b>0.0025J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 17:43	7440-38-2	
Barium	<b>0.23</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 17:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 17:43	7440-41-7	
Boron	<b>0.44</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 17:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 17:43	7440-43-9	
Chromium	<b>0.0013J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 17:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 17:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 17:43	7439-92-1	
Lithium	<b>0.048</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 17:43	7439-93-2	
Molybdenum	<b>0.0055J</b>	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 17:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 17:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 17:43	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 08:00	02/15/22 13:24	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>444</b>	mg/L	10.0	10.0	1		02/07/22 16:43		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>44.8</b>	mg/L	1.0	0.60	1		02/08/22 12:23	16887-00-6	
Fluoride	<b>0.96</b>	mg/L	0.10	0.050	1		02/08/22 12:23	16984-48-8	
Sulfate	<b>56.3</b>	mg/L	1.0	0.50	1		02/08/22 12:23	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: HGWA-2**      **Lab ID: 92586342009**      Collected: 02/01/22 11:52      Received: 02/03/22 12:32      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		02/04/22 15:40		
pH	<b>5.24</b>	Std. Units			1		02/04/22 15:40		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>27.2</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 16:53	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 17:49	7440-36-0	
Arsenic	<b>0.0023J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 17:49	7440-38-2	
Barium	<b>0.13</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 17:49	7440-39-3	
Beryllium	<b>0.00020J</b>	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 17:49	7440-41-7	
Boron	<b>0.056</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 17:49	7440-42-8	
Cadmium	<b>0.00017J</b>	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 17:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 17:49	7440-47-3	
Cobalt	<b>0.025</b>	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 17:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 17:49	7439-92-1	
Lithium	<b>0.0017J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 17:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 17:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 17:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 17:49	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 08:00	02/15/22 13:27	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2015  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>156</b>	mg/L	10.0	10.0	1		02/07/22 16:43		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>7.0</b>	mg/L	1.0	0.60	1		02/08/22 13:36	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/22 13:36	16984-48-8	
Sulfate	<b>67.1</b>	mg/L	1.0	0.50	1		02/08/22 13:36	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: HGWA-3**      **Lab ID: 92586342010**      Collected: 02/01/22 09:58      Received: 02/03/22 12:32      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		02/04/22 15:40		
pH	<b>7.45</b>	Std. Units			1		02/04/22 15:40		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>85.1</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 16:58	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 17:55	7440-36-0	
Arsenic	<b>0.0024J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 17:55	7440-38-2	
Barium	<b>0.12</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 17:55	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 17:55	7440-41-7	
Boron	<b>0.011J</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 17:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 17:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 17:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 17:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 17:55	7439-92-1	
Lithium	<b>0.0037J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 17:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 17:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 17:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 17:55	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 15:15	02/16/22 10:53	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2015  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>350</b>	mg/L	10.0	10.0	1		02/07/22 16:43		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>5.7</b>	mg/L	1.0	0.60	1		02/08/22 13:50	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/08/22 13:50	16984-48-8	
Sulfate	<b>46.0</b>	mg/L	1.0	0.50	1		02/08/22 13:50	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample:** HGWA-1      **Lab ID:** 92586342011      Collected: 02/01/22 12:13      Received: 02/03/22 12:32      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		02/04/22 15:40		
pH	<b>7.19</b>	Std. Units			1		02/04/22 15:40		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>106</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 17:02	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 18:01	7440-36-0	
Arsenic	<b>0.0016J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:01	7440-38-2	
Barium	<b>0.031</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 18:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 18:01	7440-41-7	
Boron	<b>0.016J</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 18:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 18:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 18:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 18:01	7439-92-1	
Lithium	<b>0.0011J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 18:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 18:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 18:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 18:01	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	02/15/22 15:15	02/16/22 11:04	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2015  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>270</b>	mg/L	10.0	10.0	1		02/07/22 16:44		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>7.5</b>	mg/L	1.0	0.60	1		02/08/22 14:03	16887-00-6	
Fluoride	<b>0.064J</b>	mg/L	0.10	0.050	1		02/08/22 14:03	16984-48-8	
Sulfate	<b>43.7</b>	mg/L	1.0	0.50	1		02/08/22 14:03	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: HGWA-43D**      **Lab ID: 92586342012**      Collected: 02/01/22 10:28      Received: 02/03/22 12:32      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		02/04/22 15:40		
pH	<b>7.52</b>	Std. Units			1		02/04/22 15:40		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>55.9</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 17:07	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 18:07	7440-36-0	
Arsenic	<b>0.0036J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:07	7440-38-2	
Barium	<b>0.29</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 18:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 18:07	7440-41-7	
Boron	<b>0.050</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 18:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 18:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 18:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 18:07	7439-92-1	
Lithium	<b>0.0024J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 18:07	7439-93-2	
Molybdenum	<b>0.0036J</b>	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 18:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 18:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 18:07	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 15:15	02/16/22 11:06	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2015  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>156</b>	mg/L	10.0	10.0	1		02/07/22 16:44		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>4.1</b>	mg/L	1.0	0.60	1		02/08/22 14:17	16887-00-6	
Fluoride	<b>0.19</b>	mg/L	0.10	0.050	1		02/08/22 14:17	16984-48-8	
Sulfate	<b>37.5</b>	mg/L	1.0	0.50	1		02/08/22 14:17	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: HGWC-125**      **Lab ID: 92586342013**      Collected: 02/03/22 13:09      Received: 02/07/22 12:35      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		02/07/22 15:57		
pH	<b>6.56</b>	Std. Units			1		02/07/22 15:57		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>175</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 17:12	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 18:13	7440-36-0	
Arsenic	<b>0.0032J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:13	7440-38-2	
Barium	<b>0.043</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 18:13	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 18:13	7440-41-7	
Boron	<b>1.6</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 18:13	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 18:13	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:13	7440-47-3	
Cobalt	<b>0.0086</b>	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 18:13	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 18:13	7439-92-1	
Lithium	<b>0.0057J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 18:13	7439-93-2	
Molybdenum	<b>0.0067J</b>	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 18:13	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 18:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 18:13	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 15:15	02/16/22 12:15	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2015  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>726</b>	mg/L	20.0	20.0	1		02/09/22 18:01		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>8.1</b>	mg/L	1.0	0.60	1		02/12/22 23:43	16887-00-6	M1
Fluoride	<b>0.18</b>	mg/L	0.10	0.050	1		02/12/22 23:43	16984-48-8	M1
Sulfate	<b>304</b>	mg/L	6.0	3.0	6		02/13/22 17:28	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3  
 Pace Project No.: 92586342

**Sample: HGWC-126**      **Lab ID: 92586342014**      Collected: 02/03/22 15:04      Received: 02/07/22 12:35      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		02/07/22 15:57		
pH	<b>7.01</b>	Std. Units			1		02/07/22 15:57		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>157</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 17:17	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 18:19	7440-36-0	
Arsenic	<b>0.0026J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:19	7440-38-2	
Barium	<b>0.24</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 18:19	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 18:19	7440-41-7	
Boron	<b>0.016J</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 18:19	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 18:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 18:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 18:19	7439-92-1	
Lithium	<b>0.0038J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 18:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 18:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 18:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 18:19	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 15:15	02/16/22 12:25	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>466</b>	mg/L	20.0	20.0	1		02/09/22 18:01		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>8.5</b>	mg/L	1.0	0.60	1		02/13/22 00:58	16887-00-6	
Fluoride	<b>0.51</b>	mg/L	0.10	0.050	1		02/13/22 00:58	16984-48-8	
Sulfate	<b>66.8</b>	mg/L	1.0	0.50	1		02/13/22 00:58	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: MW-32**      **Lab ID: 92586342015**      Collected: 02/03/22 10:29      Received: 02/07/22 12:35      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		02/07/22 15:57		
pH	<b>6.95</b>	Std. Units			1		02/07/22 15:57		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>157</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 17:21	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 18:25	7440-36-0	
Arsenic	<b>0.0026J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:25	7440-38-2	
Barium	<b>0.055</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 18:25	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 18:25	7440-41-7	
Boron	<b>1.2</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 18:25	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 18:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:25	7440-47-3	
Cobalt	<b>0.0036J</b>	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 18:25	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 18:25	7439-92-1	
Lithium	<b>0.033</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 18:25	7439-93-2	
Molybdenum	<b>0.058</b>	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 18:25	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 18:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 18:25	7440-28-0	

**7470 Mercury**

Analytical Method: EPA 7470A      Preparation Method: EPA 7470A  
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 15:15	02/16/22 12:28	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2015  
Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>600</b>	mg/L	20.0	20.0	1		02/09/22 18:01		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Chloride	<b>2.4</b>	mg/L	1.0	0.60	1		02/13/22 01:13	16887-00-6	
Fluoride	<b>0.32</b>	mg/L	0.10	0.050	1		02/13/22 01:13	16984-48-8	
Sulfate	<b>206</b>	mg/L	4.0	2.0	4		02/13/22 18:12	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3  
 Pace Project No.: 92586342

**Sample: MW-46D**      **Lab ID: 92586342016**      Collected: 02/03/22 10:35      Received: 02/07/22 12:35      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**Field Data**

Analytical Method:  
 Pace Analytical Services - Charlotte

Performed by	<b>CUSTOMER</b>				1		02/07/22 15:57		
pH	<b>7.69</b>	Std. Units			1		02/07/22 15:57		

**6010D ATL ICP**

Analytical Method: EPA 6010D      Preparation Method: EPA 3010A  
 Pace Analytical Services - Peachtree Corners, GA

Calcium	<b>44.4</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 17:26	7440-70-2	
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**6020 MET ICPMS**

Analytical Method: EPA 6020B      Preparation Method: EPA 3005A  
 Pace Analytical Services - Peachtree Corners, GA

Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 18:43	7440-36-0	
Arsenic	<b>0.0049J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:43	7440-38-2	
Barium	<b>0.025</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 18:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 18:43	7440-41-7	
Boron	<b>0.95</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 18:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 18:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 18:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 18:43	7439-92-1	
Lithium	<b>0.0065J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 18:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 18:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 18:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 18:43	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	02/15/22 15:15	02/16/22 12:30	7439-97-6	
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**2540C Total Dissolved Solids**

Analytical Method: SM 2540C-2015  
 Pace Analytical Services - Peachtree Corners, GA

Total Dissolved Solids	<b>588</b>	mg/L	20.0	20.0	1		02/09/22 18:01		
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
 Pace Analytical Services - Asheville

Chloride	<b>3.5</b>	mg/L	1.0	0.60	1		02/13/22 01:28	16887-00-6	
Fluoride	<b>1.1</b>	mg/L	0.10	0.050	1		02/13/22 01:28	16984-48-8	
Sulfate	<b>164</b>	mg/L	3.0	1.5	3		02/13/22 18:27	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: DUP-3**      **Lab ID: 92586342017**      Collected: 02/03/22 00:00      Received: 02/07/22 12:35      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D    Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>134</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 17:43	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 18:49	7440-36-0	
Arsenic	<b>0.0032J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:49	7440-38-2	
Barium	<b>0.24</b>	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 18:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 18:49	7440-41-7	
Boron	<b>0.015J</b>	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 18:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 18:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 18:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 18:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 18:49	7439-92-1	
Lithium	<b>0.0038J</b>	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 18:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 18:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 18:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 18:49	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A    Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 15:15	02/16/22 12:33	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>490</b>	mg/L	20.0	20.0	1		02/09/22 18:01		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>8.5</b>	mg/L	1.0	0.60	1		02/13/22 01:43	16887-00-6	
Fluoride	<b>0.51</b>	mg/L	0.10	0.050	1		02/13/22 01:43	16984-48-8	
Sulfate	<b>66.7</b>	mg/L	1.0	0.50	1		02/13/22 01:43	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: EB-3**      **Lab ID: 92586342018**      Collected: 02/03/22 15:59      Received: 02/07/22 12:35      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D    Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	ND	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 17:53	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 19:01	7440-36-0	
Arsenic	<b>0.0025J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 19:01	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 19:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 19:01	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 19:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 19:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 19:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 19:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 19:01	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 19:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 19:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 19:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 19:01	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A    Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 15:15	02/16/22 12:41	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/09/22 18:01		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		02/13/22 01:58	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/13/22 01:58	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/13/22 01:58	14808-79-8	

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### ANALYTICAL RESULTS

Project: HAMMOND AP-3

Pace Project No.: 92586342

**Sample: FB-3**      **Lab ID: 92586342019**      Collected: 02/03/22 15:51      Received: 02/07/22 12:35      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D    Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>0.88J</b>	mg/L	1.0	0.12	1	02/17/22 10:31	02/17/22 17:58	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00078	1	02/17/22 09:52	02/18/22 19:07	7440-36-0	
Arsenic	<b>0.0022J</b>	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 19:07	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/17/22 09:52	02/18/22 19:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/17/22 09:52	02/18/22 19:07	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/17/22 09:52	02/18/22 19:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/17/22 09:52	02/18/22 19:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/17/22 09:52	02/18/22 19:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/17/22 09:52	02/18/22 19:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/17/22 09:52	02/18/22 19:07	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/17/22 09:52	02/18/22 19:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/17/22 09:52	02/18/22 19:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/17/22 09:52	02/18/22 19:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/17/22 09:52	02/18/22 19:07	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A    Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.00013	1	02/15/22 15:15	02/16/22 12:43	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/09/22 18:02		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	ND	mg/L	1.0	0.60	1		02/13/22 02:13	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/13/22 02:13	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/13/22 02:13	14808-79-8	

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**QUALITY CONTROL DATA**

Project: HAMMOND AP-3  
 Pace Project No.: 92586342

QC Batch: 678931 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92586342001, 92586342002, 92586342003, 92586342004, 92586342005, 92586342006, 92586342007, 92586342008, 92586342009, 92586342010, 92586342011, 92586342012, 92586342013, 92586342014, 92586342015, 92586342016, 92586342017, 92586342018, 92586342019

METHOD BLANK: 3552812 Matrix: Water  
 Associated Lab Samples: 92586342001, 92586342002, 92586342003, 92586342004, 92586342005, 92586342006, 92586342007, 92586342008, 92586342009, 92586342010, 92586342011, 92586342012, 92586342013, 92586342014, 92586342015, 92586342016, 92586342017, 92586342018, 92586342019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/17/22 15:21	

LABORATORY CONTROL SAMPLE: 3552813

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.99J	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3552814 3552815

Parameter	Units	92586342002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	51.3	1	1	53.1	51.0	177	-37	75-125	4	20	M1

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**QUALITY CONTROL DATA**

Project: HAMMOND AP-3

Pace Project No.: 92586342

QC Batch:	678928	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92586342001, 92586342002, 92586342003, 92586342004, 92586342005, 92586342006, 92586342007, 92586342008, 92586342009, 92586342010, 92586342011, 92586342012, 92586342013, 92586342014, 92586342015, 92586342016, 92586342017, 92586342018, 92586342019

METHOD BLANK:	3552808	Matrix:	Water
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Associated Lab Samples: 92586342001, 92586342002, 92586342003, 92586342004, 92586342005, 92586342006, 92586342007, 92586342008, 92586342009, 92586342010, 92586342011, 92586342012, 92586342013, 92586342014, 92586342015, 92586342016, 92586342017, 92586342018, 92586342019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/17/22 21:50	
Arsenic	mg/L	ND	0.0050	0.0011	02/17/22 21:50	
Barium	mg/L	ND	0.0050	0.00067	02/17/22 21:50	
Beryllium	mg/L	ND	0.00050	0.000054	02/17/22 21:50	
Boron	mg/L	ND	0.040	0.0086	02/17/22 21:50	
Cadmium	mg/L	ND	0.00050	0.00011	02/17/22 21:50	
Chromium	mg/L	ND	0.0050	0.0011	02/17/22 21:50	
Cobalt	mg/L	ND	0.0050	0.00039	02/17/22 21:50	
Lead	mg/L	ND	0.0010	0.00089	02/17/22 21:50	
Lithium	mg/L	ND	0.030	0.00073	02/18/22 16:01	
Molybdenum	mg/L	ND	0.010	0.00074	02/17/22 21:50	
Selenium	mg/L	ND	0.0050	0.0014	02/17/22 21:50	
Thallium	mg/L	ND	0.0010	0.00018	02/17/22 21:50	

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	119	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.11	107	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.11	106	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.11	109	80-120	
Selenium	mg/L	0.1	0.10	104	80-120	
Thallium	mg/L	0.1	0.11	106	80-120	

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### QUALITY CONTROL DATA

Project: HAMMOND AP-3

Pace Project No.: 92586342

Parameter	Units	3552810		3552811		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92586342001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Antimony	mg/L	ND	0.1	0.1	0.12	0.13	122	125	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	110	108	75-125	2	20		
Barium	mg/L	0.035	0.1	0.1	0.14	0.14	108	107	75-125	0	20		
Beryllium	mg/L	ND	0.1	0.1	0.091	0.091	91	91	75-125	0	20		
Boron	mg/L	0.17	1	1	1.1	1.1	90	89	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.11	0.11	108	109	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.11	103	106	75-125	3	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20		
Lead	mg/L	ND	0.1	0.1	0.11	0.11	108	108	75-125	1	20		
Lithium	mg/L	ND	0.1	0.1	0.10	0.11	102	106	75-125	4	20		
Molybdenum	mg/L	0.0020J	0.1	0.1	0.12	0.12	116	116	75-125	0	20		
Selenium	mg/L	ND	0.1	0.1	0.11	0.11	111	110	75-125	0	20		
Thallium	mg/L	ND	0.1	0.1	0.11	0.11	109	109	75-125	0	20		

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**QUALITY CONTROL DATA**

Project: HAMMOND AP-3

Pace Project No.: 92586342

QC Batch: 678094 Analysis Method: EPA 7470A  
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92586342001, 92586342002, 92586342003, 92586342004, 92586342005, 92586342006, 92586342007, 92586342008, 92586342009

METHOD BLANK: 3548852 Matrix: Water  
 Associated Lab Samples: 92586342001, 92586342002, 92586342003, 92586342004, 92586342005, 92586342006, 92586342007, 92586342008, 92586342009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/15/22 12:00	

LABORATORY CONTROL SAMPLE: 3548853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3548854 3548855

Parameter	Units	92585561007 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	96	95	75-125	1	20	

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**QUALITY CONTROL DATA**

Project: HAMMOND AP-3  
 Pace Project No.: 92586342

QC Batch: 678396 Analysis Method: EPA 7470A  
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92586342010, 92586342011, 92586342012

METHOD BLANK: 3550157 Matrix: Water  
 Associated Lab Samples: 92586342010, 92586342011, 92586342012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/16/22 10:48	

LABORATORY CONTROL SAMPLE: 3550158

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: 3550159 3550160

Parameter	Units	92586342010		3550160		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0021	0.0023	85	92	75-125	8	20	

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**QUALITY CONTROL DATA**

Project: HAMMOND AP-3

Pace Project No.: 92586342

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QC Batch:	678399	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92586342013, 92586342014, 92586342015, 92586342016, 92586342017, 92586342018, 92586342019

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METHOD BLANK: 3550166 Matrix: Water

Associated Lab Samples: 92586342013, 92586342014, 92586342015, 92586342016, 92586342017, 92586342018, 92586342019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/16/22 12:04	

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LABORATORY CONTROL SAMPLE: 3550167

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	93	80-120	

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MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3550168 3550169

Parameter	Units	3550168		3550169		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0021	0.0022	82	87	75-125	6	20	

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**QUALITY CONTROL DATA**

Project: HAMMOND AP-3

Pace Project No.: 92586342

QC Batch: 676438 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: 92586342001, 92586342002, 92586342008, 92586342009, 92586342010, 92586342011, 92586342012

METHOD BLANK: 3540515 Matrix: Water  
 Associated Lab Samples: 92586342001, 92586342002, 92586342008, 92586342009, 92586342010, 92586342011, 92586342012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/07/22 16:40	

LABORATORY CONTROL SAMPLE: 3540516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	375	94	80-120	

SAMPLE DUPLICATE: 3540517

Parameter	Units	92585561006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	256	265	3	25	

SAMPLE DUPLICATE: 3540518

Parameter	Units	92586342009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	156	171	9	25	

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**QUALITY CONTROL DATA**

Project: HAMMOND AP-3  
 Pace Project No.: 92586342

QC Batch: 676565 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: 92586342003, 92586342004, 92586342005, 92586342006, 92586342007

METHOD BLANK: 3541415 Matrix: Water  
 Associated Lab Samples: 92586342003, 92586342004, 92586342005, 92586342006, 92586342007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/08/22 10:47	

LABORATORY CONTROL SAMPLE: 3541416

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	389	97	80-120	

SAMPLE DUPLICATE: 3541417

Parameter	Units	92585979001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	98.0	91.0	7	25	

SAMPLE DUPLICATE: 3541418

Parameter	Units	92586342006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	608	616	1	25	

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**QUALITY CONTROL DATA**

Project: HAMMOND AP-3

Pace Project No.: 92586342

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QC Batch:	676887	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: 92586342013, 92586342014, 92586342015, 92586342016, 92586342017, 92586342018, 92586342019

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METHOD BLANK: 3542890 Matrix: Water

Associated Lab Samples: 92586342013, 92586342014, 92586342015, 92586342016, 92586342017, 92586342018, 92586342019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/09/22 18:00	

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LABORATORY CONTROL SAMPLE: 3542891

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	386	96	80-120	

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SAMPLE DUPLICATE: 3542892

Parameter	Units	92585561016 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		25	

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SAMPLE DUPLICATE: 3542893

Parameter	Units	92586685001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1990	1860	7	25	

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**QUALITY CONTROL DATA**

Project: HAMMOND AP-3

Pace Project No.: 92586342

QC Batch:	676561	Analysis Method:	EPA 300.0 Rev 2.1 1993
QC Batch Method:	EPA 300.0 Rev 2.1 1993	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92586342001, 92586342002, 92586342003, 92586342004, 92586342005, 92586342006, 92586342007, 92586342008, 92586342009, 92586342010, 92586342011, 92586342012		

METHOD BLANK:	3541395	Matrix:	Water
Associated Lab Samples:	92586342001, 92586342002, 92586342003, 92586342004, 92586342005, 92586342006, 92586342007, 92586342008, 92586342009, 92586342010, 92586342011, 92586342012		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/08/22 06:35	
Fluoride	mg/L	ND	0.10	0.050	02/08/22 06:35	
Sulfate	mg/L	ND	1.0	0.50	02/08/22 06:35	

LABORATORY CONTROL SAMPLE: 3541396						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.6	103	90-110	
Fluoride	mg/L	2.5	2.4	95	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3541397												3541398	
Parameter	Units	92585561005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	4.1	50	50	56.9	57.4	105	106	90-110	1	10		
Fluoride	mg/L	0.086J	2.5	2.5	2.5	2.6	98	99	90-110	2	10		
Sulfate	mg/L	25.5	50	50	77.5	78.0	104	105	90-110	1	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3541399												3541400	
Parameter	Units	92586342003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	2.5	50	50	55.3	55.0	106	105	90-110	1	10		
Fluoride	mg/L	0.36	2.5	2.5	2.9	2.9	100	100	90-110	0	10		
Sulfate	mg/L	201	50	50	246	243	91	84	90-110	1	10 M1		

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**QUALITY CONTROL DATA**

Project: HAMMOND AP-3

Pace Project No.: 92586342

QC Batch:	677753	Analysis Method:	EPA 300.0 Rev 2.1 1993
QC Batch Method:	EPA 300.0 Rev 2.1 1993	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Asheville

Associated Lab Samples: 92586342013, 92586342014, 92586342015, 92586342016, 92586342017, 92586342018, 92586342019

METHOD BLANK: 3547291 Matrix: Water  
 Associated Lab Samples: 92586342013, 92586342014, 92586342015, 92586342016, 92586342017, 92586342018, 92586342019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/12/22 23:13	
Fluoride	mg/L	ND	0.10	0.050	02/12/22 23:13	
Sulfate	mg/L	ND	1.0	0.50	02/12/22 23:13	

LABORATORY CONTROL SAMPLE: 3547292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.4	101	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	49.3	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3547293 3547294

Parameter	Units	92586342013		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Chloride	mg/L	8.1	50	50	65.1	65.3	114	114	90-110	0	10	M1	
Fluoride	mg/L	0.18	2.5	2.5	3.2	3.2	121	121	90-110	0	10	M1	
Sulfate	mg/L	304	50	50	353	356	98	105	90-110	1	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3547295 3547296

Parameter	Units	92586613004		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Chloride	mg/L	3.3	50	50	60.6	60.9	115	115	90-110	0	10	M1	
Fluoride	mg/L	0.11	2.5	2.5	3.1	3.1	119	119	90-110	1	10	M1	
Sulfate	mg/L	170	50	50	227	227	116	115	90-110	0	10	M1	

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## QUALIFIERS

Project: HAMMOND AP-3

Pace Project No.: 92586342

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### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92586342001	HGWA-122				
92586342002	HGWA-45D				
92586342003	HGWC-120				
92586342004	HGWC-121A				
92586342005	HGWC-124				
92586342006	MW-39				
92586342007	MW-41				
92586342008	HGWA-44D				
92586342009	HGWA-2				
92586342010	HGWA-3				
92586342011	HGWA-1				
92586342012	HGWA-43D				
92586342013	HGWC-125				
92586342014	HGWC-126				
92586342015	MW-32				
92586342016	MW-46D				
92586342001	HGWA-122	EPA 3010A	678931	EPA 6010D	679039
92586342002	HGWA-45D	EPA 3010A	678931	EPA 6010D	679039
92586342003	HGWC-120	EPA 3010A	678931	EPA 6010D	679039
92586342004	HGWC-121A	EPA 3010A	678931	EPA 6010D	679039
92586342005	HGWC-124	EPA 3010A	678931	EPA 6010D	679039
92586342006	MW-39	EPA 3010A	678931	EPA 6010D	679039
92586342007	MW-41	EPA 3010A	678931	EPA 6010D	679039
92586342008	HGWA-44D	EPA 3010A	678931	EPA 6010D	679039
92586342009	HGWA-2	EPA 3010A	678931	EPA 6010D	679039
92586342010	HGWA-3	EPA 3010A	678931	EPA 6010D	679039
92586342011	HGWA-1	EPA 3010A	678931	EPA 6010D	679039
92586342012	HGWA-43D	EPA 3010A	678931	EPA 6010D	679039
92586342013	HGWC-125	EPA 3010A	678931	EPA 6010D	679039
92586342014	HGWC-126	EPA 3010A	678931	EPA 6010D	679039
92586342015	MW-32	EPA 3010A	678931	EPA 6010D	679039
92586342016	MW-46D	EPA 3010A	678931	EPA 6010D	679039
92586342017	DUP-3	EPA 3010A	678931	EPA 6010D	679039
92586342018	EB-3	EPA 3010A	678931	EPA 6010D	679039
92586342019	FB-3	EPA 3010A	678931	EPA 6010D	679039
92586342001	HGWA-122	EPA 3005A	678928	EPA 6020B	679033
92586342002	HGWA-45D	EPA 3005A	678928	EPA 6020B	679033
92586342003	HGWC-120	EPA 3005A	678928	EPA 6020B	679033
92586342004	HGWC-121A	EPA 3005A	678928	EPA 6020B	679033
92586342005	HGWC-124	EPA 3005A	678928	EPA 6020B	679033
92586342006	MW-39	EPA 3005A	678928	EPA 6020B	679033
92586342007	MW-41	EPA 3005A	678928	EPA 6020B	679033
92586342008	HGWA-44D	EPA 3005A	678928	EPA 6020B	679033
92586342009	HGWA-2	EPA 3005A	678928	EPA 6020B	679033
92586342010	HGWA-3	EPA 3005A	678928	EPA 6020B	679033
92586342011	HGWA-1	EPA 3005A	678928	EPA 6020B	679033
92586342012	HGWA-43D	EPA 3005A	678928	EPA 6020B	679033
92586342013	HGWC-125	EPA 3005A	678928	EPA 6020B	679033

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92586342014	HGWC-126	EPA 3005A	678928	EPA 6020B	679033
92586342015	MW-32	EPA 3005A	678928	EPA 6020B	679033
92586342016	MW-46D	EPA 3005A	678928	EPA 6020B	679033
92586342017	DUP-3	EPA 3005A	678928	EPA 6020B	679033
92586342018	EB-3	EPA 3005A	678928	EPA 6020B	679033
92586342019	FB-3	EPA 3005A	678928	EPA 6020B	679033
92586342001	HGWA-122	EPA 7470A	678094	EPA 7470A	678301
92586342002	HGWA-45D	EPA 7470A	678094	EPA 7470A	678301
92586342003	HGWC-120	EPA 7470A	678094	EPA 7470A	678301
92586342004	HGWC-121A	EPA 7470A	678094	EPA 7470A	678301
92586342005	HGWC-124	EPA 7470A	678094	EPA 7470A	678301
92586342006	MW-39	EPA 7470A	678094	EPA 7470A	678301
92586342007	MW-41	EPA 7470A	678094	EPA 7470A	678301
92586342008	HGWA-44D	EPA 7470A	678094	EPA 7470A	678301
92586342009	HGWA-2	EPA 7470A	678094	EPA 7470A	678301
92586342010	HGWA-3	EPA 7470A	678396	EPA 7470A	678613
92586342011	HGWA-1	EPA 7470A	678396	EPA 7470A	678613
92586342012	HGWA-43D	EPA 7470A	678396	EPA 7470A	678613
92586342013	HGWC-125	EPA 7470A	678399	EPA 7470A	678663
92586342014	HGWC-126	EPA 7470A	678399	EPA 7470A	678663
92586342015	MW-32	EPA 7470A	678399	EPA 7470A	678663
92586342016	MW-46D	EPA 7470A	678399	EPA 7470A	678663
92586342017	DUP-3	EPA 7470A	678399	EPA 7470A	678663
92586342018	EB-3	EPA 7470A	678399	EPA 7470A	678663
92586342019	FB-3	EPA 7470A	678399	EPA 7470A	678663
92586342001	HGWA-122	SM 2540C-2015	676438		
92586342002	HGWA-45D	SM 2540C-2015	676438		
92586342003	HGWC-120	SM 2540C-2015	676565		
92586342004	HGWC-121A	SM 2540C-2015	676565		
92586342005	HGWC-124	SM 2540C-2015	676565		
92586342006	MW-39	SM 2540C-2015	676565		
92586342007	MW-41	SM 2540C-2015	676565		
92586342008	HGWA-44D	SM 2540C-2015	676438		
92586342009	HGWA-2	SM 2540C-2015	676438		
92586342010	HGWA-3	SM 2540C-2015	676438		
92586342011	HGWA-1	SM 2540C-2015	676438		
92586342012	HGWA-43D	SM 2540C-2015	676438		
92586342013	HGWC-125	SM 2540C-2015	676887		
92586342014	HGWC-126	SM 2540C-2015	676887		
92586342015	MW-32	SM 2540C-2015	676887		
92586342016	MW-46D	SM 2540C-2015	676887		
92586342017	DUP-3	SM 2540C-2015	676887		
92586342018	EB-3	SM 2540C-2015	676887		
92586342019	FB-3	SM 2540C-2015	676887		
92586342001	HGWA-122	EPA 300.0 Rev 2.1 1993	676561		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-3

Pace Project No.: 92586342

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92586342002	HGWA-45D	EPA 300.0 Rev 2.1 1993	676561		
92586342003	HGWC-120	EPA 300.0 Rev 2.1 1993	676561		
92586342004	HGWC-121A	EPA 300.0 Rev 2.1 1993	676561		
92586342005	HGWC-124	EPA 300.0 Rev 2.1 1993	676561		
92586342006	MW-39	EPA 300.0 Rev 2.1 1993	676561		
92586342007	MW-41	EPA 300.0 Rev 2.1 1993	676561		
92586342008	HGWA-44D	EPA 300.0 Rev 2.1 1993	676561		
92586342009	HGWA-2	EPA 300.0 Rev 2.1 1993	676561		
92586342010	HGWA-3	EPA 300.0 Rev 2.1 1993	676561		
92586342011	HGWA-1	EPA 300.0 Rev 2.1 1993	676561		
92586342012	HGWA-43D	EPA 300.0 Rev 2.1 1993	676561		
92586342013	HGWC-125	EPA 300.0 Rev 2.1 1993	677753		
92586342014	HGWC-126	EPA 300.0 Rev 2.1 1993	677753		
92586342015	MW-32	EPA 300.0 Rev 2.1 1993	677753		
92586342016	MW-46D	EPA 300.0 Rev 2.1 1993	677753		
92586342017	DUP-3	EPA 300.0 Rev 2.1 1993	677753		
92586342018	EB-3	EPA 300.0 Rev 2.1 1993	677753		
92586342019	FB-3	EPA 300.0 Rev 2.1 1993	677753		

### REPORT OF LABORATORY ANALYSIS

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Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-CS-033-Rev.08

Document Revised: November 13, 2021  
Page 1 of 3  
Issuing Authority:  
Face Carolina's Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

*GA Power*

Project #:

WO#: 92586342

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Face  Other: \_\_\_\_\_



92586342

Custody Seal Present?  Yes  No Seal Intact?  Yes  No

Date/Initial Person Examining Contents: *2/3/22*  
*TS*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:  In Situ ID: 230 Type of Ice:  Green  Blue  None

Cooler Temp: 2.4 Correction Factor: Add/Subtract (°C) +0.2

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

Cooler Temp Corrected (°C): 2.6

USDA Regulated Soil ( N/A, water sample)  
Did samples originate in a quarantine zone within the United States: CA, HI, or SC (check maps)?  
 Yes  No

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCUR Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRP Review: \_\_\_\_\_ Date: \_\_\_\_\_



**CHAIN-OF-CUSTODY / Analytical Request Document**  
 The Chain-of-Custody is a legal document. All entries must be completed accurately.

<b>Section A</b> Requested Client Information Company: <u>GA Power</u> Address: <u>Atlanta, GA</u>		<b>Section B</b> Requested Project Information Project ID: <u>1000000000</u> Project Name: <u>Commodity Contracts</u>		<b>Section C</b> Sample Information Sample ID: <u>1000000000</u> Sample Name: <u>Commodity Contracts</u>	
Requested Date Sampled: <u>11/01/2022</u>	Requested Time Sampled: <u>11:00</u>	Requested Analytical Method: <u>1000000000</u>	Requested Analytical Standard: <u>1000000000</u>	Requested Analytical Agency: <u>GA</u>	Requested Analytical Agency: <u>GA</u>

ITEM #	Description of Sample	Matrix Code	Sample Type	Collected			Sample Temp at Collection	# of Containers	Preparation	Analysis Test	Residual Choice (Y/N)	Final Project No./Lab ID
				Quantity	Weight	Volume						
1	HOMW-102	WT	0	0.0000	14.0	14.0	1	1	1	1	1	1000000000
2	HOMW-490	WT	0	0.0000	14.0	14.0	1	1	1	1	1	1000000000
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

<b>APPROVALS, COMMENTS</b> APPROVED BY: <u>[Signature]</u> DATE: <u>11/01/2022</u> TIME: <u>11:00</u>	<b>APPROVED BY (ANALYST)</b> APPROVED BY: <u>[Signature]</u> DATE: <u>11/01/2022</u> TIME: <u>11:00</u>	<b>APPROVED BY (LABORATORY)</b> APPROVED BY: <u>[Signature]</u> DATE: <u>11/01/2022</u> TIME: <u>11:00</u>
<b>LABORATORY NAME AND LOCATION</b> Project Name of Laboratory: <u>GA Power</u> Location of Laboratory: <u>Atlanta, GA</u> Date Sampled: <u>11/01/2022</u>	<b>LABORATORY NAME AND LOCATION</b> Project Name of Laboratory: <u>GA Power</u> Location of Laboratory: <u>Atlanta, GA</u> Date Sampled: <u>11/01/2022</u>	<b>LABORATORY NAME AND LOCATION</b> Project Name of Laboratory: <u>GA Power</u> Location of Laboratory: <u>Atlanta, GA</u> Date Sampled: <u>11/01/2022</u>

Sample this form by signing the form prior to sampling. Items left blank are optional items and signing is not required. This form is valid for 12 months from the date of issue.





**CHAIN-OF-CUSTODY / Analytical Request Document**  
 The Chain-of-Custody is a critical document. All request fields must be completed accurately.

Page 1 of 1

<b>Section A</b> Requested Chain of Custody Agency: CA Sheriff Address: Merced, CA		<b>Section B</b> Requested Paper Information Request To: SAC's Office Date To: Sacramento, CA		<b>Section C</b> Requested Laboratory Name: Southern CO Address: Southern CO	
Requested Date/Time: 9/16/22	Requested By: [Signature]	Requested Paper No.:	Requested Paper Type:	Requested Paper Location:	Requested Paper Status:
Requested Date/Time: 9/16/22	Requested By: [Signature]	Requested Paper No.:	Requested Paper Type:	Requested Paper Location:	Requested Paper Status:

ITEM #	Vial Matrix Code	Vial Matrix Code	Vial Matrix Code	COLLECTOR			SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservation		Analysis Test	Requester Analyte Filtered (Y/N)	Residual Chrome (Y/N)	From Project (Yes/No)
				Agency	Officer	Officer			Temperature	Method				
1	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
2	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
3	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
4	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
5	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
6	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
7	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
8	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
9	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
10	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
11	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				
12	HOWM-400	WT 0 2-100000	0.00	WT	WT	WT		1	1	1				

<b>APPROVAL (COMMENTS)</b> [Signature]	<b>RECEIVED BY (AGENCY)</b> [Signature]	<b>DATE</b> 9/16/22	<b>TIME</b> 12:32	<b>ACQUIRED BY (AGENCY)</b> [Signature]	<b>DATE</b> 9/16/22	<b>TIME</b> 1:57	<b>SAMPLE COMMENTS</b> [Text]
---	--	------------------------	----------------------	--	------------------------	---------------------	----------------------------------

<b>SAMPLES SEALS AND SIGNATURES</b> Request Name of Laboratory: [Signature] Requested at Laboratory: [Signature] Date/Time: 9/16/22	Request Name of Laboratory: [Signature] Requested at Laboratory: [Signature] Date/Time: 9/16/22
--	---

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: CoA Power

Project #: **W0# : 92586342**  
 PR: NMG Due Date: 02/17/22  
 CLIENT: CR-CR Power

Carrier:  Commercial  FedEx  UPS  USPS  Other:  Client

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initial Person Examining Contents: 2/7/22  
CMH

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer: 0.83 Type of Ice:  Wet  Blue  None

Cooler Temp: 6.9 Correction Factor: Add/Subtract (C) +0.2

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

Cooler Temp Corrected (°C): 2.1

USDA Regulated Soil (  N/A, water sample)  
 Did samples originate in a quarantine zone within the United States (CA, NY, or SC) (check maps)?  Yes  No

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

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

COMMENTS/SAMPLE DISCREPANCY \_\_\_\_\_ Field Data Required?  Yes  No

Lot ID of split containers: \_\_\_\_\_

CLIENT NOTIFICATION/RESOLUTION \_\_\_\_\_

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURP Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRP Review: \_\_\_\_\_ Date: \_\_\_\_\_



**CHAIN-OF-CUSTODY / Analytical Request Document**  
 The Original-Owner's e-LOG, (PICO-LOG) is an internet-based tool for controlled custody.

Page 1 of 1

**Section A: Analytical Request Information**

Requester: CA (Pico)      Requested From: Requester

Requester Address: Requester CA      Requester City: Requester CA

Requester Phone: Requester CA      Requester Email: Requester CA

Requester Title: Requester CA

Requester Signature: \_\_\_\_\_

**Section B: Analytical Request Information**

Requester Name: Requester CA

Requester Address: Requester CA

Requester City: Requester CA

Requester Phone: Requester CA

Requester Email: Requester CA

Requester Title: Requester CA

Requester Signature: \_\_\_\_\_

**Section C: Analytical Request Information**

Requester Name: Requester CA

Requester Address: Requester CA

Requester City: Requester CA

Requester Phone: Requester CA

Requester Email: Requester CA

Requester Title: Requester CA

Requester Signature: \_\_\_\_\_

**REGULATORY AGENCY**

EPA     DNR     Other: \_\_\_\_\_

Site Location: \_\_\_\_\_

Site ID: \_\_\_\_\_

ITEM #	Sample ID	Total Sample Counts	Matrix Code	Sample Type	COLLECTED			Sample Date of Collection	# of Containers	Preservation	Analysis Test	Regulatory Agency	Requester Signature	Date	Time	Signature	Date	Time	Signature	Date	Time		
					Location	Container	Volume																
1	HOWC-118	118	WT 1	WT 2	WT 3	WT 4	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
2	HOWC-118	118	WT 5	WT 6	WT 7	WT 8	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
3	HOWC-118	118	WT 9	WT 10	WT 11	WT 12	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
4	HOWC-118	118	WT 13	WT 14	WT 15	WT 16	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
5	HOWC-118	118	WT 17	WT 18	WT 19	WT 20	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
6	HOWC-118	118	WT 21	WT 22	WT 23	WT 24	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
7	HOWC-118	118	WT 25	WT 26	WT 27	WT 28	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
8	HOWC-118	118	WT 29	WT 30	WT 31	WT 32	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
9	HOWC-118	118	WT 33	WT 34	WT 35	WT 36	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
10	HOWC-118	118	WT 37	WT 38	WT 39	WT 40	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
11	HOWC-118	118	WT 41	WT 42	WT 43	WT 44	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00
12	HOWC-118	118	WT 45	WT 46	WT 47	WT 48	11/20/2002	1	Unpreserved	Chloride, Fluoride, Sulfate	CA	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00	[Signature]	11/20/2002	11:00

**Section D: Analytical Request Information**

Requester Name: Requester CA

Requester Address: Requester CA

Requester City: Requester CA

Requester Phone: Requester CA

Requester Email: Requester CA

Requester Title: Requester CA

Requester Signature: \_\_\_\_\_

**REGULATORY AGENCY**

EPA     DNR     Other: \_\_\_\_\_

Site Location: \_\_\_\_\_

Site ID: \_\_\_\_\_

March 11, 2022

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: HAMMOND AP-3 RAD  
Pace Project No.: 92586334

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between February 03, 2022 and February 07, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,



Nicole D'Oleo  
nicole.d'oleo@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Anna Bottum, ERM  
Andrea Brazell, ERM  
Christine Hug, Geosyntec Consultants, Inc.  
Kristen Jurinko  
Thomas Kessler, Geosyntec  
Whitney Law, Geosyntec Consultants  
Noelia Muskus, Geosyntec Consultants  
Ms. Lauren Petty, Southern Company  
Lacy Smith, ERM  
Anthony Szwast, Geosyntec  
Nardos Tilahun, GeoSyntec  
Caitlin Tillema, ERM

Christine Weaver, ERM  
Dawit Yifru, Geosyntec Consultants, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: HAMMOND AP-3 RAD  
Pace Project No.: 92586334

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### Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 391  
Kansas/TNI Certification #: E-10358  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
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 #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
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 #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
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  
Wyoming Certification #: 8TMS-L

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92586334001	HGWA-122	Water	02/01/22 14:25	02/03/22 12:32
92586334002	HGWA-45D	Water	02/01/22 16:02	02/03/22 12:32
92586334003	HGWC-120	Water	02/02/22 13:33	02/03/22 12:32
92586334004	HGWC-121A	Water	02/02/22 09:47	02/03/22 12:32
92586334005	HGWC-124	Water	02/02/22 11:39	02/03/22 12:32
92586334006	MW-39	Water	02/02/22 16:33	02/03/22 12:32
92586334007	MW-41	Water	02/02/22 15:17	02/03/22 12:32
92586334008	HGWA-44D	Water	02/01/22 13:35	02/03/22 12:32
92586334009	HGWA-2	Water	02/01/22 11:52	02/03/22 12:32
92586334010	HGWA-3	Water	02/01/22 09:58	02/03/22 12:32
92586334011	HGWA-1	Water	02/01/22 12:13	02/03/22 12:32
92586334012	HGWA-43D	Water	02/01/22 10:28	02/03/22 12:32
92586334013	HGWC-125	Water	02/03/22 13:09	02/07/22 12:35
92586334014	HGWC-126	Water	02/03/22 15:04	02/07/22 12:35
92586334015	MW-32	Water	02/03/22 10:29	02/07/22 12:35
92586334016	MW-46D	Water	02/03/22 10:35	02/07/22 12:35
92586334017	DUP-3	Water	02/03/22 00:00	02/07/22 12:35
92586334018	EB-3	Water	02/03/22 15:59	02/07/22 12:35
92586334019	FB-3	Water	02/03/22 15:51	02/07/22 12:35

### REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92586334001	HGWA-122	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334002	HGWA-45D	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334003	HGWC-120	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334004	HGWC-121A	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334005	HGWC-124	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334006	MW-39	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334007	MW-41	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334008	HGWA-44D	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334009	HGWA-2	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334010	HGWA-3	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334011	HGWA-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334012	HGWA-43D	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334013	HGWC-125	EPA 9315	JC2	1	PASI-PA

**REPORT OF LABORATORY ANALYSIS**

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**SAMPLE ANALYTE COUNT**

Project: HAMMOND AP-3 RAD  
 Pace Project No.: 92586334

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92586334014	HGWC-126	EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
92586334015	MW-32	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334016	MW-46D	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
92586334017	DUP-3	EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
92586334018	EB-3	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92586334019	FB-3	EPA 9315	JC2	1	PASI-PA
		EPA 9320	JSM	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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### SUMMARY OF DETECTION

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92586334001</b>	<b>HGWA-122</b>					
EPA 9315	Radium-226	0.0875 ± 0.0882 (0.166)	pCi/L		03/08/22 09:08	
EPA 9320	Radium-228	C:94% T:NA 0.188 ± 0.336 (0.737)	pCi/L		02/23/22 14:44	
Total Radium Calculation	Total Radium	C:73% T:82% 0.276 ± 0.424 (0.903)	pCi/L		03/10/22 17:17	
<b>92586334002</b>	<b>HGWA-45D</b>					
EPA 9315	Radium-226	0.279 ± 0.123 (0.133)	pCi/L		03/08/22 09:08	
EPA 9320	Radium-228	C:98% T:NA 0.616 ± 0.400 (0.755)	pCi/L		02/23/22 14:44	
Total Radium Calculation	Total Radium	C:77% T:87% 0.895 ± 0.523 (0.888)	pCi/L		03/10/22 17:17	
<b>92586334003</b>	<b>HGWC-120</b>					
EPA 9315	Radium-226	0.251 ± 0.123 (0.152)	pCi/L		03/08/22 09:08	
EPA 9320	Radium-228	C:98% T:NA 0.565 ± 0.368 (0.690)	pCi/L		02/23/22 14:44	
Total Radium Calculation	Total Radium	C:77% T:89% 0.816 ± 0.491 (0.842)	pCi/L		03/10/22 17:17	
<b>92586334004</b>	<b>HGWC-121A</b>					
EPA 9315	Radium-226	0.254 ± 0.124 (0.143)	pCi/L		03/08/22 09:08	
EPA 9320	Radium-228	C:91% T:NA -0.0125 ± 0.304 (0.719)	pCi/L		02/23/22 14:44	
Total Radium Calculation	Total Radium	C:75% T:85% 0.254 ± 0.428 (0.862)	pCi/L		03/10/22 17:17	

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### SUMMARY OF DETECTION

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92586334005</b>	<b>HGWC-124</b>					
EPA 9315	Radium-226	0.160 ± 0.107 (0.170) C:88% T:NA	pCi/L		03/08/22 09:08	
EPA 9320	Radium-228	0.404 ± 0.441 (0.918) C:65% T:83%	pCi/L		02/23/22 14:44	
Total Radium Calculation	Total Radium	0.564 ± 0.548 (1.09)	pCi/L		03/10/22 17:17	
<b>92586334006</b>	<b>MW-39</b>					
EPA 9315	Radium-226	0.315 ± 0.137 (0.159) C:96% T:NA	pCi/L		03/08/22 09:08	
EPA 9320	Radium-228	0.141 ± 0.375 (0.837) C:78% T:85%	pCi/L		02/23/22 14:44	
Total Radium Calculation	Total Radium	0.456 ± 0.512 (0.996)	pCi/L		03/10/22 17:17	
<b>92586334007</b>	<b>MW-41</b>					
EPA 9315	Radium-226	0.0852 ± 0.0827 (0.154) C:94% T:NA	pCi/L		03/08/22 09:08	
EPA 9320	Radium-228	0.345 ± 0.332 (0.677) C:83% T:88%	pCi/L		02/23/22 14:46	
Total Radium Calculation	Total Radium	0.430 ± 0.415 (0.831)	pCi/L		03/10/22 17:17	
<b>92586334008</b>	<b>HGWA-44D</b>					
EPA 9315	Radium-226	0.184 ± 0.126 (0.198) C:70% T:NA	pCi/L		03/08/22 09:08	
EPA 9320	Radium-228	0.481 ± 0.406 (0.807) C:76% T:78%	pCi/L		02/23/22 14:46	
Total Radium Calculation	Total Radium	0.665 ± 0.532 (1.01)	pCi/L		03/10/22 17:17	

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### SUMMARY OF DETECTION

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92586334009</b>	<b>HGWA-2</b>					
EPA 9315	Radium-226	0.328 ± 0.142 (0.152) C:84% T:NA	pCi/L		03/09/22 09:31	
EPA 9320	Radium-228	0.260 ± 0.363 (0.775) C:72% T:85%	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	0.588 ± 0.505 (0.927)	pCi/L		03/10/22 17:17	
<b>92586334010</b>	<b>HGWA-3</b>					
EPA 9315	Radium-226	0.144 ± 0.104 (0.175) C:93% T:NA	pCi/L		03/09/22 09:28	
EPA 9320	Radium-228	0.122 ± 0.302 (0.675) C:81% T:91%	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	0.266 ± 0.406 (0.850)	pCi/L		03/10/22 17:17	
<b>92586334011</b>	<b>HGWA-1</b>					
EPA 9315	Radium-226	0.0981 ± 0.107 (0.220) C:93% T:NA	pCi/L		03/09/22 09:28	
EPA 9320	Radium-228	0.0451 ± 0.393 (0.907) C:71% T:84%	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	0.143 ± 0.500 (1.13)	pCi/L		03/10/22 17:17	
<b>92586334012</b>	<b>HGWA-43D</b>					
EPA 9315	Radium-226	0.174 ± 0.111 (0.170) C:92% T:NA	pCi/L		03/09/22 09:28	
EPA 9320	Radium-228	0.944 ± 0.504 (0.891) C:74% T:81%	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	1.12 ± 0.615 (1.06)	pCi/L		03/10/22 17:17	

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### SUMMARY OF DETECTION

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92586334013</b>	<b>HGWC-125</b>					
EPA 9315	Radium-226	0.257 ± 0.131 (0.174)	pCi/L		03/09/22 09:29	
EPA 9320	Radium-228	C:94% T:NA -0.282 ± 0.301 (0.783)	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	C:73% T:84% 0.257 ± 0.432 (0.957)	pCi/L		03/10/22 17:17	
<b>92586334014</b>	<b>HGWC-126</b>					
EPA 9315	Radium-226	0.574 ± 0.199 (0.197)	pCi/L		03/09/22 09:29	
EPA 9320	Radium-228	C:88% T:NA 0.931 ± 0.522 (0.943)	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	C:70% T:80% 1.51 ± 0.721 (1.14)	pCi/L		03/10/22 17:17	
<b>92586334015</b>	<b>MW-32</b>					
EPA 9315	Radium-226	0.278 ± 0.139 (0.200)	pCi/L		03/09/22 09:29	
EPA 9320	Radium-228	C:93% T:NA 0.233 ± 0.357 (0.771)	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	C:74% T:80% 0.511 ± 0.496 (0.971)	pCi/L		03/10/22 17:17	
<b>92586334016</b>	<b>MW-46D</b>					
EPA 9315	Radium-226	0.173 ± 0.108 (0.158)	pCi/L		03/09/22 09:29	
EPA 9320	Radium-228	C:93% T:NA 0.199 ± 0.362 (0.792)	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	C:74% T:83% 0.372 ± 0.470 (0.950)	pCi/L		03/10/22 17:17	

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### SUMMARY OF DETECTION

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92586334017</b>	<b>DUP-3</b>					
EPA 9315	Radium-226	0.570 ± 0.197 (0.190) C:83% T:NA	pCi/L		03/09/22 09:29	
EPA 9320	Radium-228	0.269 ± 0.376 (0.806) C:73% T:88%	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	0.839 ± 0.573 (0.996)	pCi/L		03/10/22 17:17	
<b>92586334018</b>	<b>EB-3</b>					
EPA 9315	Radium-226	0.0754 ± 0.0755 (0.140) C:97% T:NA	pCi/L		03/09/22 09:30	
EPA 9320	Radium-228	0.288 ± 0.432 (0.932) C:72% T:84%	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	0.363 ± 0.508 (1.07)	pCi/L		03/10/22 17:17	
<b>92586334019</b>	<b>FB-3</b>					
EPA 9315	Radium-226	-0.0224 ± 0.0420 (0.150) C:96% T:NA	pCi/L		03/09/22 09:30	
EPA 9320	Radium-228	-0.181 ± 0.286 (0.718) C:76% T:89%	pCi/L		02/23/22 14:47	
Total Radium Calculation	Total Radium	0.000 ± 0.328 (0.868)	pCi/L		03/10/22 17:17	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWA-122</b> <b>Lab ID: 92586334001</b> Collected: 02/01/22 14:25      Received: 02/03/22 12:32      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0875 ± 0.0882 (0.166)</b> <b>C:94% T:NA</b>	pCi/L	03/08/22 09:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.188 ± 0.336 (0.737)</b> <b>C:73% T:82%</b>	pCi/L	02/23/22 14:44	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.276 ± 0.424 (0.903)</b>	pCi/L	03/10/22 17:17	7440-14-4	

**REPORT OF LABORATORY ANALYSIS**

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWA-45D</b> <b>Lab ID: 92586334002</b> Collected: 02/01/22 16:02      Received: 02/03/22 12:32      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.279 ± 0.123 (0.133)</b> <b>C:98% T:NA</b>	pCi/L	03/08/22 09:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.616 ± 0.400 (0.755)</b> <b>C:77% T:87%</b>	pCi/L	02/23/22 14:44	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.895 ± 0.523 (0.888)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

**Sample: HGWC-120**      **Lab ID: 92586334003**      Collected: 02/02/22 13:33      Received: 02/03/22 12:32      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	<b>0.251 ± 0.123 (0.152)</b> <b>C:98% T:NA</b>	pCi/L	03/08/22 09:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.565 ± 0.368 (0.690)</b> <b>C:77% T:89%</b>	pCi/L	02/23/22 14:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.816 ± 0.491 (0.842)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWC-121A</b> <b>Lab ID: 92586334004</b> Collected: 02/02/22 09:47      Received: 02/03/22 12:32      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.254 ± 0.124 (0.143)</b> <b>C:91% T:NA</b>	pCi/L	03/08/22 09:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.0125 ± 0.304 (0.719)</b> <b>C:75% T:85%</b>	pCi/L	02/23/22 14:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.254 ± 0.428 (0.862)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWC-124</b> <b>Lab ID: 92586334005</b> Collected: 02/02/22 11:39      Received: 02/03/22 12:32      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.160 ± 0.107 (0.170)</b> <b>C:88% T:NA</b>	pCi/L	03/08/22 09:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.404 ± 0.441 (0.918)</b> <b>C:65% T:83%</b>	pCi/L	02/23/22 14:44	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.564 ± 0.548 (1.09)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.315 ± 0.137 (0.159)</b> <b>C:96% T:NA</b>	pCi/L	03/08/22 09:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.141 ± 0.375 (0.837)</b> <b>C:78% T:85%</b>	pCi/L	02/23/22 14:44	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.456 ± 0.512 (0.996)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

**Sample: MW-41**      **Lab ID: 92586334007**      Collected: 02/02/22 15:17      Received: 02/03/22 12:32      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	<b>0.0852 ± 0.0827 (0.154)</b> <b>C:94% T:NA</b>	pCi/L	03/08/22 09:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.345 ± 0.332 (0.677)</b> <b>C:83% T:88%</b>	pCi/L	02/23/22 14:46	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.430 ± 0.415 (0.831)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWA-44D</b> <b>Lab ID: 92586334008</b> Collected: 02/01/22 13:35      Received: 02/03/22 12:32      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.184 ± 0.126 (0.198)</b> <b>C:70% T:NA</b>	pCi/L	03/08/22 09:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.481 ± 0.406 (0.807)</b> <b>C:76% T:78%</b>	pCi/L	02/23/22 14:46	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.665 ± 0.532 (1.01)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWA-2</b> <b>Lab ID: 92586334009</b> Collected: 02/01/22 11:52      Received: 02/03/22 12:32      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.328 ± 0.142 (0.152)</b> <b>C:84% T:NA</b>	pCi/L	03/09/22 09:31	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.260 ± 0.363 (0.775)</b> <b>C:72% T:85%</b>	pCi/L	02/23/22 14:47	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.588 ± 0.505 (0.927)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

**Sample: HGWA-3**      **Lab ID: 92586334010**      Collected: 02/01/22 09:58      Received: 02/03/22 12:32      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	<b>0.144 ± 0.104 (0.175)</b> <b>C:93% T:NA</b>	pCi/L	03/09/22 09:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.122 ± 0.302 (0.675)</b> <b>C:81% T:91%</b>	pCi/L	02/23/22 14:47	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.266 ± 0.406 (0.850)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

**Sample: HGWA-1**      **Lab ID: 92586334011**      Collected: 02/01/22 12:13      Received: 02/03/22 12:32      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	<b>0.0981 ± 0.107 (0.220)</b> <b>C:93% T:NA</b>	pCi/L	03/09/22 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.0451 ± 0.393 (0.907)</b> <b>C:71% T:84%</b>	pCi/L	02/23/22 14:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.143 ± 0.500 (1.13)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

**Sample: HGWA-43D**      **Lab ID: 92586334012**      Collected: 02/01/22 10:28      Received: 02/03/22 12:32      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	<b>0.174 ± 0.111 (0.170)</b> <b>C:92% T:NA</b>	pCi/L	03/09/22 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.944 ± 0.504 (0.891)</b> <b>C:74% T:81%</b>	pCi/L	02/23/22 14:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.12 ± 0.615 (1.06)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HGWC-125</b> <b>Lab ID: 92586334013</b> Collected: 02/03/22 13:09      Received: 02/07/22 12:35      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.257 ± 0.131 (0.174)</b> <b>C:94% T:NA</b>	pCi/L	03/09/22 09:29	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.282 ± 0.301 (0.783)</b> <b>C:73% T:84%</b>	pCi/L	02/23/22 14:47	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.257 ± 0.432 (0.957)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

**Sample: HGWC-126**      **Lab ID: 92586334014**      Collected: 02/03/22 15:04      Received: 02/07/22 12:35      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	<b>0.574 ± 0.199 (0.197)</b> <b>C:88% T:NA</b>	pCi/L	03/09/22 09:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.931 ± 0.522 (0.943)</b> <b>C:70% T:80%</b>	pCi/L	02/23/22 14:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.51 ± 0.721 (1.14)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: MW-32</b> <b>Lab ID: 92586334015</b> Collected: 02/03/22 10:29      Received: 02/07/22 12:35      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.278 ± 0.139 (0.200)</b> <b>C:93% T:NA</b>	pCi/L	03/09/22 09:29	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.233 ± 0.357 (0.771)</b> <b>C:74% T:80%</b>	pCi/L	02/23/22 14:47	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.511 ± 0.496 (0.971)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

**Sample: MW-46D**      **Lab ID: 92586334016**      Collected: 02/03/22 10:35      Received: 02/07/22 12:35      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	<b>0.173 ± 0.108 (0.158)</b> <b>C:93% T:NA</b>	pCi/L	03/09/22 09:29	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.199 ± 0.362 (0.792)</b> <b>C:74% T:83%</b>	pCi/L	02/23/22 14:47	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.372 ± 0.470 (0.950)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: DUP-3</b> <b>Lab ID: 92586334017</b> Collected: 02/03/22 00:00      Received: 02/07/22 12:35      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.570 ± 0.197 (0.190)</b> <b>C:83% T:NA</b>	pCi/L	03/09/22 09:29	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.269 ± 0.376 (0.806)</b> <b>C:73% T:88%</b>	pCi/L	02/23/22 14:47	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.839 ± 0.573 (0.996)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

**Sample: EB-3**      **Lab ID: 92586334018**      Collected: 02/03/22 15:59      Received: 02/07/22 12:35      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	<b>0.0754 ± 0.0755 (0.140)</b> <b>C:97% T:NA</b>	pCi/L	03/09/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.288 ± 0.432 (0.932)</b> <b>C:72% T:84%</b>	pCi/L	02/23/22 14:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.363 ± 0.508 (1.07)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

**Sample: FB-3**      **Lab ID: 92586334019**      Collected: 02/03/22 15:51      Received: 02/07/22 12:35      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	<b>-0.0224 ± 0.0420 (0.150)</b> <b>C:96% T:NA</b>	pCi/L	03/09/22 09:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.181 ± 0.286 (0.718)</b> <b>C:76% T:89%</b>	pCi/L	02/23/22 14:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.000 ± 0.328 (0.868)</b>	pCi/L	03/10/22 17:17	7440-14-4	

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**QUALITY CONTROL - RADIOCHEMISTRY**

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

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QC Batch:	484160	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92586334001, 92586334002, 92586334003, 92586334004, 92586334005, 92586334006, 92586334007, 92586334008, 92586334009, 92586334010, 92586334011, 92586334012, 92586334013, 92586334014, 92586334015, 92586334016, 92586334017, 92586334018, 92586334019

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METHOD BLANK:	2341236	Matrix:	Water
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Associated Lab Samples: 92586334001, 92586334002, 92586334003, 92586334004, 92586334005, 92586334006, 92586334007, 92586334008, 92586334009, 92586334010, 92586334011, 92586334012, 92586334013, 92586334014, 92586334015, 92586334016, 92586334017, 92586334018, 92586334019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.339 ± 0.327 (0.664) C:77% T:82%	pCi/L	02/23/22 14:44	

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 RAD  
 Pace Project No.: 92586334

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QC Batch:	484283	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92586334001, 92586334002, 92586334003, 92586334004, 92586334005, 92586334006, 92586334007, 92586334008, 92586334009, 92586334010, 92586334011, 92586334012, 92586334013, 92586334014, 92586334015, 92586334016, 92586334017, 92586334018, 92586334019

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METHOD BLANK: 2341882 Matrix: Water

Associated Lab Samples: 92586334001, 92586334002, 92586334003, 92586334004, 92586334005, 92586334006, 92586334007, 92586334008, 92586334009, 92586334010, 92586334011, 92586334012, 92586334013, 92586334014, 92586334015, 92586334016, 92586334017, 92586334018, 92586334019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0636 ± 0.0722 (0.141) C:96% T:NA	pCi/L	03/08/22 09:08	

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 RAD

Pace Project No.: 92586334

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### 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.: 92586334

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92586334001	HGWA-122	EPA 9315	484283		
92586334002	HGWA-45D	EPA 9315	484283		
92586334003	HGWC-120	EPA 9315	484283		
92586334004	HGWC-121A	EPA 9315	484283		
92586334005	HGWC-124	EPA 9315	484283		
92586334006	MW-39	EPA 9315	484283		
92586334007	MW-41	EPA 9315	484283		
92586334008	HGWA-44D	EPA 9315	484283		
92586334009	HGWA-2	EPA 9315	484283		
92586334010	HGWA-3	EPA 9315	484283		
92586334011	HGWA-1	EPA 9315	484283		
92586334012	HGWA-43D	EPA 9315	484283		
92586334013	HGWC-125	EPA 9315	484283		
92586334014	HGWC-126	EPA 9315	484283		
92586334015	MW-32	EPA 9315	484283		
92586334016	MW-46D	EPA 9315	484283		
92586334017	DUP-3	EPA 9315	484283		
92586334018	EB-3	EPA 9315	484283		
92586334019	FB-3	EPA 9315	484283		
92586334001	HGWA-122	EPA 9320	484160		
92586334002	HGWA-45D	EPA 9320	484160		
92586334003	HGWC-120	EPA 9320	484160		
92586334004	HGWC-121A	EPA 9320	484160		
92586334005	HGWC-124	EPA 9320	484160		
92586334006	MW-39	EPA 9320	484160		
92586334007	MW-41	EPA 9320	484160		
92586334008	HGWA-44D	EPA 9320	484160		
92586334009	HGWA-2	EPA 9320	484160		
92586334010	HGWA-3	EPA 9320	484160		
92586334011	HGWA-1	EPA 9320	484160		
92586334012	HGWA-43D	EPA 9320	484160		
92586334013	HGWC-125	EPA 9320	484160		
92586334014	HGWC-126	EPA 9320	484160		
92586334015	MW-32	EPA 9320	484160		
92586334016	MW-46D	EPA 9320	484160		
92586334017	DUP-3	EPA 9320	484160		
92586334018	EB-3	EPA 9320	484160		
92586334019	FB-3	EPA 9320	484160		
92586334001	HGWA-122	Total Radium Calculation	489607		
92586334002	HGWA-45D	Total Radium Calculation	489607		
92586334003	HGWC-120	Total Radium Calculation	489607		
92586334004	HGWC-121A	Total Radium Calculation	489607		
92586334005	HGWC-124	Total Radium Calculation	489607		
92586334006	MW-39	Total Radium Calculation	489607		
92586334007	MW-41	Total Radium Calculation	489607		
92586334008	HGWA-44D	Total Radium Calculation	489607		
92586334009	HGWA-2	Total Radium Calculation	489607		
92586334010	HGWA-3	Total Radium Calculation	489607		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HAMMOND AP-3 RAD

Pace Project No.: 92586334

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92586334011	HGWA-1	Total Radium Calculation	489607		
92586334012	HGWA-43D	Total Radium Calculation	489607		
92586334013	HGWC-125	Total Radium Calculation	489607		
92586334014	HGWC-126	Total Radium Calculation	489607		
92586334015	MW-32	Total Radium Calculation	489607		
92586334016	MW-46D	Total Radium Calculation	489607		
92586334017	DUP-3	Total Radium Calculation	489607		
92586334018	EB-3	Total Radium Calculation	489607		
92586334019	FB-3	Total Radium Calculation	489607		

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Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-CS-033-Rev.08

Document Revised: November 13, 2021  
Page 1 of 3  
Issuing Authority:  
Face Carolina's Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

*GA Power*

Project #:

WO#: 92586342



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Face  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seal Intact?  Yes  No

Date/Initial Person Examining Contents: *2/3/22*  
*TS*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:  IR Gun ID: 230 Type of Ice:  Green  Blue  None

Cooler Temp: 2.4 Correction Factor: Add/Subtract (°C) +0.2

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

Cooler Temp Corrected (°C): 2.6

USDA Regulated Soil (  N/A, water sample)

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

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

Yes  No

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCUR Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRP Review: \_\_\_\_\_ Date: \_\_\_\_\_



**CHAIN-OF-CUSTODY / Analytical Request Document**  
 The Chain-of-Custody is a legal document. All entries must be completed accurately.

<b>Section A</b> Requested Client Information Company: <u>GA Power</u> Address: <u>Atlanta, GA</u>		<b>Section B</b> Requested Project Information Project ID: <u>1000000000</u> Project Name: <u>Georgia Power Company</u>		<b>Section C</b> Sample Information Sample ID: <u>1000000000</u> Sample Name: <u>1000000000</u>	
Requested Date Sampled: <u>11/01/2022</u> Requested Time Sampled: <u>11:00</u>	Requested Analyte: <u>1000000000</u> Requested Method: <u>1000000000</u>	Requested Agency: <u>GA</u> Requested State: <u>GA</u> Requested City: <u>Atlanta</u>	Requested Agency: <u>GA</u> Requested State: <u>GA</u> Requested City: <u>Atlanta</u>	Requested Agency: <u>GA</u> Requested State: <u>GA</u> Requested City: <u>Atlanta</u>	Requested Agency: <u>GA</u> Requested State: <u>GA</u> Requested City: <u>Atlanta</u>

ITEM #	Description of Sample	Matrix Code	Sample Type	Collected			Sample Temp at Collection	# of Containers	Preparation	Analysis Test	Residual Choice (Y/N)	Date Sampled	Time Sampled	Initials
				Quantity	Weight	Volume								
1	HOMW-102	WT	0	0.0000	14.0	14.0	1	1	1	1	1	1	1	1
2	HOMW-490	WT	0	0.0000	14.0	14.0	1	1	1	1	1	1	1	1
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

<b>APPROVALS, COMMENTS</b> APPROVED BY: <u>[Signature]</u> DATE: <u>11/21/2022</u>	<b>RECEIVED BY / INFORMATION</b> NAME: <u>[Signature]</u> DATE: <u>11/21/2022</u>	<b>AGENCY INFORMATION</b> NAME: <u>[Signature]</u> DATE: <u>11/21/2022</u>	<b>LABORATORY AGENCY</b> NAME: <u>[Signature]</u> DATE: <u>11/21/2022</u>
--	---	--	---

Sample this form by signing the form prior to sampling. Items left blank are optional and may be signed by the collector and sent with the sample.



**CHAIN-OF-CUSTODY / Analytical Request Document**  
 This Document is a LEGAL DOCUMENT. All relevant fields must be completed correctly.

**Section A**  
 Request/Client Information

Company: QA Project  
 Address: Atlanta, GA

**Section B**  
 Analytical Request Information

Project Name: BCS Controls  
 Client: Cooper Tire Controls

**Section C**  
 Project Information

Project Location: Burlington Co.  
 Company Name:

Page 1 of 1

**Section A**  
 Request/Client Information

Company: QA Project  
 Address: Atlanta, GA

**Section B**  
 Analytical Request Information

Project Name: BCS Controls  
 Client: Cooper Tire Controls

**Section C**  
 Project Information

Project Location: Burlington Co.  
 Company Name:

Requester Name: [Blank]  
 Requester Title: [Blank]

Request Date: [Blank]

Requester Email: [Blank]

Requester Phone: [Blank]

**SECTION AGENCY**

Agency Name: [Blank]  
 Agency Address: [Blank]  
 Agency City: [Blank]  
 Agency State: [Blank]

Request Date: [Blank]

Requester Name: [Blank]  
 Requester Title: [Blank]

Requester Email: [Blank]  
 Requester Phone: [Blank]

Section B Request/Client Information	Total Dates/ Times		MATERIAL CODE <small>(see note below to left)</small>	SAMPLE TYPE <small>(ID-ORIG-C-Cont)</small>	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS				ANALYSIS TEST	Requester Analytical Request (REQ)	Residual Chlorine (%)	From: Project/Req. Lab. ID.				
	DATE	TIME			DATE	TIME	DATE	TIME		DATE	TIME	UNPRESERVED	H <sub>2</sub> O <sub>2</sub>					HEX	CEC	Method	Other
	AMOUNT	LABORATORY			AMOUNT	LABORATORY	AMOUNT	LABORATORY		AMOUNT	LABORATORY	AMOUNT	LABORATORY					AMOUNT	LABORATORY	AMOUNT	LABORATORY
1	HOWC-120	WT	Q	HOWC-120	11/9	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30		
2	HOWC-121A	WT	Q	HOWC-121A	11/9	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30		
3	HOWC-121A	WT	Q	HOWC-121A	11/9	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30		
4	HOWC-121B	WT	Q	HOWC-121B	11/9	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30		
5	HOWC-121	WT	Q	HOWC-121	11/9	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30	11:30		

**ADDITIONAL COMMENTS**

Submittals by Application

DATE

TIME

ACCEPTED BY APPLICATION

DATE

TIME

**LABORATORY NAME AND INFORMATION**

Name of Laboratory: [Blank]  
 Address of Laboratory: [Blank]

Lab. Type: [Blank]

Lab. Address: [Blank]

Lab. Phone: [Blank]

Lab. Email: [Blank]



**CHAIN-OF-CUSTODY / Analytical Request Document**  
 The Chain-of-Custody is a critical document. All request fields must be completed accurately.

Page 1 of 1

<b>Section A</b> Requested Chain of Custody Agency: CA Sheriff Address: Merced, CA		<b>Section B</b> Requested Paper Information Request To: DOJ Forensic Request From: Superior Court		<b>Section C</b> Requested Laboratory Name: Southern CO Address: Southern CO	
Requested Date/Time: 9/16/22	Requested By: [Signature]	Requested From: [Signature]	Requested To: [Signature]	Requested Agency: [Signature]	Requested State: CA

ITEM #	Description of Sample	Volume/Weight/Concentration	Matrix Code	Sample Type	Collector			Sample Temp at Collection	# of Containers	Preservation			Analysis Test	Requester Analysis Requested
					Agency	Officer	Signature			Refrigerated	Freeze Dried	Other		
1	HOWA-400	1000	HT-0	HT-0	HT-0	HT-0	HT-0	1	Refrigerated	Freeze Dried	Other	HT-0	Yes	
2	HOWA-2	1000	HT-0	HT-0	HT-0	HT-0	HT-0	1	Refrigerated	Freeze Dried	Other	HT-0	Yes	
3	HOWA-3	1000	HT-0	HT-0	HT-0	HT-0	HT-0	1	Refrigerated	Freeze Dried	Other	HT-0	Yes	
4	HOWA-1	1000	HT-0	HT-0	HT-0	HT-0	HT-0	1	Refrigerated	Freeze Dried	Other	HT-0	Yes	
5	HOWA-400	1000	HT-0	HT-0	HT-0	HT-0	HT-0	1	Refrigerated	Freeze Dried	Other	HT-0	Yes	

**Additional Comments:**

Requested by: [Signature] DATE: 9/16/22 TIME: 12:32

Accepted by: [Signature] DATE: 9/16/22 TIME: 1:57

Sample Location: [Signature] DATE: 9/16/22 TIME: 1:57

**Sample Chain and Signature**

Requester Name: [Signature] DATE: 9/16/22

Requester Title: [Signature] DATE: 9/16/22

Requester Agency: [Signature] DATE: 9/16/22

Requester State: CA

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt: \_\_\_\_\_ Client Name: CoA Power Project #: **W0# : 92586342**

Carrier:  Commercial  FedEx  UPS  USPS  Other: \_\_\_\_\_  Client

PR: NMG Due Date: 02/17/22  
CLIENT: CA-CA Power

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer: 083 Type of Ice:  Wet  Blue  None

Cooler Temp: 6.9 Correction Factor: Add/Subtract (C) +0.2

Cooler Temp Corrected (°C): 2.1

USDA Regulated Soil?  Yes  No (water sample)

Temp should be above freezing to 5°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun.

Did samples originate in a quarantine zone within the United States (CA, NY, or SC) (check maps)?  Yes  No

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

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

COMMENTS/SAMPLE DISCREPANCY \_\_\_\_\_ Field Data Required?  Yes  No

Lot ID of split containers: \_\_\_\_\_

CLIENT NOTIFICATION/RESOLUTION \_\_\_\_\_

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURP Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRP Review: \_\_\_\_\_ Date: \_\_\_\_\_



**CHAIN-OF-CUSTODY / Analytical Request Document**  
 The Original-Owner's e-LEAD, POC, and/or "at request" fields may be completed, if desired.

Page 1 of 1

**Section A: Requester Contact Information**  
 Name: CA Figure  
 Address: MOBILE, CA  
 Phone: 909-441-1111  
 Email: cafigure@cafigure.com

**Section B: Analytical Request Information**  
 Name of Requester: CA Figure  
 Name of Agency: CA Figure  
 Name of Analyst: CA Figure  
 Name of Laboratory: CA Figure

**Section C: Sample Information**  
 Name of Sample: CA Figure  
 Name of Container: CA Figure  
 Name of Matrix: CA Figure  
 Name of Matrix Code: CA Figure  
 Name of Matrix Description: CA Figure

**Section D: Regulatory Agency**  
 Federal  State  Local  Other  
 EPA  DHEW  DOT  Other  
 Signature: CA Figure  
 Title: CA Figure  
 Date: CA Figure

ITEM #	Sample ID	Total Sample Count	Matrix Code	Sample Type	COLLECTED			Sample Date of Collection	# of Containers	Preservation	Analysis Test	Regulatory Agency	Requester Signature	Requester Title	Requester Date	Lab Location	Lab Name	Lab Address	Lab Phone	Lab Fax	Lab Email	Lab Website
					Quantity	Volume	Weight															
1	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	HOWC-118	1	HOWC-118	HOWC-118	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

**Section E: Additional Comments**  
Howard

**Section F: Signatures**  
 Requester Signature: Howard  
 Requester Title: Requester  
 Requester Date: 12/22/2008  
 Laboratory Signature: Howard  
 Laboratory Title: Laboratory  
 Laboratory Date: 12/22/2008



## Quality Control Sample Performance Assessment

Test: Ra-226  
Analyst: JC2  
Date: 2/19/2022  
Worklist: 65099  
Matrix: DW

**Analyst Must Manually Enter All Fields Highlighted in Yellow.**

Method Blank Assessment	
MB Sample ID	2341882
MB concentration:	0.064
M/B Counting Uncertainty:	0.072
MB MDC:	0.141
MB Numerical Performance Indicator:	1.74
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS65099	LCSD65099
Count Date:	3/9/2022	3/9/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.029	24.029
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.498
Target Conc. (pCi/L, g, F):	4.748	4.829
Uncertainty (Calculated):	0.057	0.058
Result (pCi/L, g, F):	4.768	5.277
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.445	0.483
Numerical Performance Indicator:	0.09	1.81
Percent Recovery:	100.44%	109.28%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment	LCS65099	92586334002
Sample I.D.:	LCS65099	92586334002
Duplicate Sample I.D.:	LCSD65099	92586334002DUP
Sample Result (pCi/L, g, F):	4.768	0.279
Sample Result Counting Uncertainty (pCi/L, g, F):	0.445	0.116
Sample Duplicate Result (pCi/L, g, F):	5.277	0.320
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.483	0.137
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-1.519	-0.448
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	8.43%	13.69%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	25%	25%

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

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

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

Comments:





## Quality Control Sample Performance Assessment

Test: Ra-228  
Analyst: JSM  
Date: 2/21/2022  
Worklist: 65088  
Matrix: WT

**Analyst Must Manually Enter All Fields Highlighted in Yellow.**

Method Blank Assessment		
MB Sample ID	2341236	
MB concentration:	0.339	
M/B 2 Sigma CSU:	0.327	
MB MDC:	0.664	
MB Numerical Performance Indicator:	2.03	
MB Status vs Numerical Indicator:	Warning	
MB Status vs. MDC:	Pass	

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS65088	LCSD65088
Count Date:	2/23/2022	2/23/2022
Spike I.D.:	21-029	21-029
Decay Corrected Spike Concentration (pCi/mL):	36.233	36.233
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.807	0.812
Target Conc. (pCi/L, g, F):	4.493	4.462
Uncertainty (Calculated):	0.220	0.219
Result (pCi/L, g, F):	3.310	3.183
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.840	0.812
Numerical Performance Indicator:	-2.67	-2.98
Percent Recovery:	73.67%	71.32%
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.:	LCS65088	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.:	LCSD65088	
Sample Result (pCi/L, g, F):	3.310	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.840	
Sample Duplicate Result (pCi/L, g, F):	3.183	
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:	0.213	92586334001
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.24%	92586334001DUP
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:

# VALIDATION REPORTS

## Memorandum

Date: December 2, 2021  
To: Whitney Law  
From: Kristoffer Henderson  
CC: J. Caprio  
Subject: **Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Services, LLC Project Numbers 92555510 and 92555514**

**SITE: Plant Hammond AP-3**

### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of sixteen aqueous samples, one field duplicate, one equipment blank and one field blank, collected 11-19 August 2021, as part of the Plant Hammond AP on-site sampling event.

The samples were analyzed at Pace Analytical Services Atlanta, Peachtree Corners, Georgia, for the following analytical tests:

- Calcium by United States Environmental Protection Agency (US EPA) Methods 3010A/6010D
- Metals by US EPA Methods 3005A/6020B
- Mercury by US EPA Method 7470A
- Total Dissolved Solids (TDS) by Standard Method 2540C

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

- Anions (Chloride, Fluoride and Sulfate) by US EPA Method 300.0

The samples were analyzed at Pace Analytical Services, LLC, Greensburg, Pennsylvania, for the following analytical tests:

- Radium-226 by US EPA Method 9315
- Radium-228 by US EPA Method 9320
- Total Radium by Calculation

**EXECUTIVE SUMMARY**

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for meeting project objectives. Qualified data should be used within the limitation of the qualification.

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
92555510001	HGWA-1
92555510002	HGWA-43D
92555510003	HGWA-2
92555510004	HGWA-3
92555510005	HGWA-45D
92555510006	HGWA-122
92555510007	HGWA-44D
92555924001	HGWC-121A
92555924002	HGWC-120
92555924003	HGWC-124
92555924004	MW-46D
92555924005	MW-39
92555924006	MW-32
92555924007	MW-41
92555924008	HGWC-126
92555924009	HGWC-125
92555924010	DUP-3
92555924011	EB-3
92555924012	FB-3

Laboratory ID	Client ID
92555514001	HGWA-1
92555514002	HGWA-43D
92555514003	HGWA-2
92555514004	HGWA-3
92555514005	HGWA-45D
92555514006	HGWA-122
92555514007	HGWA-44D
92555938001	HGWC-121A
92555938002	HGWC-120
92555938003	HGWC-124
92555938004	MW-46D
92555938005	MW-39
92555938006	MW-32
92555938007	MW-41
92555938008	HGWC-126
92555938009	HGWC-125
92555938010	DUP-3
92555938011	EB-3
92555938012	FB-3

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

The field pH data included in the laboratory report were not validated.

## 1.0 METALS

The samples were analyzed for metals by US EPA methods 3010A/6010D and US EPA methods 3005A/6020B. (Mercury was evaluated separately in Section 2.0, below).

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 Deliverables Review

### 1.1 Overall Assessment

The metals data reported in this data set 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 data set 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). Eight method blanks were reported (batches 641193, 641498, 641912, 643161, 641199, 641502, 641913 and 643162). Metals were not detected in the method blanks above the method detection limits (MDLs), with the following exception.

Antimony was detected in the method blank in batch 641502 at an estimated concentration greater than the MDL and less than the reporting limit (RL). Since antimony was not detected in the associated samples, no qualifications were applied to the data.

#### **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). Two sample set specific MS/MSD pairs were reported for calcium using samples HGWC-121A and HGWC-126. The recovery and RPD results were within the laboratory specified acceptance criteria with the following exception.

Since the calcium concentrations in samples HGWC-121A and HGWC-126 were greater than four times the spiked concentration, no qualifications were applied to the data based on the MS/MSD recovery results.

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 based on the MS/MSD recovery results.

#### **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). Eight LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

#### **1.6 Equipment Blank**

One equipment blank was collected with the sample set, EB-3. Metals were not detected in the equipment blank above the MDLs.

#### **1.7 Field Blank**

One field blank was collected with the sample set, FB-3. Metals were not detected in the field blank above the MDLs.

#### **1.8 Field Duplicate**

One field duplicate sample was collected with the sample set, DUP-3. Acceptable precision [relative percent difference (RPD)  $\leq$  20% or the difference between the concentrations  $<$  RL] was demonstrated between the field duplicate and the original sample, HGWC-125.

#### **1.9 Sensitivity**

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

### **1.10 Electronic Data Deliverable (EDD) Review**

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

## **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 Deliverables Review

### **2.1 Overall Assessment**

The mercury data reported in this data set 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 data set is 100%.

### **2.2 Holding Time**

The holding time for 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). Two method blanks were reported (batches 642527 and 643221). Mercury was not detected in the method blanks above the MDL, with the following exception.

Mercury was detected in the method blank in batch 643221 at an estimated concentration greater than the MDL and less than the RL. Therefore, the estimated mercury concentrations in the associated samples were U qualified as not detected at the RL and the mercury concentration in EB-3 was J+ qualified as estimated with high bias, based on professional and technical judgment.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Laboratory Result (mg/L)	Validation Qualifier*	Reason Code**
DUP-3	Mercury	0.00015	J B	0.0002	U	3
EB-3	Mercury	0.00020	B	0.0002	J+	3
FB-3	Mercury	0.00011	J B	0.0002	U	3

mg/L-milligrams per liter

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

B-laboratory flag indicating analyte was detected in the method blank

\* 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

### 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). Two batch MS/MSD pairs were 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). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

### 2.6 Equipment Blank

One equipment blank was collected with the sample set, EB-01.



Mercury (0.00020 mg/L) was detected in the equipment blank at a concentration greater than the RL. Since mercury was not detected in the associated samples, no qualifications were applied to the data.

## **2.7 Field Blank**

One field blank was collected with the sample set, FB-3.

Mercury was detected in the field blank at an estimated concentration greater than the MDL and less than the RL. Since the mercury concentration in the field blank was U qualified due to method blank contamination and based on professional and technical judgment, no additional qualifications were applied to the data.

## **2.8 Field Duplicate**

One field duplicate sample was collected with the sample set, DUP-3. Acceptable precision (RPD  $\leq$  20% or the difference between the concentrations  $<$  RL) was demonstrated between the field duplicate and the original sample, HGWC-125.

## **2.9 Sensitivity**

The samples were reported to the MDL. No elevated non-detect results were 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 TDS by Standard method 2540C and anions by US EPA method 300.0.

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 Deliverables Review

### **3.1 Overall Assessment**

The wet chemistry data reported in this data set 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 these analyses, for this data set is 100%.

### **3.2 Holding Times**

The holding time for the TDS analysis of a water sample is 7 days from sample collection to analysis. The holding time for the anions (chloride, fluoride, and sulfate) analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

### **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). Five method blanks were reported for TDS (batches 640931, 641466, 642065, 642673 and 643140) and six method blanks were reported for the anions (batches 641753, 641754, 641887, 642138, 642990 and 643306). The wet chemistry parameters were not detected in the method blanks above the MDLs.

### **3.4 Matrix Spike/Matrix Spike Duplicate**

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Four sample set specific MS/MSD pairs were reported for the anions using samples HGWA-43D, HGWA-122, HGWC-120 and HGWC-125. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The MS recovery of sulfate in the MS/MSD pair using sample HGWC-120 was low and outside of the laboratory specified acceptance criteria. Since the sulfate concentration in sample HGWC-120 was greater than four times the spiked concentration, no qualifications were applied to the data.

The recoveries of sulfate in the MS/MSD pair using sample HGWC-125 were low and outside the laboratory specified acceptance criteria. Since the sulfate concentration in sample HGWC-125 was greater than four times the spiked concentration, no qualifications were applied to the data.

Batch MS/MSD pairs were also reported for the 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.

### **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**

Five sample set specific laboratory duplicates were reported for TDS using samples HGWA-1, HGWA-2, HGWA-45D, HGWC-121A and FB-3. The RPD results were within the laboratory specified acceptance criteria.

Batch laboratory duplicates were also reported for TDS. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

### **3.7 Equipment Blank**

One equipment blank was collected with the sample set, EB-3. The wet chemistry parameters were not detected in the equipment blank above the MDL.

### **3.8 Field Blank**

One field blank was collected with the sample set, FB-3. The wet chemistry parameters were not detected in the field blank above the MDL.

### **3.9 Field Duplicate**

One field duplicate sample was collected with the sample set, DUP-3. Acceptable precision (RPD  $\leq$  20% or the difference between the concentrations  $<$  RL) was demonstrated between the field duplicate and the original sample, HGWC-125.

### **3.10 Sensitivity**

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

## **4.0 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

### **4.1 Overall Assessment**

The radium-226 and radium-228 data reported in this data set 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 data set is 100%.

#### **4.2 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.

#### **4.3 Method Blank**

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three method blanks were reported for the radium-226 data (batches 463428, 463426 and 463380). Four method blanks were reported for the radium-228 data (batches 463298, 461961, 463379 and 461962). Radium-226 and radium-228 were not detected in the method blanks above the minimum detectable concentrations (MDCs).

#### **4.4 Matrix Spike/Matrix Spike Duplicate**

MS/MSD pairs were not reported with the data.

#### **4.5 Laboratory Control Sample**

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). 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 ( $1\sigma$ )] results were within the laboratory specified acceptance criteria, with the following exception.

The LCSD recovery of radium-228 in the LCS/LCSD pair in batch 463298 was high and outside of the laboratory specified acceptance criteria. Since radium-228 was not detected in the associated sample, no qualifications were applied to the data.

#### **4.6 Laboratory Duplicate**

Three batch laboratory duplicates were reported for radium-226. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

#### **4.7 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.

#### **4.8 Equipment Blank**

One equipment blank was collected with the sample set, EB-3. Radium-226 and Radium-228 were not detected in the equipment blank above the MDCs.

#### **4.9 Field Blank**

One field blank was collected with the sample set, FB-3. Radium-226 and Radium-228 were not detected in the field blank above the MDCs.

#### **4.10 Field Duplicate**

One field duplicate sample was collected with the sample set, DUP-3. Acceptable precision ( $RER(1\sigma) < 3$ ) was demonstrated between the field duplicate and the original sample, HGWC-125.

#### **4.11 Sensitivity**

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

#### **4.12 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**

<b>Valid Value</b>	<b>Description</b>
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



## Memorandum

Date: March 28, 2022  
To: Christine Hug  
From: Ashley Wilson  
CC: J. Caprio  
Subject: **Stage 2A Data Validations - Level II Data Deliverable – Pace Analytical Project No.: 92586342**

**SITE: CCR Plant Hammond AP-3**

### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of sixteen aqueous samples, one field blank, one equipment blank and one field duplicate, collected 1-3 February 2022, 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

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for supporting project objectives. Qualified data should be used within the limitation of the qualification.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- United States Environmental Protection Agency (US EPA) Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 540-R-20-006).

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

Laboratory IDs	Client IDs
92586342001	HGWA-122
92586342002	HGWA-45D
92586342003	HGWC-120
92586342004	HGWC-121A
92586342005	HGWC-124
92586342006	MW-39
92586342007	MW-41
92586342008	HGWA-44D
92586342009	HGWA-2
92586342010	HGWA-3

Laboratory IDs	Client IDs
92586342011	HGWA-1
92586342012	HGWA-43D
92586342013	HGWC-125
92586342014	HGWC-126
92586342015	MW-32
92586342016	MW-46D
92586342017	DUP-3
92586342018	EB-3
92586342019	FB-3

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

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

A revised COC was issued that included samples HGWC-125, HGWC-126, MW-32, MW-46D, DUP-3, EB-3 and FB-3.

## 1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020B and calcium by US EPA Method 3010A/6010D.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time

- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ⊗ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

### **1.1 Overall Assessment**

The metals data reported in this data package are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this dataset is 100%.

### **1.2 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). One method blank was reported for metals by US EPA method 6020B (batch 678928) and one method blank for calcium by US EPA Method 6010D (batch 678931). Metals were not detected in the method blanks 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). One sample set specific MS/MSD pair was reported for metals by US EPA method 6020B, using sample HGWA-122, and one sample set specific MS/MSD pair was reported for calcium by US EPA Method 6010D, using sample HGWA-45D. The recovery and relative percent difference results were within the laboratory specified acceptance criteria.

Since the calcium concentration in sample HGWA-45D was greater than four times the spiked concentration, no qualifications were applied to the data based on the MS/MSD recovery results.

### 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

One equipment blank was collected with the sample set, EB-3. Metals by US EPA methods 3005A/6020 and for calcium by US EPA Method 3010A/6010D were not detected in the equipment blank, with the following exception.

Arsenic was detected at an estimated concentration greater than the MDL and less than the reporting limit (RL). Since the arsenic concentration in EB-3 was U qualified due to field blank contamination and based on professional and technical judgment, no additional qualifications were applied to the data.

### 1.7 Field Blank

One field blank was collected with the sample set, FB-3. Metals by US EPA methods 3005A/6020 and for calcium by US EPA Method 3010A/6010D were not detected in the equipment blank, with the following exceptions.

Arsenic and calcium were detected in the field blank at estimated concentrations greater than the MDLs and less than the RLs. Since the calcium concentrations in the associated samples were greater than the RL and based on professional and technical judgment, no qualifications were applied to the calcium data. However, the estimated concentrations of arsenic in the associated samples were U qualified as not detected at the RL.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HGWC-120	Arsenic	0.0014	J	0.0050	U	3
MW-39	Arsenic	0.0022	J	0.0050	U	3
MW-41	Arsenic	0.0023	J	0.0050	U	3
HGWA-44D	Arsenic	0.0025	J	0.0050	U	3
HGWA-2	Arsenic	0.0023	J	0.0050	U	3
HGWA-3	Arsenic	0.0024	J	0.0050	U	3
HGWA-1	Arsenic	0.0016	J	0.0050	U	3
HGWA-43D	Arsenic	0.0036	J	0.0050	U	3
HGWC-125	Arsenic	0.0032	J	0.0050	U	3
HGWC-126	Arsenic	0.0026	J	0.0050	U	3

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
MW-32	Arsenic	0.0026	J	0.0050	U	3
MW-46D	Arsenic	0.0049	J	0.0050	U	3
DUP-3	Arsenic	0.0032	J	0.0050	U	3
EB-3	Arsenic	0.0025	J	0.0050	U	3

mg/L- milligram per liter

J-the result is less than RL but greater than the MDL and the concentration is an approximate value

### 1.8 Field Duplicate

One field duplicate was collected with the sample set, DUP-3. Acceptable precision (RPD  $\leq$  30%) was demonstrated between the field duplicate and the original sample, HGWC-126.

### 1.9 Sensitivity

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

### 1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

## 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). Three method blanks were reported (batches 678094, 678396 and 678399). Mercury was not detected in the method blanks 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). Two sample specific MS/MSD pairs were reported using samples HGWA-3 and HGWC-125. The recovery and RPD results were within the laboratory specified acceptance criteria.

In addition, one batch MS/MSD pair was reported. Since this was 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). Three LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

## **2.6 Equipment Blank**

One equipment blank was collected with the sample set, EB-3. Mercury was not detected in the equipment blank above the MDLs.

## 2.7 Field Blank

One field blank was collected with the sample set, FB-3. Mercury was not detected in the field blank above the MDLs.

## 2.8 Field Duplicate

One field duplicate was collected with the sample set, DUP-3. Acceptable precision ( $RPD \leq 30\%$ ) was demonstrated between the field duplicate and the original sample, HGWC-126.

## 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 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 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 time for the fluoride, chloride and sulfate analysis of a water sample is 28 days from sample collection to analysis. The holding time for the TDS analysis of a water sample is 7 days from sample collection to analysis. The holding times were met for the sample analyses.

### **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). Three method blanks were reported for TDS (batches 676438, 676565 and 676887) and two method blanks were reported for chloride, fluoride and sulfate (batches 676561 and 677753). The wet chemistry parameters were not detected in the method blanks above the MDLs.

### **3.4 Matrix Spike/Matrix Spike Duplicate**

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Sample set specific MS/MSD pairs were reported for chloride, fluoride and sulfate using samples HGWC-120 and HGWC-125. The recovery and RPD results were within the laboratory specified acceptance criteria with the following exceptions.

The MSD recovery of sulfate in the MS/MSD pair using sample HGWC-120 was low and outside of laboratory specified acceptance criteria. Therefore, the concentration of sulfate in sample HGWC-120 was J- qualified as estimated with a low bias.

The recoveries of chloride and fluoride in the MS/MSD pair using sample HGWC-125 were high and outside the laboratory specified acceptance criteria. Therefore, the concentrations of chloride and fluoride in sample HGWC-125 were J+ qualified as estimated with high biases.

Two batch MS/MSD pairs were also reported for chloride, fluoride and sulfate. 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
HGWC-120	Sulfate	201	M1	201	J+	4
HGWC-125	Chloride	8.1	M1	8.1	J+	4
HGWC-125	Fluoride	0.18	M1	0.18	J+	4

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

Laboratory duplicates were reported for TDS using samples MW-39 and HGWA-2. The RPD results were within the laboratory specified acceptance criteria.

Four 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

One equipment blank was collected with the sample set, EB-3. The wet chemistry parameters were not detected in the equipment blank above the MDLs.

### 3.8 Field Blank

One field blank was collected with the sample set, FB-3. The wet chemistry parameters were not detected in the field blank above the MDLs.

### 3.9 Field Duplicate

One field duplicate was collected with the sample set, DUP-3. Acceptable precision ( $RPD \leq 30\%$ ) was demonstrated between the field duplicate and the original sample, HGWC-126.

### 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 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**

<b>Valid Value</b>	<b>Description</b>
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 recovery outside limits
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

RPD-relative percent difference

## Memorandum

Date: April 5, 2022  
To: Whitney Law  
From: Kristoffer Henderson  
CC: J. Caprio  
Subject: **Stage 2A Data Validation - Level II Data Deliverable – Pace Analytical Services, LLC Project Number 92586334**

**SITE: Plant Hammond AP-3**

### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of sixteen aqueous samples, one field duplicate, one equipment blank and one field blank, collected 1-3 February 2022, 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 US EPA Method 9315
- Radium-228 by US EPA Method 9320
- Total Radium by Calculation

### EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data are usable for meeting project objectives.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- 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 ID	Client ID
92586334001	HGWA-122
92586334002	HGWA-45D
92586334003	HGWC-120
92586334004	HGWC-121A
92586334005	HGWC-124
92586334006	MW-39
92586334007	MW-41
92586334008	HGWA-44D
92586334009	HGWA-2
92586334010	HGWA-3

Laboratory ID	Client ID
92586334011	HGWA-1
92586334012	HGWA-43D
92586334013	HGWC-125
92586334014	HGWC-126
92586334015	MW-32
92586334016	MW-46D
92586334017	DUP-3
92586334018	EB-3
92586334019	FB-3

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

## 1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 9315, radium-228 by US EPA method 9320 and total radium by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Tracers and Carriers
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

### 1.1 Overall Assessment

The radium-226 and radium-228 data reported in this data set are considered usable for 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 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). One method blank was reported for the radium-226 data (batch 484283). One method blank was reported for the radium-228 data (batch 484160). Radium-226 and radium-228 were not detected in the method blanks above the minimum detectable concentrations (MDCs).

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

MS/MSD pairs were not reported with the data.

### **1.5 Laboratory Control Sample (LCS)**

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS/LCS duplicate (LCSD) pair was reported for radium-226. One LCS/LCSD pair was reported for radium-228. The recovery and replicate error ratio (RER) [1 sigma ( $1\sigma$ )] results were within the laboratory specified acceptance criteria.

### **1.6 Laboratory Duplicate**

One sample set specific laboratory duplicate was reported for Radium-226 using sample HGWA-45D. The RER result was within the laboratory specified acceptance criteria.

### **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 was collected with the sample set, EB-3. Radium-226 and Radium-228 were not detected in the equipment blank above the MDCs.

**1.9 Field Blank**

One field blank was collected with the sample set, FB-3. 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, DUP-3. Acceptable precision (RER ( $1\sigma < 3$ )) was demonstrated between the field duplicate and the original sample, HGWC-126.

**1.11 Sensitivity**

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

**1.12 Electronic Data Deliverable (EDD) Review**

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

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**ATTACHMENT 1**  
**DATA VALIDATION QUALIFIER DEFINITIONS**  
**AND INTERPRETATION KEY**  
**Assigned by Geosyntec's Data Validation Team**

**DATA QUALIFIER DEFINITIONS**

- U The analyte was analyzed for but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to “not detected at or above the reported result”.
  
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
  
- J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
  
- J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
  
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
  
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

**ATTACHMENT 2**  
**DATA VALIDATION REASON CODES**  
**Assigned by Geosyntec’s Data Validation Team**

<b>Valid Value</b>	<b>Description</b>
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

# FIELD SAMPLING REPORTS

August 2021

# Low-Flow Test Report:

Test Date / Time: 8/11/2021 1:57:08 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWA-1</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 22.50 ft</b> <b>Total Depth: 32.50 ft</b> <b>Initial Depth to Water: 18.88 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 27.50 ft</b> <b>Estimated Total Volume Pumped: 36.75 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.52 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728541</b>
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## Test Notes:

Five bottles: Full app. III & IV.

## Weather Conditions:

Sunny, 96 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/11/2021 1:57 PM	00:00	7.00 pH	21.04 °C	667.52 µS/cm	0.64 mg/L	3.23 NTU	33.4 mV	19.28 ft	200.00 ml/min
8/11/2021 2:02 PM	05:00	6.99 pH	19.20 °C	683.41 µS/cm	0.40 mg/L	1.41 NTU	33.7 mV	19.33 ft	200.00 ml/min
8/11/2021 2:07 PM	10:00	6.99 pH	19.15 °C	659.32 µS/cm	0.45 mg/L	2.60 NTU	33.5 mV	19.38 ft	200.00 ml/min
8/11/2021 2:12 PM	15:00	6.99 pH	19.02 °C	656.40 µS/cm	0.40 mg/L	0.75 NTU	32.2 mV	19.39 ft	200.00 ml/min
8/11/2021 2:15 PM	18:12	6.99 pH	19.03 °C	661.45 µS/cm	0.35 mg/L	0.36 NTU	34.6 mV	19.40 ft	200.00 ml/min
8/11/2021 2:20 PM	23:12	6.98 pH	18.94 °C	660.06 µS/cm	0.28 mg/L	0.55 NTU	35.7 mV	19.40 ft	200.00 ml/min
8/11/2021 2:25 PM	28:12	6.98 pH	19.06 °C	660.13 µS/cm	0.28 mg/L	0.19 NTU	35.4 mV	19.40 ft	200.00 ml/min
8/11/2021 2:30 PM	33:12	6.99 pH	18.90 °C	665.62 µS/cm	0.38 mg/L	1.14 NTU	35.4 mV	19.40 ft	200.00 ml/min
8/11/2021 2:35 PM	38:12	6.99 pH	18.79 °C	661.37 µS/cm	0.33 mg/L	0.28 NTU	35.6 mV	19.40 ft	200.00 ml/min
8/11/2021 2:40 PM	43:12	6.98 pH	18.75 °C	662.88 µS/cm	0.26 mg/L	--	37.0 mV	19.40 ft	200.00 ml/min
8/11/2021 2:45 PM	48:12	6.98 pH	18.75 °C	663.83 µS/cm	0.25 mg/L	--	36.8 mV	19.40 ft	200.00 ml/min
8/11/2021 2:50 PM	53:12	6.98 pH	18.74 °C	655.03 µS/cm	0.36 mg/L	--	34.6 mV	19.40 ft	200.00 ml/min
8/11/2021 2:55 PM	58:12	6.98 pH	18.80 °C	664.96 µS/cm	0.32 mg/L	--	34.7 mV	19.40 ft	200.00 ml/min

8/11/2021 3:00 PM	01:03:12	6.98 pH	18.73 °C	667.63 µS/cm	0.27 mg/L	--	34.7 mV	19.40 ft	200.00 ml/min
8/11/2021 3:05 PM	01:08:12	6.98 pH	18.79 °C	667.13 µS/cm	0.26 mg/L	--	34.5 mV	19.40 ft	200.00 ml/min
8/11/2021 3:10 PM	01:13:12	6.98 pH	18.92 °C	666.06 µS/cm	0.30 mg/L	--	32.6 mV	19.40 ft	200.00 ml/min
8/11/2021 3:15 PM	01:18:12	6.98 pH	18.99 °C	665.79 µS/cm	0.24 mg/L	--	30.5 mV	19.40 ft	200.00 ml/min
8/11/2021 3:20 PM	01:23:12	6.97 pH	18.97 °C	665.66 µS/cm	0.34 mg/L	--	30.7 mV	19.40 ft	200.00 ml/min
8/11/2021 3:25 PM	01:28:12	6.98 pH	18.84 °C	666.38 µS/cm	0.25 mg/L	--	30.9 mV	19.40 ft	200.00 ml/min
8/11/2021 3:30 PM	01:33:12	6.98 pH	18.79 °C	665.01 µS/cm	0.19 mg/L	--	29.8 mV	19.40 ft	200.00 ml/min
8/11/2021 3:35 PM	01:38:12	6.98 pH	18.74 °C	664.47 µS/cm	0.22 mg/L	--	30.0 mV	19.40 ft	200.00 ml/min
8/11/2021 3:40 PM	01:43:12	6.98 pH	18.69 °C	664.99 µS/cm	0.24 mg/L	--	28.6 mV	19.40 ft	200.00 ml/min
8/11/2021 3:45 PM	01:48:12	6.97 pH	18.75 °C	662.12 µS/cm	0.21 mg/L	--	29.5 mV	19.40 ft	200.00 ml/min
8/11/2021 3:50 PM	01:53:12	6.98 pH	18.78 °C	663.73 µS/cm	0.28 mg/L	--	28.4 mV	19.40 ft	200.00 ml/min
8/11/2021 3:55 PM	01:58:12	6.98 pH	18.70 °C	665.36 µS/cm	0.21 mg/L	--	27.3 mV	19.40 ft	200.00 ml/min
8/11/2021 4:00 PM	02:03:12	6.98 pH	18.70 °C	664.22 µS/cm	0.20 mg/L	--	28.1 mV	19.40 ft	200.00 ml/min
8/11/2021 4:05 PM	02:08:12	6.98 pH	18.70 °C	663.86 µS/cm	0.33 mg/L	--	29.3 mV	19.40 ft	200.00 ml/min
8/11/2021 4:10 PM	02:13:12	6.97 pH	18.75 °C	662.73 µS/cm	0.24 mg/L	--	29.7 mV	19.40 ft	200.00 ml/min
8/11/2021 4:15 PM	02:18:12	6.98 pH	18.93 °C	663.37 µS/cm	0.20 mg/L	--	30.1 mV	19.40 ft	200.00 ml/min
8/11/2021 4:20 PM	02:23:12	6.98 pH	18.97 °C	663.89 µS/cm	0.20 mg/L	--	28.0 mV	19.40 ft	200.00 ml/min
8/11/2021 4:25 PM	02:28:12	6.98 pH	18.85 °C	661.80 µS/cm	0.31 mg/L	--	30.1 mV	19.40 ft	200.00 ml/min
8/11/2021 4:30 PM	02:33:12	6.97 pH	18.84 °C	663.72 µS/cm	0.28 mg/L	--	30.4 mV	19.40 ft	200.00 ml/min
8/11/2021 4:35 PM	02:38:12	6.97 pH	18.71 °C	662.50 µS/cm	0.22 mg/L	--	29.4 mV	19.40 ft	200.00 ml/min
8/11/2021 4:40 PM	02:43:12	6.98 pH	18.74 °C	660.97 µS/cm	0.32 mg/L	--	29.4 mV	19.40 ft	200.00 ml/min
8/11/2021 4:45 PM	02:48:12	6.98 pH	18.73 °C	636.44 µS/cm	0.23 mg/L	0.36 NTU	29.7 mV	19.40 ft	200.00 ml/min
8/11/2021 4:50 PM	02:53:12	6.98 pH	18.73 °C	663.99 µS/cm	0.37 mg/L	0.38 NTU	30.5 mV	19.40 ft	200.00 ml/min
8/11/2021 4:55 PM	02:58:12	6.98 pH	18.65 °C	661.28 µS/cm	0.36 mg/L	0.37 NTU	28.5 mV	19.40 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-1	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 8/12/2021 2:21:33 PM

Project: GP-Plant Hammond

Operator Name: Ashley Ramsey

<b>Location Name: HGWA-2</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 17.95 ft</b> <b>Total Depth: 27.95 ft</b> <b>Initial Depth to Water: 10.67 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 22.95 ft</b> <b>Estimated Total Volume Pumped: 14 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.05 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728623</b>
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## Test Notes:

Five bottle: Full app. III & IV.

## Weather Conditions:

Sunny, 91 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/12/2021 2:21 PM	00:00	5.15 pH	23.08 °C	203.81 µS/cm	0.77 mg/L	34.00 NTU	130.2 mV	10.67 ft	200.00 ml/min
8/12/2021 2:26 PM	05:00	5.08 pH	21.50 °C	202.92 µS/cm	0.26 mg/L	49.60 NTU	130.2 mV	10.72 ft	200.00 ml/min
8/12/2021 2:31 PM	10:00	5.08 pH	21.42 °C	203.27 µS/cm	0.19 mg/L	29.60 NTU	155.5 mV	10.72 ft	200.00 ml/min
8/12/2021 2:36 PM	15:00	5.10 pH	21.73 °C	204.60 µS/cm	0.26 mg/L	22.80 NTU	127.2 mV	10.72 ft	200.00 ml/min
8/12/2021 2:41 PM	20:00	5.09 pH	21.78 °C	204.30 µS/cm	0.25 mg/L	16.80 NTU	156.0 mV	10.72 ft	200.00 ml/min
8/12/2021 2:46 PM	25:00	5.08 pH	21.69 °C	203.45 µS/cm	0.23 mg/L	16.10 NTU	127.1 mV	10.72 ft	200.00 ml/min
8/12/2021 2:51 PM	30:00	5.06 pH	21.60 °C	202.80 µS/cm	0.18 mg/L	15.50 NTU	156.8 mV	10.72 ft	200.00 ml/min
8/12/2021 2:56 PM	35:00	5.05 pH	21.81 °C	202.03 µS/cm	0.15 mg/L	11.70 NTU	127.1 mV	10.72 ft	200.00 ml/min
8/12/2021 3:01 PM	40:00	5.05 pH	21.65 °C	202.15 µS/cm	0.14 mg/L	9.76 NTU	126.0 mV	10.72 ft	200.00 ml/min
8/12/2021 3:06 PM	45:00	5.05 pH	21.82 °C	201.32 µS/cm	0.13 mg/L	9.92 NTU	125.4 mV	10.72 ft	200.00 ml/min
8/12/2021 3:11 PM	50:00	5.05 pH	21.82 °C	202.01 µS/cm	0.14 mg/L	7.58 NTU	125.2 mV	10.72 ft	200.00 ml/min
8/12/2021 3:16 PM	55:00	5.04 pH	21.33 °C	202.45 µS/cm	0.12 mg/L	6.44 NTU	124.8 mV	10.72 ft	200.00 ml/min
8/12/2021 3:21 PM	01:00:00	5.04 pH	21.24 °C	203.65 µS/cm	0.12 mg/L	6.07 NTU	124.7 mV	10.72 ft	200.00 ml/min

8/12/2021 3:26 PM	01:05:00	5.05 pH	21.37 °C	202.40 µS/cm	0.11 mg/L	5.42 NTU	158.0 mV	10.72 ft	200.00 ml/min
8/12/2021 3:31 PM	01:10:00	5.05 pH	21.04 °C	203.48 µS/cm	0.11 mg/L	4.12 NTU	124.4 mV	10.72 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-2	Grab sample.



# Low-Flow Test Report:

Test Date / Time: 8/12/2021 8:42:53 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWA-3</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 34.87 ft Initial</b> <b>Total Depth: 44.87 ft</b> <b>Depth to Water: 10.51 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 39.87 ft</b> <b>Estimated Total Volume Pumped: 19 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.02 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728541</b>
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## Test Notes:

Five bottles: Full app. III & IV.

## Weather Conditions:

Sunny, 75 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/12/2021 8:42 AM	00:00	7.28 pH	20.30 °C	460.79 µS/cm	2.04 mg/L	74.50 NTU	-65.2 mV	10.51 ft	200.00 ml/min
8/12/2021 8:47 AM	05:00	7.28 pH	19.16 °C	461.91 µS/cm	2.42 mg/L	10.15 NTU	-80.8 mV	10.51 ft	200.00 ml/min
8/12/2021 8:52 AM	10:00	7.27 pH	19.20 °C	464.76 µS/cm	2.64 mg/L	6.23 NTU	-85.6 mV	10.52 ft	200.00 ml/min
8/12/2021 8:57 AM	15:00	7.29 pH	19.26 °C	465.02 µS/cm	1.36 mg/L	5.51 NTU	-81.9 mV	10.52 ft	200.00 ml/min
8/12/2021 9:02 AM	20:00	7.29 pH	19.15 °C	462.89 µS/cm	2.28 mg/L	3.51 NTU	-98.1 mV	10.52 ft	200.00 ml/min
8/12/2021 9:07 AM	25:00	7.30 pH	19.15 °C	464.17 µS/cm	1.25 mg/L	2.55 NTU	-87.8 mV	10.52 ft	200.00 ml/min
8/12/2021 9:12 AM	30:00	7.30 pH	19.23 °C	462.67 µS/cm	1.71 mg/L	2.10 NTU	-83.8 mV	10.52 ft	200.00 ml/min
8/12/2021 9:17 AM	35:00	7.29 pH	19.30 °C	463.45 µS/cm	1.56 mg/L	1.32 NTU	-86.3 mV	10.52 ft	200.00 ml/min
8/12/2021 9:22 AM	40:00	7.30 pH	19.42 °C	451.88 µS/cm	1.79 mg/L	1.21 NTU	-87.3 mV	10.53 ft	200.00 ml/min
8/12/2021 9:27 AM	45:00	7.30 pH	19.43 °C	462.08 µS/cm	3.14 mg/L	1.28 NTU	-97.4 mV	10.53 ft	200.00 ml/min
8/12/2021 9:32 AM	50:00	7.31 pH	19.39 °C	463.60 µS/cm	1.34 mg/L	1.02 NTU	-85.6 mV	10.53 ft	200.00 ml/min
8/12/2021 9:37 AM	55:00	7.31 pH	19.42 °C	463.46 µS/cm	1.30 mg/L	2.16 NTU	-86.2 mV	10.53 ft	200.00 ml/min
8/12/2021 9:42 AM	01:00:00	7.29 pH	19.34 °C	464.62 µS/cm	1.08 mg/L	1.99 NTU	-79.5 mV	10.53 ft	200.00 ml/min

8/12/2021 9:47 AM	01:05:00	7.31 pH	19.37 °C	455.63 µS/cm	1.00 mg/L	1.53 NTU	-81.6 mV	10.53 ft	200.00 ml/min
8/12/2021 9:52 AM	01:10:00	7.31 pH	19.42 °C	462.54 µS/cm	1.40 mg/L	1.14 NTU	-97.2 mV	10.53 ft	200.00 ml/min
8/12/2021 9:57 AM	01:15:00	7.31 pH	19.28 °C	463.04 µS/cm	1.73 mg/L	0.99 NTU	-85.2 mV	10.53 ft	200.00 ml/min
8/12/2021 10:02 AM	01:20:00	7.31 pH	19.55 °C	463.83 µS/cm	1.41 mg/L	0.71 NTU	-95.5 mV	10.53 ft	200.00 ml/min
8/12/2021 10:07 AM	01:25:00	7.30 pH	19.58 °C	464.34 µS/cm	1.44 mg/L	0.58 NTU	-83.4 mV	10.53 ft	200.00 ml/min
8/12/2021 10:12 AM	01:30:00	7.31 pH	19.69 °C	457.58 µS/cm	1.28 mg/L	0.61 NTU	-85.1 mV	10.53 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-3	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 8/11/2021 2:08:01 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWA-43D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 51.26 ft</b> <b>Total Depth: 61.25 ft</b> <b>Initial Depth to Water: 18.65 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 56.25 ft</b> <b>Estimated Total Volume Pumped: 34 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 3.03 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: Full app. III & IV.

## Weather Conditions:

Sunny, 90 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/11/2021 2:08 PM	00:00	8.30 pH	37.12 °C	0.11 µS/cm	6.81 mg/L	3.16 NTU	82.9 mV	20.00 ft	200.00 ml/min
8/11/2021 2:13 PM	05:00	7.50 pH	20.20 °C	528.39 µS/cm	0.58 mg/L	4.21 NTU	-95.1 mV	20.20 ft	200.00 ml/min
8/11/2021 2:18 PM	10:00	7.49 pH	19.63 °C	521.25 µS/cm	0.36 mg/L	3.80 NTU	-91.7 mV	20.65 ft	200.00 ml/min
8/11/2021 2:23 PM	15:00	7.49 pH	19.49 °C	516.37 µS/cm	0.27 mg/L	--	-94.4 mV	--	200.00 ml/min
8/11/2021 2:28 PM	20:00	7.49 pH	19.40 °C	509.58 µS/cm	0.18 mg/L	--	-94.2 mV	--	200.00 ml/min
8/11/2021 2:33 PM	25:00	7.48 pH	19.45 °C	503.82 µS/cm	0.15 mg/L	--	-111.7 mV	--	200.00 ml/min
8/11/2021 2:38 PM	30:00	7.48 pH	19.36 °C	502.21 µS/cm	0.14 mg/L	--	-112.0 mV	--	200.00 ml/min
8/11/2021 2:43 PM	35:00	7.47 pH	19.47 °C	502.19 µS/cm	0.13 mg/L	--	-111.8 mV	--	200.00 ml/min
8/11/2021 2:48 PM	40:00	7.46 pH	19.40 °C	496.56 µS/cm	0.12 mg/L	--	-110.4 mV	--	200.00 ml/min
8/11/2021 2:53 PM	45:00	7.46 pH	19.44 °C	499.36 µS/cm	0.12 mg/L	--	-109.0 mV	--	200.00 ml/min
8/11/2021 2:58 PM	50:00	7.45 pH	19.34 °C	490.56 µS/cm	0.12 mg/L	--	-89.6 mV	--	200.00 ml/min
8/11/2021 3:03 PM	55:00	7.45 pH	19.41 °C	491.20 µS/cm	0.12 mg/L	--	-88.4 mV	--	200.00 ml/min
8/11/2021 3:08 PM	01:00:00	7.44 pH	19.54 °C	488.13 µS/cm	0.12 mg/L	--	-102.9 mV	--	200.00 ml/min

8/11/2021 3:13 PM	01:05:00	7.43 pH	19.70 °C	485.51 µS/cm	0.12 mg/L	--	-85.5 mV	--	200.00 ml/min
8/11/2021 3:18 PM	01:10:00	7.43 pH	19.69 °C	481.07 µS/cm	0.12 mg/L	--	-83.4 mV	--	200.00 ml/min
8/11/2021 3:23 PM	01:15:00	7.42 pH	19.57 °C	479.55 µS/cm	0.12 mg/L	--	-81.7 mV	--	200.00 ml/min
8/11/2021 3:28 PM	01:20:00	7.42 pH	19.56 °C	486.53 µS/cm	0.12 mg/L	--	-95.2 mV	--	200.00 ml/min
8/11/2021 3:33 PM	01:25:00	7.42 pH	19.49 °C	480.24 µS/cm	0.13 mg/L	--	-78.9 mV	--	200.00 ml/min
8/11/2021 3:38 PM	01:30:00	7.42 pH	19.51 °C	475.62 µS/cm	0.12 mg/L	--	-94.9 mV	--	200.00 ml/min
8/11/2021 3:43 PM	01:35:00	7.42 pH	19.50 °C	480.10 µS/cm	0.12 mg/L	--	-93.0 mV	--	200.00 ml/min
8/11/2021 3:48 PM	01:40:00	7.42 pH	19.58 °C	483.92 µS/cm	0.12 mg/L	--	-92.3 mV	--	200.00 ml/min
8/11/2021 3:53 PM	01:45:00	7.42 pH	19.61 °C	477.83 µS/cm	0.12 mg/L	--	-92.7 mV	--	200.00 ml/min
8/11/2021 3:58 PM	01:50:00	7.41 pH	19.54 °C	476.06 µS/cm	0.12 mg/L	--	-74.3 mV	--	200.00 ml/min
8/11/2021 4:03 PM	01:55:00	7.41 pH	19.65 °C	479.74 µS/cm	0.12 mg/L	--	-90.4 mV	--	200.00 ml/min
8/11/2021 4:08 PM	02:00:00	7.41 pH	19.70 °C	475.89 µS/cm	0.12 mg/L	--	-74.2 mV	--	200.00 ml/min
8/11/2021 4:13 PM	02:05:00	7.41 pH	19.76 °C	476.21 µS/cm	0.12 mg/L	--	-89.0 mV	--	200.00 ml/min
8/11/2021 4:18 PM	02:10:00	7.41 pH	19.75 °C	479.29 µS/cm	0.12 mg/L	--	-88.6 mV	--	200.00 ml/min
8/11/2021 4:23 PM	02:15:00	7.41 pH	19.70 °C	480.88 µS/cm	0.12 mg/L	--	-71.7 mV	--	200.00 ml/min
8/11/2021 4:28 PM	02:20:00	7.41 pH	19.54 °C	476.43 µS/cm	0.12 mg/L	--	-86.2 mV	--	200.00 ml/min
8/11/2021 4:33 PM	02:25:00	7.41 pH	19.49 °C	472.66 µS/cm	0.12 mg/L	--	-85.6 mV	--	200.00 ml/min
8/11/2021 4:38 PM	02:30:00	7.41 pH	19.45 °C	478.48 µS/cm	0.13 mg/L	--	-86.5 mV	--	200.00 ml/min
8/11/2021 4:43 PM	02:35:00	7.41 pH	19.35 °C	475.82 µS/cm	0.12 mg/L	--	-69.5 mV	--	200.00 ml/min
8/11/2021 4:48 PM	02:40:00	7.41 pH	19.39 °C	473.79 µS/cm	0.12 mg/L	2.27 NTU	-68.5 mV	21.68 ft	200.00 ml/min
8/11/2021 4:53 PM	02:45:00	7.41 pH	19.36 °C	476.17 µS/cm	0.12 mg/L	1.68 NTU	-67.8 mV	21.68 ft	200.00 ml/min
8/11/2021 4:58 PM	02:50:00	7.40 pH	19.40 °C	469.00 µS/cm	0.12 mg/L	0.68 NTU	-82.5 mV	21.68 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-43D	Grab Sample.

# Low-Flow Test Report:

Test Date / Time: 8/13/2021 9:25:02 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWA-44D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 103 ft</b> <b>Total Depth: 113.28 ft</b> <b>Initial Depth to Water: 18.25 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 108.28 ft</b> <b>Estimated Total Volume Pumped: 23 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 3.1 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Sunny, 85 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/13/2021 9:25 AM	00:00	7.61 pH	24.10 °C	1,163.3 µS/cm	2.99 mg/L	50.70 NTU	98.2 mV	18.55 ft	200.00 ml/min
8/13/2021 9:30 AM	05:00	7.63 pH	19.76 °C	1,113.6 µS/cm	1.57 mg/L	69.60 NTU	39.4 mV	18.55 ft	200.00 ml/min
8/13/2021 9:35 AM	10:00	7.69 pH	19.26 °C	1,112.3 µS/cm	0.65 mg/L	65.80 NTU	-32.9 mV	18.55 ft	200.00 ml/min
8/13/2021 9:40 AM	15:00	7.69 pH	19.24 °C	1,109.5 µS/cm	0.43 mg/L	58.60 NTU	-62.0 mV	19.75 ft	200.00 ml/min
8/13/2021 9:45 AM	20:00	7.68 pH	19.74 °C	1,071.7 µS/cm	0.36 mg/L	46.30 NTU	-20.2 mV	19.85 ft	200.00 ml/min
8/13/2021 9:50 AM	25:00	7.67 pH	19.85 °C	1,053.8 µS/cm	0.31 mg/L	25.00 NTU	-14.5 mV	20.15 ft	200.00 ml/min
8/13/2021 9:55 AM	30:00	7.67 pH	19.76 °C	1,050.8 µS/cm	0.28 mg/L	18.40 NTU	3.1 mV	20.26 ft	200.00 ml/min
8/13/2021 10:00 AM	35:00	7.67 pH	19.64 °C	1,046.8 µS/cm	0.26 mg/L	12.40 NTU	14.2 mV	20.38 ft	200.00 ml/min
8/13/2021 10:05 AM	40:00	7.67 pH	19.70 °C	1,033.5 µS/cm	0.25 mg/L	11.20 NTU	24.6 mV	20.43 ft	200.00 ml/min
8/13/2021 10:10 AM	45:00	7.67 pH	19.69 °C	1,039.2 µS/cm	0.24 mg/L	8.47 NTU	27.3 mV	20.55 ft	200.00 ml/min
8/13/2021 10:15 AM	50:00	7.68 pH	19.67 °C	1,027.9 µS/cm	0.23 mg/L	8.93 NTU	28.6 mV	20.67 ft	200.00 ml/min
8/13/2021 10:20 AM	55:00	7.68 pH	19.69 °C	1,020.1 µS/cm	0.22 mg/L	14.06 NTU	28.7 mV	20.67 ft	200.00 ml/min
8/13/2021 10:25 AM	01:00:00	7.69 pH	19.63 °C	1,033.7 µS/cm	0.21 mg/L	11.74 NTU	29.4 mV	20.70 ft	200.00 ml/min

8/13/2021 10:30 AM	01:05:00	7.70 pH	19.62 °C	992.87 µS/cm	0.20 mg/L	8.71 NTU	30.0 mV	20.70 ft	200.00 ml/min
8/13/2021 10:35 AM	01:10:00	7.72 pH	19.60 °C	939.74 µS/cm	0.19 mg/L	6.36 NTU	30.4 mV	20.88 ft	200.00 ml/min
8/13/2021 10:37 AM	01:12:03	7.72 pH	19.49 °C	895.36 µS/cm	0.18 mg/L	6.36 NTU	32.2 mV	20.88 ft	200.00 ml/min
8/13/2021 10:42 AM	01:17:03	7.73 pH	19.45 °C	890.88 µS/cm	0.17 mg/L	4.39 NTU	30.6 mV	20.90 ft	200.00 ml/min
8/13/2021 10:47 AM	01:22:03	7.74 pH	19.50 °C	844.55 µS/cm	0.16 mg/L	4.13 NTU	30.9 mV	21.00 ft	200.00 ml/min
8/13/2021 10:52 AM	01:27:03	7.75 pH	19.40 °C	838.90 µS/cm	0.15 mg/L	3.85 NTU	30.6 mV	21.05 ft	200.00 ml/min
8/13/2021 10:57 AM	01:32:03	7.76 pH	19.49 °C	804.21 µS/cm	0.14 mg/L	3.05 NTU	30.5 mV	21.15 ft	200.00 ml/min
8/13/2021 11:02 AM	01:37:03	7.77 pH	19.86 °C	781.29 µS/cm	0.13 mg/L	2.95 NTU	30.6 mV	21.25 ft	200.00 ml/min
8/13/2021 11:07 AM	01:42:03	7.77 pH	20.03 °C	769.60 µS/cm	0.12 mg/L	5.36 NTU	30.7 mV	21.30 ft	200.00 ml/min
8/13/2021 11:12 AM	01:47:03	7.77 pH	20.14 °C	775.38 µS/cm	0.11 mg/L	5.44 NTU	30.8 mV	21.30 ft	200.00 ml/min
8/13/2021 11:17 AM	01:52:03	7.77 pH	20.35 °C	761.59 µS/cm	0.11 mg/L	4.83 NTU	30.8 mV	21.35 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-44D	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 8/13/2021 11:32:20 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWA-45D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 52.87 ft</b> <b>Total Depth: 62.87 ft</b> <b>Initial Depth to Water: 12.35 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 57.87 ft</b> <b>Estimated Total Volume Pumped: 7 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.61 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728541</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Sunny, 88 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/13/2021 11:32 AM	00:00	7.56 pH	26.15 °C	516.02 µS/cm	2.01 mg/L	2.08 NTU	-111.5 mV	12.55 ft	200.00 ml/min
8/13/2021 11:37 AM	05:00	7.50 pH	22.02 °C	507.81 µS/cm	0.61 mg/L	1.09 NTU	-124.0 mV	12.86 ft	200.00 ml/min
8/13/2021 11:42 AM	10:00	7.48 pH	21.76 °C	508.21 µS/cm	0.40 mg/L	0.60 NTU	-139.5 mV	12.96 ft	200.00 ml/min
8/13/2021 11:47 AM	15:00	7.45 pH	21.64 °C	507.15 µS/cm	0.44 mg/L	0.52 NTU	-141.8 mV	12.96 ft	200.00 ml/min
8/13/2021 11:52 AM	20:00	7.43 pH	21.64 °C	503.97 µS/cm	0.44 mg/L	0.44 NTU	-146.1 mV	12.96 ft	200.00 ml/min
8/13/2021 11:57 AM	25:00	7.43 pH	21.91 °C	503.84 µS/cm	0.57 mg/L	0.40 NTU	-153.2 mV	12.96 ft	200.00 ml/min
8/13/2021 12:02 PM	30:00	7.42 pH	21.93 °C	502.46 µS/cm	0.38 mg/L	0.45 NTU	-157.8 mV	12.96 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-45D	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 8/16/2021 11:40:29 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWC-120</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 57.55 ft</b> <b>Total Depth: 67.55 ft</b> <b>Initial Depth to Water: 40.7 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 62.55 ft</b> <b>Estimated Total Volume Pumped: 7 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.05 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728541</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Partly cloudy, 78 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/16/2021 11:40 AM	00:00	7.06 pH	22.89 °C	951.92 µS/cm	2.11 mg/L	0.60 NTU	-125.1 mV	40.75 ft	200.00 ml/min
8/16/2021 11:45 AM	05:00	6.96 pH	20.88 °C	997.81 µS/cm	1.20 mg/L	0.43 NTU	-74.4 mV	40.75 ft	200.00 ml/min
8/16/2021 11:50 AM	10:00	6.94 pH	20.71 °C	985.49 µS/cm	1.22 mg/L	0.27 NTU	-60.2 mV	40.75 ft	200.00 ml/min
8/16/2021 11:55 AM	15:00	6.93 pH	20.89 °C	986.96 µS/cm	0.86 mg/L	0.25 NTU	-51.9 mV	40.75 ft	200.00 ml/min
8/16/2021 12:00 PM	20:00	6.93 pH	21.01 °C	984.91 µS/cm	0.97 mg/L	0.11 NTU	-45.7 mV	40.75 ft	200.00 ml/min
8/16/2021 12:05 PM	25:00	6.92 pH	20.88 °C	987.72 µS/cm	0.91 mg/L	0.32 NTU	-56.8 mV	40.75 ft	200.00 ml/min
8/16/2021 12:10 PM	30:00	6.92 pH	21.06 °C	1,000.8 µS/cm	0.96 mg/L	0.20 NTU	-39.4 mV	40.75 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWC-120	Grab sample.



# Low-Flow Test Report:

Test Date / Time: 8/16/2021 3:35:04 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWC-121A</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 28.16 ft</b> <b>Total Depth: 38.16 ft</b> <b>Initial Depth to Water: 18.09 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 33.16 ft</b> <b>Estimated Total Volume Pumped: 7 Liters</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.11 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728541</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Cloudy, 86 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/16/2021 3:35 PM	00:00	6.87 pH	23.07 °C	906.65 µS/cm	4.05 mg/L	4.90 NTU	53.9 mV	18.14 ft	200.00 ml/min
8/16/2021 3:40 PM	05:00	6.76 pH	21.28 °C	997.61 µS/cm	1.53 mg/L	4.82 NTU	52.2 mV	18.17 ft	200.00 ml/min
8/16/2021 3:45 PM	10:00	6.75 pH	21.04 °C	1,019.0 µS/cm	1.73 mg/L	3.81 NTU	61.0 mV	18.18 ft	200.00 ml/min
8/16/2021 3:50 PM	15:00	6.75 pH	21.01 °C	1,022.6 µS/cm	1.38 mg/L	3.63 NTU	49.3 mV	18.18 ft	200.00 ml/min
8/16/2021 3:55 PM	20:00	6.74 pH	20.97 °C	1,025.8 µS/cm	1.07 mg/L	3.72 NTU	51.8 mV	18.18 ft	200.00 ml/min
8/16/2021 4:00 PM	25:00	6.73 pH	20.84 °C	1,029.2 µS/cm	1.03 mg/L	3.09 NTU	55.3 mV	18.20 ft	200.00 ml/min
8/16/2021 4:05 PM	30:00	6.74 pH	21.05 °C	1,042.8 µS/cm	1.00 mg/L	2.69 NTU	56.7 mV	18.20 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWC-121A	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 8/13/2021 9:32:04 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWA-122</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 18.39 ft</b> <b>Total Depth: 28.52 ft</b> <b>Initial Depth to Water: 13.39 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 35.15 ft</b> <b>Estimated Total Volume Pumped: 10 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728541</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Sunny, 80 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/13/2021 9:32 AM	00:00	6.52 pH	22.18 °C	335.65 µS/cm	2.85 mg/L	4.53 NTU	125.5 mV	13.39 ft	200.00 ml/min
8/13/2021 9:37 AM	05:00	6.53 pH	21.51 °C	345.87 µS/cm	2.59 mg/L	4.30 NTU	105.7 mV	13.39 ft	200.00 ml/min
8/13/2021 9:42 AM	10:00	6.54 pH	21.48 °C	351.81 µS/cm	2.50 mg/L	1.78 NTU	139.8 mV	13.39 ft	200.00 ml/min
8/13/2021 9:47 AM	15:00	6.54 pH	21.49 °C	353.71 µS/cm	2.45 mg/L	1.03 NTU	141.2 mV	13.39 ft	200.00 ml/min
8/13/2021 9:52 AM	20:00	6.55 pH	21.46 °C	354.88 µS/cm	2.75 mg/L	0.66 NTU	140.4 mV	13.39 ft	200.00 ml/min
8/13/2021 9:57 AM	25:00	6.55 pH	21.53 °C	356.05 µS/cm	3.82 mg/L	0.83 NTU	139.7 mV	13.39 ft	200.00 ml/min
8/13/2021 10:02 AM	30:00	6.55 pH	21.53 °C	358.65 µS/cm	3.66 mg/L	0.57 NTU	139.7 mV	13.39 ft	200.00 ml/min
8/13/2021 10:07 AM	35:00	6.56 pH	21.46 °C	358.02 µS/cm	2.16 mg/L	0.56 NTU	101.8 mV	13.39 ft	200.00 ml/min
8/13/2021 10:12 AM	40:00	6.57 pH	21.69 °C	361.28 µS/cm	2.11 mg/L	0.34 NTU	137.6 mV	13.39 ft	200.00 ml/min
8/13/2021 10:17 AM	45:00	6.56 pH	21.73 °C	361.57 µS/cm	2.01 mg/L	0.27 NTU	141.0 mV	13.39 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-122	Grab sample.

# Low-Flow Test Report:

Location Name: Device Location

Initial Depth to Water: 15.59 ft

Test Date / Time: 8/16/2021 9:14:15 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWC-124</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.52 ft</b> <b>Total Depth: 35.52 ft</b> <b>Initial Depth to Water: 15.59 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 30.52 ft</b> <b>Estimated Total Volume Pumped: 11 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.31 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728541</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Cloudy, 76 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/16/2021 9:14 AM	00:00	7.18 pH	20.84 °C	577.02 µS/cm	1.33 mg/L	14.80 NTU	-19.9 mV	15.90 ft	200.00 ml/min
8/16/2021 9:19 AM	05:00	7.17 pH	19.32 °C	575.70 µS/cm	0.20 mg/L	9.23 NTU	-22.4 mV	15.90 ft	200.00 ml/min
8/16/2021 9:24 AM	10:00	7.18 pH	19.20 °C	577.89 µS/cm	3.34 mg/L	7.57 NTU	-14.1 mV	15.89 ft	200.00 ml/min
8/16/2021 9:29 AM	15:00	7.17 pH	19.14 °C	579.05 µS/cm	0.78 mg/L	4.77 NTU	4.6 mV	15.90 ft	200.00 ml/min
8/16/2021 9:34 AM	20:00	7.15 pH	19.15 °C	581.43 µS/cm	2.34 mg/L	3.40 NTU	-14.7 mV	15.90 ft	200.00 ml/min
8/16/2021 9:39 AM	25:00	7.14 pH	19.16 °C	580.98 µS/cm	2.45 mg/L	2.76 NTU	-2.2 mV	15.90 ft	200.00 ml/min
8/16/2021 9:44 AM	30:00	7.13 pH	19.19 °C	582.88 µS/cm	1.01 mg/L	2.06 NTU	-13.9 mV	15.90 ft	200.00 ml/min
8/16/2021 9:49 AM	35:00	7.12 pH	19.25 °C	582.07 µS/cm	0.85 mg/L	1.55 NTU	2.3 mV	15.90 ft	200.00 ml/min
8/16/2021 9:54 AM	40:00	7.10 pH	19.26 °C	582.56 µS/cm	0.16 mg/L	1.57 NTU	5.3 mV	15.90 ft	200.00 ml/min
8/16/2021 9:59 AM	45:00	7.09 pH	19.29 °C	584.19 µS/cm	0.17 mg/L	1.25 NTU	-1.8 mV	15.90 ft	200.00 ml/min
8/16/2021 10:04 AM	50:00	7.09 pH	19.36 °C	581.98 µS/cm	0.16 mg/L	1.17 NTU	9.7 mV	15.90 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWC-124	Grab sample.

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# Low-Flow Test Report:

Test Date / Time: 8/19/2021 10:39:46 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWC-125</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 53.19 ft</b> <b>Total Depth: 63.19 Initial</b> <b>Depth to Water: 41.6 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 58.19 ft</b> <b>Estimated Total Volume Pumped: 6 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: Full App. III and IV.

## Weather Conditions:

Sunny, 80 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/19/2021 10:39 AM	00:00	7.47 pH	24.86 °C	861.61 µS/cm	3.65 mg/L	2.53 NTU	84.8 mV	41.60 ft	200.00 ml/min
8/19/2021 10:44 AM	05:00	7.54 pH	20.56 °C	993.97 µS/cm	1.27 mg/L	1.73 NTU	51.5 mV	41.60 ft	200.00 ml/min
8/19/2021 10:49 AM	10:00	7.37 pH	20.29 °C	1,015.0 µS/cm	0.73 mg/L	1.40 NTU	40.6 mV	41.60 ft	200.00 ml/min
8/19/2021 10:54 AM	15:00	7.32 pH	20.32 °C	1,030.1 µS/cm	0.45 mg/L	1.24 NTU	37.6 mV	41.60 ft	200.00 ml/min
8/19/2021 10:59 AM	20:00	7.29 pH	20.09 °C	1,032.1 µS/cm	0.33 mg/L	1.39 NTU	33.0 mV	41.60 ft	200.00 ml/min
8/19/2021 11:04 AM	25:00	7.28 pH	19.98 °C	1,033.9 µS/cm	0.29 mg/L	1.32 NTU	33.1 mV	41.60 ft	200.00 ml/min
8/19/2021 11:09 AM	30:00	7.24 pH	19.87 °C	1,031.0 µS/cm	0.26 mg/L	1.11 NTU	31.2 mV	41.60 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWC-125	Grab sample.
DUP-3	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 8/19/2021 9:10:56 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWC-126</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 58.52 ft</b> <b>Total Depth: 68.52 ft</b> <b>Initial Depth to Water: 40.37 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 63.52 ft</b> <b>Estimated Total Volume Pumped: 6 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 1.28 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: full App. III and IV.

## Weather Conditions:

Sunny, 80 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/19/2021 9:10 AM	00:00	7.37 pH	24.08 °C	695.49 µS/cm	3.49 mg/L	3.08 NTU	-87.9 mV	40.37 ft	200.00 ml/min
8/19/2021 9:15 AM	05:00	7.30 pH	20.48 °C	839.13 µS/cm	0.89 mg/L	4.30 NTU	-68.5 mV	40.80 ft	200.00 ml/min
8/19/2021 9:20 AM	10:00	7.30 pH	19.89 °C	846.05 µS/cm	0.59 mg/L	3.82 NTU	-87.6 mV	41.20 ft	200.00 ml/min
8/19/2021 9:25 AM	15:00	7.30 pH	19.94 °C	846.27 µS/cm	0.50 mg/L	2.69 NTU	-59.6 mV	41.38 ft	200.00 ml/min
8/19/2021 9:30 AM	20:00	7.30 pH	19.88 °C	851.15 µS/cm	0.37 mg/L	2.50 NTU	-58.5 mV	41.50 ft	200.00 ml/min
8/19/2021 9:35 AM	25:00	7.30 pH	19.85 °C	853.59 µS/cm	0.29 mg/L	3.13 NTU	-58.1 mV	41.65 ft	200.00 ml/min
8/19/2021 9:40 AM	30:00	7.32 pH	20.09 °C	852.35 µS/cm	0.26 mg/L	3.67 NTU	-57.3 mV	41.65 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWC-126	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 8/18/2021 10:11:11 AM

Project: GP-Plant Hammond

Operator Name: Ashley Ramsey

<b>Location Name: MW-32</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 26.55 ft</b> <b>Total Depth: 36.55 ft</b> <b>Initial Depth to Water: 18.85 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 31.55 ft</b> <b>Estimated Total Volume Pumped: 18 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728623</b>
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## Test Notes:

Five bottles: Full app. III & IV.

## Weather Conditions:

Sunny, 91 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/18/2021 10:11 AM	00:00	7.08 pH	27.55 °C	613.02 µS/cm	3.31 mg/L	48.90 NTU	66.5 mV	18.85 ft	200.00 ml/min
8/18/2021 10:16 AM	05:00	6.98 pH	23.63 °C	747.81 µS/cm	0.89 mg/L	26.70 NTU	68.6 mV	18.85 ft	200.00 ml/min
8/18/2021 10:21 AM	10:00	6.96 pH	23.49 °C	776.80 µS/cm	0.69 mg/L	20.40 NTU	62.3 mV	18.85 ft	200.00 ml/min
8/18/2021 10:26 AM	15:00	6.96 pH	23.46 °C	799.86 µS/cm	0.53 mg/L	19.70 NTU	49.8 mV	18.85 ft	200.00 ml/min
8/18/2021 10:31 AM	20:00	6.94 pH	23.93 °C	810.47 µS/cm	0.44 mg/L	17.70 NTU	45.2 mV	18.85 ft	200.00 ml/min
8/18/2021 10:36 AM	25:00	6.95 pH	23.75 °C	805.58 µS/cm	0.38 mg/L	17.00 NTU	40.9 mV	18.85 ft	200.00 ml/min
8/18/2021 10:41 AM	30:00	6.93 pH	24.06 °C	820.62 µS/cm	0.38 mg/L	14.40 NTU	39.6 mV	18.85 ft	200.00 ml/min
8/18/2021 10:46 AM	35:00	6.93 pH	25.37 °C	821.85 µS/cm	0.46 mg/L	16.00 NTU	43.9 mV	18.85 ft	200.00 ml/min
8/18/2021 10:51 AM	40:00	6.93 pH	25.86 °C	824.89 µS/cm	0.48 mg/L	12.60 NTU	40.0 mV	18.85 ft	200.00 ml/min
8/18/2021 10:56 AM	45:00	6.93 pH	25.14 °C	826.65 µS/cm	0.47 mg/L	13.20 NTU	40.6 mV	18.85 ft	200.00 ml/min
8/18/2021 11:01 AM	50:00	6.92 pH	26.20 °C	841.23 µS/cm	0.49 mg/L	13.60 NTU	41.6 mV	18.85 ft	200.00 ml/min
8/18/2021 11:06 AM	55:00	6.91 pH	26.69 °C	839.75 µS/cm	0.46 mg/L	11.20 NTU	49.2 mV	18.85 ft	200.00 ml/min
8/18/2021 11:11 AM	01:00:00	6.91 pH	26.79 °C	845.78 µS/cm	0.48 mg/L	14.67 NTU	44.6 mV	18.85 ft	200.00 ml/min

8/18/2021 11:16 AM	01:05:00	6.90 pH	26.94 °C	847.38 µS/cm	0.46 mg/L	12.51 NTU	45.3 mV	18.85 ft	200.00 ml/min
8/18/2021 11:21 AM	01:10:00	6.90 pH	26.60 °C	851.44 µS/cm	0.44 mg/L	9.57 NTU	54.9 mV	18.85 ft	200.00 ml/min
8/18/2021 11:26 AM	01:15:00	6.90 pH	26.56 °C	859.82 µS/cm	0.43 mg/L	9.04 NTU	48.7 mV	18.85 ft	200.00 ml/min
8/18/2021 11:31 AM	01:20:00	6.90 pH	26.48 °C	865.99 µS/cm	0.41 mg/L	6.29 NTU	58.7 mV	18.85 ft	200.00 ml/min
8/18/2021 11:36 AM	01:25:00	6.90 pH	26.63 °C	866.13 µS/cm	0.40 mg/L	4.63 NTU	50.7 mV	18.85 ft	200.00 ml/min
8/18/2021 11:41 AM	01:30:00	6.89 pH	26.87 °C	871.99 µS/cm	0.41 mg/L	4.75 NTU	60.6 mV	18.85 ft	200.00 ml/min

## Samples

Sample ID:	Description:
MW-32	Grab Sample



# Low-Flow Test Report:

Test Date / Time: 8/18/2021 8:36:14 AM

Project: GP-Plant Hammond

Operator Name: Ashley Ramsey

<b>Location Name: MW-39</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13 ft</b> <b>Total Depth: 23 ft</b> <b>Initial Depth to Water: 13.91 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 18 ft</b> <b>Estimated Total Volume Pumped: 6 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.03 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728623</b>
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## Test Notes:

Five bottles; Full app. III & IV.

## Weather Conditions:

Sunny, 91 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/18/2021 8:36 AM	00:00	6.90 pH	19.47 °C	949.02 µS/cm	0.78 mg/L	2.45 NTU	42.7 mV	13.91 ft	200.00 ml/min
8/18/2021 8:41 AM	05:00	6.91 pH	19.06 °C	961.10 µS/cm	0.40 mg/L	3.28 NTU	35.1 mV	13.94 ft	200.00 ml/min
8/18/2021 8:46 AM	10:00	6.91 pH	18.99 °C	958.12 µS/cm	0.26 mg/L	2.27 NTU	34.6 mV	13.94 ft	200.00 ml/min
8/18/2021 8:51 AM	15:00	6.91 pH	18.90 °C	960.33 µS/cm	0.23 mg/L	3.90 NTU	33.9 mV	13.94 ft	200.00 ml/min
8/18/2021 8:56 AM	20:00	6.90 pH	19.06 °C	957.31 µS/cm	0.21 mg/L	3.56 NTU	33.9 mV	13.94 ft	200.00 ml/min
8/18/2021 9:01 AM	25:00	6.90 pH	19.18 °C	955.26 µS/cm	0.19 mg/L	2.92 NTU	33.9 mV	13.94 ft	200.00 ml/min
8/18/2021 9:06 AM	30:00	6.90 pH	19.24 °C	955.18 µS/cm	0.18 mg/L	1.92 NTU	33.3 mV	13.94 ft	200.00 ml/min

## Samples

Sample ID:	Description:
MW-39	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 8/18/2021 12:45:30 PM

Project: GP-Plant Hammond

Operator Name: Ashley Ramsey

<b>Location Name: MW-41</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 14.38 ft</b> <b>Total Depth: 24.38 ft</b> <b>Initial Depth to Water: 10.53 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 19.38 ft</b> <b>Estimated Total Volume Pumped: 6 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.1 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728623</b>
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## Test Notes:

Five bottles: Full app. III & IV.

## Weather Conditions:

Sunny, 91 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/18/2021 12:45 PM	00:00	6.96 pH	28.65 °C	897.48 µS/cm	1.30 mg/L	1.32 NTU	-56.8 mV	10.53 ft	200.00 ml/min
8/18/2021 12:50 PM	05:00	6.93 pH	21.86 °C	994.33 µS/cm	0.31 mg/L	0.34 NTU	-48.5 mV	10.63 ft	200.00 ml/min
8/18/2021 12:55 PM	10:00	6.94 pH	21.29 °C	974.91 µS/cm	0.22 mg/L	1.73 NTU	-49.6 mV	10.63 ft	200.00 ml/min
8/18/2021 1:00 PM	15:00	6.94 pH	21.46 °C	965.54 µS/cm	0.18 mg/L	2.12 NTU	-29.6 mV	10.63 ft	200.00 ml/min
8/18/2021 1:05 PM	20:00	6.93 pH	21.38 °C	965.44 µS/cm	0.17 mg/L	2.01 NTU	-25.6 mV	10.63 ft	200.00 ml/min
8/18/2021 1:10 PM	25:00	6.93 pH	21.05 °C	959.20 µS/cm	0.16 mg/L	1.79 NTU	-20.4 mV	10.63 ft	200.00 ml/min
8/18/2021 1:15 PM	30:00	6.93 pH	21.11 °C	955.04 µS/cm	0.15 mg/L	1.87 NTU	-19.4 mV	10.63 ft	200.00 ml/min

## Samples

Sample ID:	Description:
MW-41	Grab sample

# Low-Flow Test Report:

Test Date / Time: 8/16/2021 1:56:28 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: MW-46D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 92.05 ft</b> <b>Total Depth: 102.05 ft</b> <b>Initial Depth to Water: 40.59 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 97.05 ft</b> <b>Estimated Total Volume Pumped: 7 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 2.04 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728541</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Partly cloudy, 85 Degrees.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/16/2021 1:56 PM	00:00	7.62 pH	23.25 °C	940.73 µS/cm	1.23 mg/L	1.04 NTU	-167.3 mV	41.07 ft	200.00 ml/min
8/16/2021 2:01 PM	05:00	7.65 pH	20.70 °C	989.77 µS/cm	0.49 mg/L	1.43 NTU	-207.2 mV	41.92 ft	200.00 ml/min
8/16/2021 2:06 PM	10:00	7.65 pH	20.57 °C	993.93 µS/cm	0.39 mg/L	0.69 NTU	-217.4 mV	42.39 ft	200.00 ml/min
8/16/2021 2:11 PM	15:00	7.66 pH	20.80 °C	989.78 µS/cm	0.25 mg/L	0.55 NTU	-222.7 mV	42.52 ft	200.00 ml/min
8/16/2021 2:16 PM	20:00	7.65 pH	20.84 °C	995.32 µS/cm	0.23 mg/L	1.02 NTU	-238.2 mV	42.63 ft	200.00 ml/min
8/16/2021 2:21 PM	25:00	7.66 pH	20.53 °C	986.84 µS/cm	0.21 mg/L	0.77 NTU	-244.5 mV	42.63 ft	200.00 ml/min
8/16/2021 2:26 PM	30:00	7.65 pH	20.47 °C	989.57 µS/cm	0.20 mg/L	1.12 NTU	-257.2 mV	42.63 ft	200.00 ml/min

## Samples

Sample ID:	Description:
MW-46D	Grab sample.

September 2021  
(Surface Water Sampling)

## Plant Hammond AP-3 (Cabin Creek) Surface Water Samples 09/13/2021

Sample ID	Time	Temp(F)	pH	OPR (mV)	DO (mg/L)	Turbidity (NTU)	Conductance – (mS/cm)	Coordinates
H-SCC NBR	1455	21.75	7.77	93.4	7.35	11.77	0.189	34.261192, 85.336247
H-SCC E41	1440	21.37	7.82	85.4	6.24	3.13	0.213	34.258522, -85.335786
H-SCC	1245	23.51	7.34	64.4	7.16	8.19	0.185	34.251869, -85.338019

January 2022  
(Surface Water Sampling)

## Plant Hammond AP-3 (Cabin Creek) Surface Water Samples 01/24/2022

Sample ID	Time	Temp(C)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Conductance – (mS/cm)	Coordinates
H-SCC NBR	14:05	6.97	7.31	-100.6	11.41	6.26	0.097	34.261192, 85.336247
H-SCC E41	13:55	5.71	6.48	-10.38	12.33	7.92	0.078	34.258522, -85.335786
H-SCC	11:46	5.69	7.03	-80.1	11.40	8.42	0.126	34.251869, -85.338019

February 2022



# Low-Flow Test Report:

Test Date / Time: 2/1/2022 11:33:37 AM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: HGWA-1</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 22.50 ft</b> <b>Total Depth: 32.50 ft</b> <b>Initial Depth to Water: 13.42 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 27.50 ft</b> <b>Estimated Total Volume Pumped: 7.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.52 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843593</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Sunny, 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	
2/1/2022 11:33 AM	00:00	7.28 pH	18.61 °C	556.69 µS/cm	2.06 mg/L	12.50 NTU	1.6 mV	13.73 ft	200.00 ml/min
2/1/2022 11:38 AM	05:00	7.25 pH	17.05 °C	581.92 µS/cm	1.89 mg/L	5.43 NTU	6.0 mV	13.95 ft	200.00 ml/min
2/1/2022 11:43 AM	10:00	7.25 pH	17.41 °C	575.00 µS/cm	1.67 mg/L	3.36 NTU	6.3 mV	13.92 ft	200.00 ml/min
2/1/2022 11:48 AM	15:00	7.23 pH	17.54 °C	574.57 µS/cm	1.32 mg/L	4.09 NTU	3.3 mV	13.93 ft	200.00 ml/min
2/1/2022 11:53 AM	20:00	7.21 pH	17.45 °C	580.36 µS/cm	1.01 mg/L	2.91 NTU	4.7 mV	13.93 ft	200.00 ml/min
2/1/2022 11:58 AM	25:00	7.19 pH	17.23 °C	583.39 µS/cm	0.73 mg/L	2.07 NTU	0.7 mV	13.93 ft	200.00 ml/min
2/1/2022 12:03 PM	30:00	7.19 pH	17.55 °C	579.09 µS/cm	0.63 mg/L	3.05 NTU	1.4 mV	13.93 ft	200.00 ml/min
2/1/2022 12:08 PM	35:00	7.19 pH	17.41 °C	582.19 µS/cm	0.56 mg/L	0.40 NTU	-1.4 mV	13.94 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-1	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/1/2022 10:42:11 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWA-2</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 17.95 ft</b> <b>Total Depth: 27.95 ft</b> <b>Initial Depth to Water: 8.27 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 22.95 ft</b> <b>Estimated Total Volume Pumped: 14 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.14 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Sunny, 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	
2/1/2022 10:42 AM	00:00	5.14 pH	16.69 °C	232.20 µS/cm	0.63 mg/L	46.90 NTU	158.1 mV	8.34 ft	200.00 ml/min
2/1/2022 10:47 AM	05:00	5.15 pH	16.40 °C	192.80 µS/cm	0.75 mg/L	23.20 NTU	136.3 mV	8.35 ft	200.00 ml/min
2/1/2022 10:52 AM	10:00	5.13 pH	16.24 °C	231.06 µS/cm	0.48 mg/L	16.60 NTU	129.5 mV	8.35 ft	200.00 ml/min
2/1/2022 10:57 AM	15:00	5.17 pH	16.30 °C	224.16 µS/cm	0.43 mg/L	10.76 NTU	119.4 mV	8.37 ft	200.00 ml/min
2/1/2022 11:02 AM	20:00	5.17 pH	16.42 °C	233.37 µS/cm	0.42 mg/L	8.08 NTU	113.7 mV	8.37 ft	200.00 ml/min
2/1/2022 11:07 AM	25:00	5.19 pH	16.67 °C	234.45 µS/cm	0.56 mg/L	6.51 NTU	167.3 mV	8.37 ft	200.00 ml/min
2/1/2022 11:12 AM	30:00	5.20 pH	17.00 °C	192.38 µS/cm	0.43 mg/L	6.16 NTU	107.4 mV	8.40 ft	200.00 ml/min
2/1/2022 11:17 AM	35:00	5.19 pH	17.00 °C	149.79 µS/cm	0.39 mg/L	4.79 NTU	103.2 mV	8.40 ft	200.00 ml/min
2/1/2022 11:22 AM	40:00	5.24 pH	17.00 °C	231.77 µS/cm	0.43 mg/L	4.03 NTU	99.1 mV	8.40 ft	200.00 ml/min
2/1/2022 11:27 AM	45:00	5.23 pH	17.21 °C	234.14 µS/cm	0.45 mg/L	3.61 NTU	98.2 mV	8.41 ft	200.00 ml/min
2/1/2022 11:32 AM	50:00	5.24 pH	17.09 °C	199.83 µS/cm	0.51 mg/L	3.56 NTU	146.7 mV	8.41 ft	200.00 ml/min
2/1/2022 11:37 AM	55:00	5.22 pH	17.21 °C	234.19 µS/cm	0.52 mg/L	3.28 NTU	96.1 mV	8.41 ft	200.00 ml/min
2/1/2022 11:42 AM	01:00:00	5.24 pH	17.14 °C	233.68 µS/cm	0.46 mg/L	3.31 NTU	91.1 mV	8.41 ft	200.00 ml/min

2/1/2022 11:47 AM	01:05:00	5.24 pH	17.16 °C	235.29 µS/cm	0.48 mg/L	2.85 NTU	139.6 mV	8.41 ft	200.00 ml/min
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## Samples

Sample ID:	Description:
HGWA-2	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/1/2022 9:18:03 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWA-3</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 34.87 ft</b> <b>Total Depth: 44.87 ft</b> <b>Initial Depth to Water: 7.86 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 39.87 ft</b> <b>Estimated Total Volume Pumped: 8 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.02 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Sunny, 31 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/1/2022 9:18 AM	00:00	7.43 pH	14.38 °C	462.35 µS/cm	2.13 mg/L	8.40 NTU	-60.5 mV	7.86 ft	200.00 ml/min
2/1/2022 9:23 AM	05:00	7.42 pH	15.95 °C	470.26 µS/cm	0.50 mg/L	2.62 NTU	-81.6 mV	7.86 ft	200.00 ml/min
2/1/2022 9:28 AM	10:00	7.43 pH	16.15 °C	463.71 µS/cm	0.88 mg/L	2.86 NTU	-85.7 mV	7.86 ft	200.00 ml/min
2/1/2022 9:33 AM	15:00	7.44 pH	16.11 °C	466.16 µS/cm	0.40 mg/L	2.63 NTU	-115.1 mV	7.88 ft	200.00 ml/min
2/1/2022 9:38 AM	20:00	7.44 pH	16.24 °C	504.38 µS/cm	0.50 mg/L	1.63 NTU	-93.6 mV	7.88 ft	200.00 ml/min
2/1/2022 9:43 AM	25:00	7.44 pH	16.24 °C	467.40 µS/cm	0.25 mg/L	0.72 NTU	-94.2 mV	7.88 ft	200.00 ml/min
2/1/2022 9:48 AM	30:00	7.44 pH	16.27 °C	467.09 µS/cm	0.31 mg/L	0.62 NTU	-94.7 mV	7.88 ft	200.00 ml/min
2/1/2022 9:53 AM	35:00	7.45 pH	16.38 °C	466.51 µS/cm	0.20 mg/L	0.68 NTU	-95.7 mV	7.88 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-3	Grab Sample.

# Low-Flow Test Report:

Test Date / Time: 2/1/2022 9:43:27 AM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: HGWA-43D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 51.25 ft</b> <b>Total Depth: 61.25 ft</b> <b>Initial Depth to Water: 13.34 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 56.25 ft</b> <b>Estimated Total Volume Pumped: 9 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 3.19 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843593</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## 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	
2/1/2022 9:43 AM	00:00	7.53 pH	16.74 °C	496.11 µS/cm	0.53 mg/L	8.09 NTU	-83.8 mV	15.27 ft	200.00 ml/min
2/1/2022 9:48 AM	05:00	7.51 pH	16.85 °C	499.11 µS/cm	0.42 mg/L	3.49 NTU	-119.9 mV	15.57 ft	200.00 ml/min
2/1/2022 9:53 AM	10:00	7.52 pH	16.92 °C	497.47 µS/cm	0.25 mg/L	0.92 NTU	-129.8 mV	15.94 ft	200.00 ml/min
2/1/2022 9:58 AM	15:00	7.53 pH	17.03 °C	489.27 µS/cm	0.18 mg/L	1.95 NTU	-109.8 mV	16.24 ft	200.00 ml/min
2/1/2022 10:03 AM	20:00	7.53 pH	17.01 °C	481.27 µS/cm	0.15 mg/L	0.29 NTU	-136.5 mV	16.41 ft	200.00 ml/min
2/1/2022 10:08 AM	24:37	7.53 pH	17.10 °C	474.80 µS/cm	0.13 mg/L	0.03 NTU	-136.8 mV	16.52 ft	200.00 ml/min
2/1/2022 10:13 AM	29:37	7.53 pH	17.22 °C	469.54 µS/cm	0.12 mg/L	1.72 NTU	-110.6 mV	16.59 ft	200.00 ml/min
2/1/2022 10:18 AM	34:37	7.52 pH	17.32 °C	465.38 µS/cm	0.12 mg/L	1.59 NTU	-108.8 mV	16.63 ft	200.00 ml/min
2/1/2022 10:23 AM	39:37	7.52 pH	17.27 °C	463.05 µS/cm	0.11 mg/L	1.63 NTU	-107.5 mV	16.53 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-43D	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/1/2022 9:53:41 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWA-44D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 103.28 ft</b> <b>Total Depth: 113.28 ft</b> <b>Initial Depth to Water: 13.34 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 108.28 ft</b> <b>Estimated Total Volume Pumped: 26 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min Final Draw Down: 1.20 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Sunny, 32 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	
2/1/2022 9:53 AM	00:00	8.03 pH	15.77 °C	788.25 µS/cm	2.41 mg/L	40.40 NTU	-1.7 mV	11.50 ft	200.00 ml/min
2/1/2022 9:58 AM	05:00	8.07 pH	16.24 °C	793.68 µS/cm	6.43 mg/L	30.50 NTU	-10.9 mV	11.85 ft	200.00 ml/min
2/1/2022 10:03 AM	10:00	8.11 pH	16.20 °C	798.19 µS/cm	8.19 mg/L	23.90 NTU	-10.3 mV	12.40 ft	200.00 ml/min
2/1/2022 10:08 AM	15:00	8.13 pH	16.28 °C	800.71 µS/cm	10.64 mg/L	24.30 NTU	-12.4 mV	12.62 ft	200.00 ml/min
2/1/2022 10:13 AM	20:00	8.14 pH	16.46 °C	799.34 µS/cm	12.75 mg/L	18.80 NTU	-11.7 mV	12.90 ft	200.00 ml/min
2/1/2022 10:18 AM	25:00	8.15 pH	16.72 °C	797.19 µS/cm	11.61 mg/L	17.60 NTU	-11.2 mV	13.05 ft	200.00 ml/min
2/1/2022 10:23 AM	30:00	8.16 pH	16.82 °C	795.06 µS/cm	11.42 mg/L	16.70 NTU	-11.0 mV	13.10 ft	200.00 ml/min
2/1/2022 10:28 AM	35:00	8.17 pH	16.28 °C	804.14 µS/cm	12.45 mg/L	16.60 NTU	-13.9 mV	13.30 ft	200.00 ml/min
2/1/2022 10:33 AM	40:00	8.18 pH	16.41 °C	801.48 µS/cm	12.08 mg/L	14.20 NTU	-13.6 mV	13.60 ft	100.00 ml/min
2/1/2022 10:38 AM	45:00	8.19 pH	16.45 °C	804.07 µS/cm	11.86 mg/L	14.00 NTU	-14.6 mV	13.60 ft	100.00 ml/min
2/1/2022 10:43 AM	50:00	8.20 pH	16.46 °C	804.80 µS/cm	11.98 mg/L	16.10 NTU	-16.6 mV	13.65 ft	100.00 ml/min
2/1/2022 10:48 AM	55:00	8.21 pH	16.60 °C	803.09 µS/cm	12.00 mg/L	18.90 NTU	-16.9 mV	13.70 ft	100.00 ml/min
2/1/2022 10:53 AM	01:00:00	8.21 pH	16.72 °C	803.58 µS/cm	12.70 mg/L	16.30 NTU	-17.0 mV	13.75 ft	100.00 ml/min

2/1/2022 10:58 AM	01:05:00	8.21 pH	16.82 °C	802.58 µS/cm	12.73 mg/L	20.00 NTU	-14.3 mV	13.90 ft	100.00 ml/min
2/1/2022 11:03 AM	01:10:00	8.23 pH	16.73 °C	806.13 µS/cm	12.61 mg/L	24.90 NTU	-15.9 mV	14.00 ft	100.00 ml/min
2/1/2022 11:08 AM	01:15:00	8.23 pH	16.82 °C	799.63 µS/cm	12.22 mg/L	15.60 NTU	-12.5 mV	14.10 ft	100.00 ml/min
2/1/2022 11:13 AM	01:20:00	8.23 pH	16.60 °C	803.48 µS/cm	12.18 mg/L	15.20 NTU	-11.4 mV	14.15 ft	100.00 ml/min
2/1/2022 11:18 AM	01:25:00	8.23 pH	16.84 °C	803.65 µS/cm	12.11 mg/L	11.70 NTU	-11.5 mV	14.23 ft	100.00 ml/min
2/1/2022 11:23 AM	01:30:00	8.23 pH	17.08 °C	801.82 µS/cm	12.10 mg/L	11.60 NTU	-12.9 mV	14.35 ft	100.00 ml/min
2/1/2022 11:28 AM	01:35:00	8.24 pH	17.10 °C	800.28 µS/cm	12.06 mg/L	9.96 NTU	-10.9 mV	14.35 ft	100.00 ml/min
2/1/2022 11:33 AM	01:40:00	8.24 pH	16.98 °C	802.78 µS/cm	12.20 mg/L	8.43 NTU	-10.7 mV	14.35 ft	100.00 ml/min
2/1/2022 11:38 AM	01:45:00	8.25 pH	16.55 °C	807.34 µS/cm	12.65 mg/L	8.17 NTU	-10.4 mV	14.40 ft	100.00 ml/min
2/1/2022 11:43 AM	01:50:00	8.25 pH	16.35 °C	809.51 µS/cm	12.60 mg/L	8.27 NTU	-11.9 mV	14.50 ft	100.00 ml/min
2/1/2022 11:48 AM	01:55:00	8.25 pH	16.28 °C	809.68 µS/cm	12.89 mg/L	7.64 NTU	-10.6 mV	14.50 ft	100.00 ml/min
2/1/2022 11:53 AM	02:00:00	8.25 pH	16.23 °C	811.81 µS/cm	12.86 mg/L	7.36 NTU	-10.5 mV	14.50 ft	100.00 ml/min
2/1/2022 11:58 AM	02:05:00	8.25 pH	16.20 °C	811.57 µS/cm	12.90 mg/L	6.17 NTU	-11.8 mV	14.50 ft	100.00 ml/min
2/1/2022 12:03 PM	02:10:00	8.26 pH	16.22 °C	810.30 µS/cm	12.71 mg/L	5.74 NTU	-10.5 mV	14.51 ft	100.00 ml/min
2/1/2022 12:08 PM	02:15:00	8.26 pH	16.19 °C	812.80 µS/cm	12.90 mg/L	5.76 NTU	-12.1 mV	14.51 ft	100.00 ml/min
2/1/2022 12:13 PM	02:20:00	8.26 pH	16.16 °C	812.48 µS/cm	12.88 mg/L	5.35 NTU	-12.2 mV	14.52 ft	100.00 ml/min
2/1/2022 12:18 PM	02:25:00	8.26 pH	16.22 °C	811.47 µS/cm	12.87 mg/L	5.23 NTU	-12.5 mV	14.52 ft	100.00 ml/min
2/1/2022 12:23 PM	02:30:00	8.27 pH	16.24 °C	812.48 µS/cm	12.75 mg/L	7.30 NTU	-12.6 mV	14.53 ft	100.00 ml/min
2/1/2022 12:28 PM	02:35:00	8.27 pH	16.33 °C	810.61 µS/cm	12.74 mg/L	6.77 NTU	-11.4 mV	14.54 ft	100.00 ml/min
2/1/2022 12:33 PM	02:40:00	8.27 pH	16.32 °C	812.17 µS/cm	12.75 mg/L	6.80 NTU	-11.4 mV	14.54 ft	100.00 ml/min
2/1/2022 12:38 PM	02:45:00	8.27 pH	16.39 °C	809.86 µS/cm	12.75 mg/L	6.52 NTU	-11.5 mV	14.54 ft	100.00 ml/min
2/1/2022 12:43 PM	02:50:00	8.27 pH	16.48 °C	810.57 µS/cm	12.73 mg/L	6.00 NTU	-12.1 mV	14.54 ft	100.00 ml/min
2/1/2022 12:47 PM	02:53:59	8.27 pH	16.46 °C	809.23 µS/cm	13.38 mg/L	6.75 NTU	-9.9 mV	14.54 ft	100.00 ml/min
2/1/2022 12:52 PM	02:58:59	8.27 pH	16.51 °C	796.69 µS/cm	12.96 mg/L	6.30 NTU	-13.0 mV	14.54 ft	100.00 ml/min
2/1/2022 12:57 PM	03:03:59	8.27 pH	16.44 °C	808.16 µS/cm	12.86 mg/L	6.41 NTU	-14.2 mV	14.54 ft	100.00 ml/min
2/1/2022 1:01 PM	03:07:44	8.26 pH	16.49 °C	782.67 µS/cm	13.44 mg/L	5.53 NTU	-13.9 mV	14.54 ft	100.00 ml/min
2/1/2022 1:06 PM	03:12:44	8.26 pH	16.49 °C	796.34 µS/cm	13.14 mg/L	13.70 NTU	-15.4 mV	14.54 ft	100.00 ml/min
2/1/2022 1:11 PM	03:17:44	8.26 pH	16.46 °C	806.69 µS/cm	12.44 mg/L	4.35 NTU	-18.4 mV	14.54 ft	100.00 ml/min
2/1/2022 1:16 PM	03:22:44	8.26 pH	16.55 °C	800.04 µS/cm	12.24 mg/L	4.36 NTU	-17.6 mV	14.54 ft	100.00 ml/min

2/1/2022 1:21 PM	03:27:44	8.26 pH	16.57 °C	799.46 µS/cm	12.26 mg/L	4.20 NTU	-18.6 mV	14.54 ft	100.00 ml/min
2/1/2022 1:26 PM	03:32:44	8.25 pH	16.83 °C	795.30 µS/cm	12.14 mg/L	4.25 NTU	-20.8 mV	14.54 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HGWA-44D	Grab sample.



# Low-Flow Test Report:

Test Date / Time: 2/1/2022 3:17:09 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWA-45D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 52.87 ft</b> <b>Total Depth: 62.87 ft</b> <b>Initial Depth to Water: 8.45 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 57.87 ft</b> <b>Estimated Total Volume Pumped: 9 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.72 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Five bottles: Full app. III and V.

## Weather Conditions:

Sunny, 62 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	
2/1/2022 3:17 PM	00:00	7.51 pH	18.29 °C	527.85 µS/cm	1.28 mg/L	2.64 NTU	-134.0 mV	9.12 ft	200.00 ml/min
2/1/2022 3:22 PM	05:00	7.52 pH	18.11 °C	396.16 µS/cm	1.18 mg/L	1.50 NTU	-127.4 mV	9.15 ft	200.00 ml/min
2/1/2022 3:27 PM	10:00	7.50 pH	18.06 °C	508.59 µS/cm	1.32 mg/L	1.26 NTU	-124.7 mV	9.15 ft	200.00 ml/min
2/1/2022 3:32 PM	15:00	7.48 pH	18.07 °C	497.79 µS/cm	1.20 mg/L	0.77 NTU	-130.7 mV	9.15 ft	200.00 ml/min
2/1/2022 3:37 PM	20:00	7.45 pH	18.08 °C	491.79 µS/cm	1.31 mg/L	0.54 NTU	-135.8 mV	9.17 ft	200.00 ml/min
2/1/2022 3:42 PM	25:00	7.46 pH	18.05 °C	417.74 µS/cm	1.29 mg/L	0.61 NTU	-133.7 mV	9.17 ft	200.00 ml/min
2/1/2022 3:47 PM	30:00	7.48 pH	18.03 °C	487.61 µS/cm	1.23 mg/L	0.57 NTU	-142.3 mV	9.17 ft	200.00 ml/min
2/1/2022 3:52 PM	35:00	7.48 pH	18.01 °C	484.63 µS/cm	1.30 mg/L	0.62 NTU	-136.0 mV	9.17 ft	200.00 ml/min
2/1/2022 3:57 PM	40:00	7.45 pH	18.04 °C	482.51 µS/cm	1.30 mg/L	0.65 NTU	-143.5 mV	9.17 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-45D	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/1/2022 1:35:40 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWA-122</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 18.52 ft</b> <b>Total Depth: 28.52 ft</b> <b>Initial Depth to Water: 9.56 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 23.52 ft</b> <b>Estimated Total Volume Pumped: 10 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.02 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Five bottles: Full app. III and V.

## Weather Conditions:

Sunny, 65 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	
2/1/2022 1:35 PM	00:00	6.53 pH	17.94 °C	322.89 µS/cm	2.87 mg/L	20.20 NTU	63.2 mV	9.58 ft	200.00 ml/min
2/1/2022 1:40 PM	05:00	6.54 pH	17.94 °C	322.43 µS/cm	2.75 mg/L	12.20 NTU	56.0 mV	9.58 ft	200.00 ml/min
2/1/2022 1:45 PM	10:00	6.53 pH	17.90 °C	323.58 µS/cm	2.61 mg/L	7.36 NTU	53.2 mV	9.58 ft	200.00 ml/min
2/1/2022 1:50 PM	15:00	6.55 pH	17.85 °C	328.46 µS/cm	2.59 mg/L	6.62 NTU	51.2 mV	9.58 ft	200.00 ml/min
2/1/2022 1:55 PM	20:00	6.55 pH	17.98 °C	330.27 µS/cm	2.41 mg/L	3.79 NTU	49.3 mV	9.58 ft	200.00 ml/min
2/1/2022 2:00 PM	25:00	6.55 pH	17.99 °C	330.77 µS/cm	2.42 mg/L	3.50 NTU	48.2 mV	9.58 ft	200.00 ml/min
2/1/2022 2:05 PM	30:00	6.57 pH	18.03 °C	366.64 µS/cm	2.32 mg/L	2.78 NTU	74.2 mV	9.58 ft	200.00 ml/min
2/1/2022 2:10 PM	35:00	6.55 pH	18.07 °C	335.23 µS/cm	2.31 mg/L	2.54 NTU	46.4 mV	9.58 ft	200.00 ml/min
2/1/2022 2:15 PM	40:00	6.57 pH	18.10 °C	339.70 µS/cm	2.30 mg/L	1.99 NTU	44.9 mV	9.58 ft	200.00 ml/min
2/1/2022 2:20 PM	45:00	6.57 pH	18.03 °C	339.62 µS/cm	2.26 mg/L	2.00 NTU	71.6 mV	9.58 ft	200.00 ml/min

## Samples

Sample ID:	Description:
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HGWA-122

Grab Sample.

Created using VuSitu from In-Situ, Inc.

# Low-Flow Test Report:

Test Date / Time: 2/2/2022 12:57:46 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWC-120</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 57.55 ft</b> <b>Total Depth: 67.55 ft</b> <b>Initial Depth to Water: 39.68 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 62.55 ft</b> <b>Estimated Total Volume Pumped: 7 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.97 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: Full app. III and V.

## Weather Conditions:

Cloudy, 45 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/2/2022 12:57 PM	00:00	7.03 pH	16.93 °C	908.03 µS/cm	0.63 mg/L	8.08 NTU	-32.5 mV	40.65 ft	200.00 ml/min
2/2/2022 1:02 PM	05:00	7.00 pH	16.92 °C	926.27 µS/cm	0.23 mg/L	6.55 NTU	-30.2 mV	40.65 ft	200.00 ml/min
2/2/2022 1:07 PM	10:00	6.99 pH	17.02 °C	926.18 µS/cm	0.16 mg/L	3.60 NTU	-34.4 mV	40.65 ft	200.00 ml/min
2/2/2022 1:12 PM	15:00	6.99 pH	17.01 °C	926.21 µS/cm	0.14 mg/L	2.35 NTU	-34.8 mV	40.65 ft	200.00 ml/min
2/2/2022 1:17 PM	20:00	6.99 pH	17.08 °C	925.90 µS/cm	0.13 mg/L	1.91 NTU	-26.9 mV	40.65 ft	200.00 ml/min
2/2/2022 1:22 PM	25:00	7.00 pH	17.11 °C	925.20 µS/cm	0.13 mg/L	1.68 NTU	-27.3 mV	40.65 ft	200.00 ml/min
2/2/2022 1:27 PM	30:00	7.00 pH	17.08 °C	925.34 µS/cm	0.12 mg/L	1.54 NTU	-34.7 mV	40.65 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWC-120	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/2/2022 9:13:38 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWC-121A</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 28.16 ft</b> <b>Total Depth: 38.16 ft</b> <b>Initial Depth to Water: 17.94 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 33.16 ft</b> <b>Estimated Total Volume Pumped: 7 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.16 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: Full app. III and V.

## Weather Conditions:

Cloudy, 45 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/2/2022 9:13 AM	00:00	7.16 pH	15.94 °C	702.55 µS/cm	4.38 mg/L	7.36 NTU	14.8 mV	17.94 ft	200.00 ml/min
2/2/2022 9:18 AM	05:00	6.94 pH	16.76 °C	924.45 µS/cm	0.97 mg/L	4.26 NTU	6.8 mV	18.00 ft	200.00 ml/min
2/2/2022 9:23 AM	10:00	6.92 pH	17.04 °C	952.11 µS/cm	0.40 mg/L	3.67 NTU	2.6 mV	18.05 ft	200.00 ml/min
2/2/2022 9:28 AM	15:00	6.92 pH	17.11 °C	951.12 µS/cm	0.36 mg/L	2.87 NTU	-0.2 mV	18.10 ft	200.00 ml/min
2/2/2022 9:33 AM	20:00	6.92 pH	17.23 °C	953.47 µS/cm	0.31 mg/L	1.55 NTU	-1.4 mV	18.10 ft	200.00 ml/min
2/2/2022 9:38 AM	25:00	6.92 pH	17.13 °C	955.80 µS/cm	0.30 mg/L	1.29 NTU	-4.6 mV	18.10 ft	200.00 ml/min
2/2/2022 9:43 AM	30:00	6.92 pH	17.11 °C	958.35 µS/cm	0.26 mg/L	1.15 NTU	-6.6 mV	18.10 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWA-121A	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/2/2022 11:03:24 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWC-124</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.52 ft</b> <b>Total Depth: 35.52 ft</b> <b>Initial Depth to Water: 14.95 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.52 ft</b> <b>Estimated Total Volume Pumped: 6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min Final Draw Down: 0.35 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: Full app. III and V.

## Weather Conditions:

Cloudy, 45 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/2/2022 11:03 AM	00:00	7.33 pH	15.72 °C	538.94 µS/cm	2.62 mg/L	31.50 NTU	-42.6 mV	15.10 ft	200.00 ml/min
2/2/2022 11:08 AM	05:00	7.30 pH	16.16 °C	538.32 µS/cm	0.58 mg/L	11.80 NTU	-25.6 mV	15.30 ft	200.00 ml/min
2/2/2022 11:13 AM	10:00	7.31 pH	16.51 °C	537.63 µS/cm	0.72 mg/L	8.40 NTU	-16.3 mV	15.30 ft	200.00 ml/min
2/2/2022 11:18 AM	15:00	7.31 pH	16.41 °C	536.80 µS/cm	0.72 mg/L	7.64 NTU	-16.1 mV	15.30 ft	200.00 ml/min
2/2/2022 11:23 AM	20:00	7.31 pH	16.46 °C	537.69 µS/cm	0.57 mg/L	6.79 NTU	-12.9 mV	15.30 ft	200.00 ml/min
2/2/2022 11:28 AM	25:00	7.30 pH	16.46 °C	537.81 µS/cm	0.46 mg/L	5.89 NTU	-14.5 mV	15.30 ft	200.00 ml/min
2/2/2022 11:33 AM	30:00	7.28 pH	16.50 °C	539.50 µS/cm	0.37 mg/L	4.80 NTU	-14.0 mV	15.30 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWC-124	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/3/2022 11:44:16 AM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: HGWC-125</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 53.19 ft</b> <b>Total Depth: 63.19 ft</b> <b>Initial Depth to Water: 43.46 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 58.19 ft</b> <b>Estimated Total Volume Pumped: 17 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: -0.10 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843593</b>
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## Test Notes:

Five bottles: Full app. III and V.

## Weather Conditions:

Rainy, 50 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/3/2022 11:44 AM	00:00	6.52 pH	17.29 °C	1,046.6 µS/cm	6.96 mg/L	1.48 NTU	16.8 mV	43.45 ft	200.00 ml/min
2/3/2022 11:49 AM	05:00	6.52 pH	17.37 °C	1,083.8 µS/cm	5.98 mg/L	0.79 NTU	14.9 mV	43.45 ft	200.00 ml/min
2/3/2022 11:54 AM	10:00	6.50 pH	17.34 °C	1,078.5 µS/cm	4.01 mg/L	0.75 NTU	12.2 mV	43.42 ft	200.00 ml/min
2/3/2022 11:59 AM	15:00	6.50 pH	17.40 °C	1,099.6 µS/cm	3.28 mg/L	0.91 NTU	10.9 mV	43.43 ft	200.00 ml/min
2/3/2022 12:04 PM	20:00	6.50 pH	17.41 °C	1,096.7 µS/cm	1.78 mg/L	0.87 NTU	9.6 mV	43.40 ft	200.00 ml/min
2/3/2022 12:09 PM	25:00	6.51 pH	17.37 °C	1,089.2 µS/cm	1.92 mg/L	1.07 NTU	9.0 mV	43.42 ft	200.00 ml/min
2/3/2022 12:14 PM	30:00	6.52 pH	17.28 °C	1,097.3 µS/cm	4.21 mg/L	0.59 NTU	8.5 mV	43.42 ft	200.00 ml/min
2/3/2022 12:19 PM	35:00	6.54 pH	17.27 °C	1,072.5 µS/cm	2.53 mg/L	0.61 NTU	9.2 mV	43.42 ft	200.00 ml/min
2/3/2022 12:24 PM	40:00	6.53 pH	17.32 °C	1,088.5 µS/cm	1.56 mg/L	0.54 NTU	11.8 mV	43.40 ft	200.00 ml/min
2/3/2022 12:29 PM	45:00	6.53 pH	17.42 °C	1,071.2 µS/cm	1.37 mg/L	0.64 NTU	12.4 mV	43.40 ft	200.00 ml/min
2/3/2022 12:34 PM	50:00	6.53 pH	17.45 °C	1,098.2 µS/cm	1.18 mg/L	0.56 NTU	8.7 mV	43.38 ft	200.00 ml/min
2/3/2022 12:39 PM	55:00	6.54 pH	17.46 °C	1,098.9 µS/cm	1.03 mg/L	0.53 NTU	8.1 mV	43.38 ft	200.00 ml/min
2/3/2022 12:44 PM	01:00:00	6.54 pH	17.54 °C	1,097.7 µS/cm	0.88 mg/L	0.75 NTU	7.9 mV	43.38 ft	200.00 ml/min

2/3/2022 12:49 PM	01:05:00	6.54 pH	17.45 °C	1,097.7 µS/cm	0.73 mg/L	0.58 NTU	8.1 mV	43.37 ft	200.00 ml/min
2/3/2022 12:54 PM	01:10:00	6.54 pH	17.54 °C	1,096.6 µS/cm	0.60 mg/L	0.53 NTU	8.2 mV	43.38 ft	200.00 ml/min
2/3/2022 12:59 PM	01:15:00	6.54 pH	17.54 °C	1,096.1 µS/cm	0.51 mg/L	0.48 NTU	11.4 mV	43.37 ft	200.00 ml/min
2/3/2022 1:04 PM	01:20:00	6.56 pH	17.55 °C	1,096.1 µS/cm	0.43 mg/L	0.61 NTU	8.0 mV	43.36 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWC-125	Grab sample.



# Low-Flow Test Report:

Test Date / Time: 2/3/2022 2:04:19 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: HGWC-126</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 58.52 ft</b> <b>Total Depth: 68.52 ft</b> <b>Initial Depth to Water: 40.68 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 63.52 ft</b> <b>Estimated Total Volume Pumped: 12 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 1.68 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843593</b>
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## Test Notes:

Five bottles: Full app. III and V.

## Weather Conditions:

Rainy, 50 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/3/2022 2:04 PM	00:00	6.99 pH	17.54 °C	920.19 µS/cm	1.17 mg/L	6.12 NTU	-57.6 mV	41.21 ft	200.00 ml/min
2/3/2022 2:09 PM	05:00	7.00 pH	17.72 °C	914.47 µS/cm	0.59 mg/L	13.05 NTU	-57.5 mV	41.45 ft	200.00 ml/min
2/3/2022 2:14 PM	10:00	7.01 pH	17.68 °C	910.57 µS/cm	0.46 mg/L	8.09 NTU	-77.9 mV	41.65 ft	200.00 ml/min
2/3/2022 2:19 PM	15:00	7.01 pH	17.68 °C	908.87 µS/cm	0.40 mg/L	7.85 NTU	-79.4 mV	41.78 ft	200.00 ml/min
2/3/2022 2:24 PM	20:00	7.02 pH	17.70 °C	909.79 µS/cm	0.34 mg/L	7.36 NTU	-81.5 mV	41.91 ft	200.00 ml/min
2/3/2022 2:29 PM	25:00	7.02 pH	17.65 °C	911.35 µS/cm	0.30 mg/L	6.84 NTU	-83.3 mV	41.99 ft	200.00 ml/min
2/3/2022 2:34 PM	30:00	7.02 pH	17.63 °C	914.02 µS/cm	0.28 mg/L	6.62 NTU	-63.2 mV	42.10 ft	200.00 ml/min
2/3/2022 2:39 PM	35:00	7.01 pH	17.63 °C	913.96 µS/cm	0.27 mg/L	6.62 NTU	-84.6 mV	42.17 ft	200.00 ml/min
2/3/2022 2:44 PM	40:00	7.01 pH	17.63 °C	915.53 µS/cm	0.26 mg/L	5.61 NTU	-85.3 mV	42.19 ft	200.00 ml/min
2/3/2022 2:49 PM	45:00	7.01 pH	17.63 °C	918.11 µS/cm	0.25 mg/L	5.58 NTU	-64.1 mV	42.29 ft	200.00 ml/min
2/3/2022 2:54 PM	50:00	7.01 pH	17.66 °C	917.42 µS/cm	0.24 mg/L	5.34 NTU	-85.0 mV	42.33 ft	200.00 ml/min
2/3/2022 2:59 PM	55:00	7.01 pH	17.69 °C	918.24 µS/cm	0.24 mg/L	4.44 NTU	-85.2 mV	42.36 ft	200.00 ml/min

**Samples**

Sample ID:	Description:
HGWC-126	Grab sample.
DUP-3	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/3/2022 9:53:24 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-32</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 26.55 ft</b> <b>Total Depth: 36.55 ft</b> <b>Initial Depth to Water: 19.99 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 31.55 ft</b> <b>Estimated Total Volume Pumped: 7 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: -0.04 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: Full app. III and V.

## Weather Conditions:

Rainy, 50 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/3/2022 9:53 AM	00:00	6.94 pH	16.40 °C	886.02 µS/cm	0.34 mg/L	1.73 NTU	22.0 mV	19.95 ft	200.00 ml/min
2/3/2022 9:58 AM	05:00	6.95 pH	16.47 °C	909.25 µS/cm	0.24 mg/L	0.63 NTU	16.1 mV	19.95 ft	200.00 ml/min
2/3/2022 10:03 AM	10:00	6.95 pH	16.37 °C	916.42 µS/cm	0.20 mg/L	1.36 NTU	11.0 mV	19.95 ft	200.00 ml/min
2/3/2022 10:08 AM	15:00	6.95 pH	16.46 °C	915.32 µS/cm	0.19 mg/L	1.00 NTU	9.5 mV	19.95 ft	200.00 ml/min
2/3/2022 10:13 AM	20:00	6.95 pH	16.40 °C	916.20 µS/cm	0.17 mg/L	1.19 NTU	5.6 mV	19.95 ft	200.00 ml/min
2/3/2022 10:18 AM	25:00	6.95 pH	16.38 °C	916.33 µS/cm	0.17 mg/L	1.63 NTU	3.4 mV	19.95 ft	200.00 ml/min
2/3/2022 10:23 AM	30:00	6.95 pH	16.40 °C	909.78 µS/cm	0.16 mg/L	0.90 NTU	5.2 mV	19.95 ft	200.00 ml/min

## Samples

Sample ID:	Description:
MW-32	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/2/2022 3:58:14 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-39</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 15.47 ft</b> <b>Total Depth: 25.47 ft</b> <b>Initial Depth to Water: 15.35 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 20.47 ft</b> <b>Estimated Total Volume Pumped: 7 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.05 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Rainy, 50 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/2/2022 3:58 PM	00:00	6.96 pH	16.22 °C	867.47 µS/cm	0.32 mg/L	3.15 NTU	-3.6 mV	15.35 ft	200.00 ml/min
2/2/2022 4:03 PM	05:00	6.96 pH	16.19 °C	918.14 µS/cm	0.24 mg/L	3.25 NTU	-4.8 mV	15.40 ft	200.00 ml/min
2/2/2022 4:08 PM	10:00	6.96 pH	16.06 °C	927.46 µS/cm	0.19 mg/L	2.51 NTU	-9.5 mV	15.40 ft	200.00 ml/min
2/2/2022 4:13 PM	15:00	6.96 pH	16.12 °C	928.67 µS/cm	0.17 mg/L	2.12 NTU	-5.1 mV	15.40 ft	200.00 ml/min
2/2/2022 4:18 PM	20:00	6.96 pH	16.13 °C	926.64 µS/cm	0.17 mg/L	4.95 NTU	-4.9 mV	15.40 ft	200.00 ml/min
2/2/2022 4:23 PM	25:00	6.96 pH	16.06 °C	927.33 µS/cm	0.16 mg/L	4.74 NTU	-5.1 mV	15.40 ft	200.00 ml/min
2/2/2022 4:28 PM	30:00	6.96 pH	16.06 °C	926.33 µS/cm	0.15 mg/L	3.49 NTU	-10.1 mV	15.40 ft	200.00 ml/min

## Samples

Sample ID:	Description:
MW-39	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/2/2022 2:38:12 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-41</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 14.38 ft Total</b> <b>Depth: 24.38 ft</b> <b>Initial Depth to Water: 12.36 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 19.38 ft</b> <b>Estimated Total Volume Pumped: 7.8 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.09 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728634</b>
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## Test Notes:

Five bottles: Full app. III and V.

## Weather Conditions:

Lousy, 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	
2/2/2022 2:38 PM	00:00	7.02 pH	16.70 °C	825.49 µS/cm	0.34 mg/L	2.98 NTU	-0.7 mV	12.45 ft	200.00 ml/min
2/2/2022 2:42 PM	04:06	7.01 pH	16.28 °C	904.31 µS/cm	0.22 mg/L	1.59 NTU	-6.5 mV	12.45 ft	200.00 ml/min
2/2/2022 2:47 PM	09:06	7.01 pH	16.19 °C	903.77 µS/cm	0.18 mg/L	2.98 NTU	-7.0 mV	12.45 ft	200.00 ml/min
2/2/2022 2:52 PM	14:06	6.99 pH	16.16 °C	906.75 µS/cm	0.15 mg/L	4.89 NTU	-8.8 mV	12.45 ft	200.00 ml/min
2/2/2022 2:57 PM	19:06	6.98 pH	16.26 °C	904.82 µS/cm	0.12 mg/L	4.24 NTU	-5.5 mV	12.45 ft	200.00 ml/min
2/2/2022 3:02 PM	24:06	6.99 pH	16.19 °C	904.93 µS/cm	0.14 mg/L	2.78 NTU	-5.6 mV	12.45 ft	200.00 ml/min
2/2/2022 3:07 PM	29:06	6.98 pH	16.15 °C	904.85 µS/cm	0.13 mg/L	2.94 NTU	-5.8 mV	12.45 ft	200.00 ml/min
2/2/2022 3:12 PM	34:06	6.98 pH	16.10 °C	903.73 µS/cm	0.13 mg/L	1.80 NTU	-6.2 mV	12.45 ft	200.00 ml/min

## Samples

Sample ID:	Description:
MW-41	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/3/2022 9:58:51 AM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: MW-46D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 92.05 ft</b> <b>Total Depth: 102.05 ft</b> <b>Initial Depth to Water: 40.47 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 97.5 ft</b> <b>Estimated Total Volume Pumped: 7.4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min Final Draw Down: 2.91 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 843593</b>
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## Test Notes:

Five bottles: Full app. III and V.

## Weather Conditions:

Rainy, 50 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/3/2022 9:58 AM	00:00	7.67 pH	16.16 °C	1,015.0 µS/cm	0.73 mg/L	1.28 NTU	-113.3 mV	41.45 ft	200.00 ml/min
2/3/2022 10:03 AM	05:00	7.67 pH	16.92 °C	1,082.0 µS/cm	0.33 mg/L	1.07 NTU	-161.1 mV	42.50 ft	200.00 ml/min
2/3/2022 10:08 AM	10:00	7.67 pH	17.01 °C	1,082.1 µS/cm	0.26 mg/L	0.88 NTU	-184.5 mV	43.00 ft	200.00 ml/min
2/3/2022 10:13 AM	15:00	7.68 pH	17.00 °C	1,080.8 µS/cm	0.23 mg/L	0.93 NTU	-212.0 mV	43.24 ft	200.00 ml/min
2/3/2022 10:18 AM	20:00	7.69 pH	16.96 °C	1,081.1 µS/cm	0.21 mg/L	0.83 NTU	-268.6 mV	43.37 ft	200.00 ml/min
2/3/2022 10:23 AM	25:00	7.69 pH	16.92 °C	1,082.2 µS/cm	0.21 mg/L	0.93 NTU	-281.7 mV	43.40 ft	200.00 ml/min
2/3/2022 10:28 AM	30:00	7.69 pH	16.93 °C	1,082.0 µS/cm	0.21 mg/L	0.91 NTU	-289.4 mV	43.42 ft	200.00 ml/min
2/3/2022 10:31 AM	32:25	7.69 pH	16.91 °C	1,082.4 µS/cm	0.20 mg/L	0.80 NTU	-265.3 mV	43.38 ft	200.00 ml/min

## Samples

Sample ID:	Description:
MW-46D	Grab sample.

# CALIBRATION REPORTS

August 2021



6.00000000

EQUIPMENT CALIBRATION LOG

Name: C. CAIN Date: 8/11/21 Station: 1255 Section: 1322  
 Instrument ID: P28541  
 Operator: Sammy GTE Plant: Plant Hammond

Calibrated by

	Standard Used (Date of Calibration)	Target (Standard #)	1st Reading	2nd Reading	3rd Reading	4th Reading	5th Reading	6th Reading
Standard 1	20440203 2/22	30.92	30.9	43.74	44.90			
Standard 2			30.9	4.01	4.0			
Standard 3			30.9					
Standard 4	19450117 2/22	30.85	30.8	6.97	7.0			
Standard 5			30.8					
Standard 6	24010047 2/22	30.43	30.4	9.92	10.0			
Standard 7			30.4					
Standard 8	19460167 2/22	29.73	29.7	219.7	228			
Standard 9			29.7	102.06	100			
Standard 10			29.7	0.11	0.08			
Standard 11			29.7	0.73	1.00			
Standard 12			29.7	11.67	10.00			



NON-IMPACT CALIBRATION LOG

1. CFV

8/12/21

0720

295

72801

295

Clay, RSE

Flint Howard

Calibration Log

	Number of Observations	Sample Count	Target Speed	Actual Speed	Percent Error	Accuracy Class	Pass	Comments
1000 RPM	20440209 02/22	107	1000	1450	145%	1000	0	
500 RPM			500	728	145%	500	0	
250 RPM	10220209 02/22	213	250	403	161%	250	0	
125 RPM	10450110 02/22	1575	125	195	156%	125	0	
62.5 RPM	10460110 02/22	2860	62.5	70	112%	62.5	0	
31.25 RPM	20180008 02/22	1534	31.25	402	129%	31.25	0	
15.625 RPM	10190008 02/22	2115	15.625	190	122%	15.625	0	
7.8125 RPM	10120101 02/22	2137	7.8125	258	331%	7.8125	0	
3.90625 RPM			3.90625	298	76%	3.90625	0	
1.953125 RPM			1.953125	3.58	183%	1.953125	0	
0.9765625 RPM			0.9765625	3.73	381%	0.9765625	0	
0.48828125 RPM			0.48828125	12.5	2560%	0.48828125	0	

EQUIPMENT CALIBRATION LOG

Name: A Ramsay      Date: 8/12/21      Project: 0720      Location: 0745  
 Instrument ID: 728423      SN: 1859-0412  
 Model: Sony 91      Location: Plant Hammond

Calibrated by

	Temperature (°C) / Relative Humidity (%)	Date of Calibration	Type of Standard	Initial Reading	Final Reading	Temperature Range	Humidity	Remarks
Standard 1 (100.00)	20.0 / 65%	8/12/21	100	100.00	100.00	-	☉	
Standard 2 (50.00)	20.0 / 65%	8/12/21	50	50.00	50.00	-	☉	
Standard 3 (25.00)	20.0 / 65%	8/12/21	25	25.00	25.00	-	☉	
Standard 4 (10.00)	20.0 / 65%	8/12/21	10	10.00	10.00	-	☉	
Standard 5 (0.00)	20.0 / 65%	8/12/21	0	0.00	0.00	-	☉	
Standard 6 (10.00)	20.0 / 65%	8/12/21	10	10.00	10.00	-	☉	
Standard 7 (25.00)	20.0 / 65%	8/12/21	25	25.00	25.00	-	☉	
Standard 8 (50.00)	20.0 / 65%	8/12/21	50	50.00	50.00	-	☉	
Standard 9 (100.00)	20.0 / 65%	8/12/21	100	100.00	100.00	-	☉	

LOU IMPLMENT CALIBRATION LOG

Technician: C. CAIN Date: 8/10/21 Time (start): 0725 2750  
2953  
Spring 95°F Plant Humus

Calibration Log

	Product Lot # (Part #)	Temp. (Celsius)	Temp. (Fahrenheit)	Scale Reading	Temp. (Celsius)	Temp. (Fahrenheit)	Temp. (Celsius)	Temp. (Fahrenheit)
Temperature probe	3098289	25.47	77.85	4.0	4.0	4.0	4.0	
0.0	231	25.47	77.85	3.0	4.0	4.0	4.0	
Temperature probe		31.81	89.26	4.0	4.0	4.0	4.0	
0.0	3098289	25.47	77.85	6.0	4.0	4.0	4.0	
Temperature probe		30.28	86.50	4.0	4.0	4.0	4.0	
0.0	3098289	25.47	77.85	7.0	4.0	4.0	4.0	
Temperature probe		37.61	99.69	4.0	4.0	4.0	4.0	
0.0	3098289	25.47	77.85	8.0	4.0	4.0	4.0	
0.0				100.25	100	100	100	
0.0				5.50	0.04	0.04	0.04	
0.0				12.74	1.0	1.0	1.0	
0.0				12.2	10.0	10.0	10.0	

EQUIPMENT CALIBRATION LOG

Location: 2000 West 10th St Date: 8/13/21 Time: 0730 - 0750  
 Project: 7th St Surveyor: \_\_\_\_\_ Instrument: 5072-1543  
 Station: Survey 40

Calibrated by: \_\_\_\_\_

Instrument ID	Instrument Make & Model	Year of Manufacture	Serial Number	Serial Number	Serial Number	Accuracy Class	Pass	Remarks
Instrument 1	2000-203	2018	100	100	100	-	Pass	
Instrument 2	702	2018	100	100	100	-	Pass	
Instrument 3	_____	/	100	100	/	-	Pass	
Instrument 4	2000-203	2018	100	100	100	-	Pass	
Instrument 5	_____	/	100	100	/	-	Pass	
Instrument 6	702	2018	100	100	100	-	Pass	
Instrument 7	_____	/	100	100	/	-	Pass	
Instrument 8	2000-203	2018	100	100	100	-	Pass	
Instrument 9	_____		100	100	100	-	Pass	
Instrument 10	_____		100	100	100	-	Pass	
Instrument 11	_____		100	100	100	-	Pass	
Instrument 12	_____		100	100	100	-	Pass	
Instrument 13	_____		100	100	100	-	Pass	
Instrument 14	_____		100	100	100	-	Pass	

EQUIPMENT CALIBRATION LOG

Technician: C. CAIN      Date: 8/10/21      Time: 0745      OK  
 Instrument: 728541      ID: 2952  
 Location: Cloudy 75°F      Plant Hammond

Calibration Log								
Instrument	Standard Used	Target Value	Actual Value	Delta	Pass/Fail	Notes	Operator	Date
Standard 1	20174009	24.87	24.87	0.00	Pass			
Standard 2	2/22	24.87	24.87	0.00	Pass			
Standard 3	20174009	17.52	17.52	0.00	Pass			
Standard 4	2/22	17.52	17.52	0.00	Pass			
Standard 5	19460117	25.56	25.56	0.00	Pass			
Standard 6	2/22	25.56	25.56	0.00	Pass			
Standard 7	17460117	37.74	37.74	0.00	Pass			
Standard 8	2/22	37.74	37.74	0.00	Pass			
Standard 9	20174009	26.87	26.87	0.00	Pass			
Standard 10	2/22	26.87	26.87	0.00	Pass			
Standard 11	19460117	100.24	100.24	0.00	Pass			
Standard 12	2/22	100.24	100.24	0.00	Pass			
Standard 13	19460117	0.98	0.98	0.00	Pass			
Standard 14	2/22	0.98	0.98	0.00	Pass			
Standard 15	19460117	1.00	1.00	0.00	Pass			
Standard 16	2/22	1.00	1.00	0.00	Pass			

EQUIPMENT CALIBRATION LOG

Field Technician: A. Ransky

Date: 8/18/21

Time (start): 0730

0755

Worksheet ID: 7:9-23

1350 0410

Project: Sandy, RI

Plant Hammond

Equipment Log

	Model and Type of Equipment	Tag or Inventory #	Field Number	Start Reading	Final Reading	Measuring Type	Unit	Comments
Vertical Hammer (VH)	2040203 2125	2132	200	432.5	442.0	-	mm	
SP-1			200	432	442	-	mm	
Vertical Hammer (VH)	-	-	200	432	---	-	-	
SP-1	2040203 2125	2135	700	700	750	-	mm	
Vertical Hammer (VH)	"	-	700	700	---	-	-	
SP-1	4030 94 612	2142	100	600	700	-	mm	
Vertical Hammer (VH)	"	-	100	600	---	4-01SU	-	
SP-1	1340204 2126	2191	224	224.2	229.5	-	mm	
SP-1 Vertical Hammer (VH)			200	100.04	100.00	-	mm	
Vertical Hammer (VH)			200	100	100	-	mm	
Vertical Hammer (VH)			0	9.05	100	-	mm	
Vertical Hammer (VH)			200	10.05	100	-	mm	



EQUIPMENT CALIBRATION LOG

Project: Greenhouse      Date: 8/24      Location: OTSC      Sheet: 03  
 Station: 726034      Instrument: Trimble      Operator: SLB  
 User: Sammy      Date: 8/24      Time: 10:00

Calibration log

	Model / Serial #	Make / Model #	Test Frequency	Today Reading	Factory Reading	Accuracy Range	Unit	Notes
Level 1	201000	✓	110	1.000	1.000		mm	
Level 2	0200	2000	10	<del>1.000</del>	<del>1.000</del>		mm	2000
Level 3	✓	✓	10	4.00	✓		mm	
Level 4	Blanca 000	2000	10	2.00	7.00		mm	
Level 5	✓	✓	10	1.00	✓		mm	
Level 6	200000	2000	10	0.00	0.00		mm	
Level 7	✓	✓	10	0.00	✓		mm	
Level 8	Blanca 000	2000	10	2.00	2.78		mm	
Level 9	200000		10	0.00	1.00		mm	
Level 10	200000		10	1.00	1.00		mm	
Level 11	200000		10	0.00	0.00		mm	
Level 12	200000		10	0.00	0.00		mm	

February 2022

EQUIPMENT CALCULATION LOG

Project: AS Date: 3/1/2012 Sheet: 3-1 of 4/5  
 Location: Plant Station: 455  
 Name: Lee, J and Unit: Plant Hammond

Collection by

	Quantity (per Day or Frequency)	Days or Frequency (%)	Units of Material	Empty Hauling	Full Cap Hauling	Support Equip	Fuel	Comments
Small Construction jobs	1000	100%	1000	1000	1000	.	Ⓢ	
all 1/2	500	100%	500	500	500	.	Ⓢ	
Medium size jobs	1000	100%	1000	1000	1000	.	Ⓢ	all 1/2 day 2nd day
all 1/2	500	100%	500	500	500	.	Ⓢ	
Medium size jobs	1000	100%	1000	1000	1000	.	Ⓢ	
all 1/2	500	100%	500	500	500	.	Ⓢ	
Medium size jobs	1000	100%	1000	1000	1000	.	Ⓢ	
all 1/2	500	100%	500	500	500	.	Ⓢ	
Large jobs	1000	100%	1000	1000	1000	.	Ⓢ	
all 1/2	500	100%	500	500	500	.	Ⓢ	
Large jobs	1000	100%	1000	1000	1000	.	Ⓢ	
all 1/2	500	100%	500	500	500	.	Ⓢ	
Large jobs	1000	100%	1000	1000	1000	.	Ⓢ	
all 1/2	500	100%	500	500	500	.	Ⓢ	
Large jobs	1000	100%	1000	1000	1000	.	Ⓢ	
all 1/2	500	100%	500	500	500	.	Ⓢ	

EQUIPMENT CALIBRATION LOG

1/10/16

2/1/17

0.5m

0.2m

0.2m

0.2m

0.2m 4"

Calibration Log

	Reading at 0.2m Temperature	Temp at 0.2m	Reading at depth	At 0.2m Reading	Depth's Reading	Temperature Range	Depth	Comments
0.2m calibration check	7.075 m/s		1.00	100.00	100.00		0	
at 0.2m	5.22	2.1	-0.5	3.97	3.97		0	
0.2m depth 0.2m	5.10-5.05 5.22	2.1	-0.5	4.13	4.16		0	
at 0.2m	3.20-3.05 4.22	1.34	0.0	7.24	2.0		0	
0.2m depth 0.2m	- - -	14.32	-0.5	7.16	7.2		0	
at 0.2m	1.00-0.95 6.22	2.35	0.0	10.20	9.6		0	
0.2m depth 0.2m	0.00-0.05 0.22	4.13	0.0	10.05	10.0		0	
at 0.2m	0.00-0.05 9.22	2.1	0.0	2.00	2.00		0	
0.2m depth 0.2m			0.0	10.00	10.0		0	
0.2m depth 0.2m			0.0	2.00	2.00		0	
0.2m depth 0.2m			0.0	2.00	2.00		0	
0.2m depth 0.2m			0.0	10.00	10.0		0	

EMPLOYEE ID

EQUIPMENT CALIBRATION LOG

Name: Thomas Kessler

Address: 1115 0127

Phone: 0730

Fax: 0820

Model: 1752341

Manufacturer: Hamilton

SN: 5990-3915

Serial: 01001501

Location: Hannover

Calibration Log

	Vendor Unit Part Number	Test Standard	Factor Number	Factor Reading	Ref Factor Reading	Calibration Range	Pass	Comments
Factor 1	71072013	<del>1033</del>	1000	1000.0	1000		Ⓟ	
Factor 2	1000000	1033	1000	1000.0	1000		Ⓟ	
Factor 3	1000000		1000	1000.0			Ⓟ	
Factor 4	7110000	1032	1000	1000.0	1000.0		Ⓟ	
Factor 5	1000000		1000	1000.0			Ⓟ	
Factor 6	1100000	7.56	1000	1000.0	1000.0		Ⓟ	
Factor 7	21080189	7.45	1000	1000.0	1000.0		Ⓟ	
Factor 8	1000000	0	1000	1000.0	1000.0		Ⓟ	
Factor 9			1000	1000.0	1000.0		Ⓟ	
Factor 10			1000	1000.0	1000.0		Ⓟ	
Factor 11			1000	1000.0	1000.0		Ⓟ	
Factor 12			1000	1000.0	1000.0		Ⓟ	
Factor 13			1000	1000.0	1000.0		Ⓟ	
Factor 14			1000	1000.0	1000.0		Ⓟ	

City:                     

**EQUIPMENT CALIBRATION LOG**

Date: 11/20/22      Time: 1:30      Location: C-12  
 Operator:                           Instrument:                       
 Technician:                           Model:                     

Continued on

Serial Number	Instrument	Calibration Due	Year - Month	From Factory	From Reading	Accuracy Range	Test	Reference
1001	1001	1/20	2022	1001	1001		Ⓢ	
1002	1002	1/20	2022	1002	1002		Ⓢ	
1003	1003	1/20	2022	1003	1003		Ⓢ	
1004	1004	1/20	2022	1004	1004		Ⓢ	
1005	1005	1/20	2022	1005	1005		Ⓢ	
1006	1006	1/20	2022	1006	1006		Ⓢ	
1007	1007	1/20	2022	1007	1007		Ⓢ	
1008	1008	1/20	2022	1008	1008		Ⓢ	
1009	1009	1/20	2022	1009	1009		Ⓢ	
1010	1010	1/20	2022	1010	1010		Ⓢ	
1011	1011	1/20	2022	1011	1011		Ⓢ	
1012	1012	1/20	2022	1012	1012		Ⓢ	
1013	1013	1/20	2022	1013	1013		Ⓢ	
1014	1014	1/20	2022	1014	1014		Ⓢ	
1015	1015	1/20	2022	1015	1015		Ⓢ	

EQUIPMENT CALIBRATION LOG

Job No: 11 Date: 2/3/2022 Station: 745 Sheet: 8 of 2  
 Project: 1-7343 Location: Plant Hammond  
 Name: Ross, S. F.

Equipment Log

	Serial # or ID #	Calibration Due	Year of Purchase	Current Reading	Last Calibration	Temperature Range	Pass?	Comments
Topsoil Compaction (1.5m)	2010000	2021	2014	20.0	20.0	0-100	Pass	
do	2010001	2021	2014	20.0	20.0	0-100	Pass	
Moisture (1.5m)	2010002	2021	2014	10.0	10.0	0-100	Pass	
do	2010003	2021	2014	10.0	10.0	0-100	Pass	
Moisture (0.75m)	2010004	2021	2014	10.0	10.0	0-100	Pass	
do	2010005	2021	2014	10.0	10.0	0-100	Pass	
Moisture (0.3m)	2010006	2021	2014	10.0	10.0	0-100	Pass	
do	2010007	2021	2014	10.0	10.0	0-100	Pass	
Moisture (0.15m)	2010008	2021	2014	10.0	10.0	0-100	Pass	
do	2010009	2021	2014	10.0	10.0	0-100	Pass	
Moisture (0.075m)	2010010	2021	2014	10.0	10.0	0-100	Pass	
do	2010011	2021	2014	10.0	10.0	0-100	Pass	
Moisture (0.0375m)	2010012	2021	2014	10.0	10.0	0-100	Pass	
do	2010013	2021	2014	10.0	10.0	0-100	Pass	

EQUIPMENT CALIBRATION LOG

Technician: Thomas Kessler      Date: 12.12.17      Time: 0740      Page: 3/4

Location: Plant      Facility and Unit: Plant Hemmoneel

Continued on

Equipment	Calibration Date	Calibration Interval	Manufacturer	Range	Accuracy	Accuracy Class	Pass	Remarks
Scale 100g	12.12.17	12	100g	0.001g	±0.001g	Class 1	Yes	
Scale 1g	12.12.17	12	1g	0.001g	±0.001g	Class 1	Yes	
Scale 10g	12.12.17	12	10g	0.001g	±0.001g	Class 1	Yes	
Scale 100g	12.12.17	12	100g	0.001g	±0.001g	Class 1	Yes	
Scale 1g	12.12.17	12	1g	0.001g	±0.001g	Class 1	Yes	
Scale 10g	12.12.17	12	10g	0.001g	±0.001g	Class 1	Yes	
Scale 100g	12.12.17	12	100g	0.001g	±0.001g	Class 1	Yes	
Scale 1g	12.12.17	12	1g	0.001g	±0.001g	Class 1	Yes	
Scale 10g	12.12.17	12	10g	0.001g	±0.001g	Class 1	Yes	
Scale 100g	12.12.17	12	100g	0.001g	±0.001g	Class 1	Yes	
Scale 1g	12.12.17	12	1g	0.001g	±0.001g	Class 1	Yes	
Scale 10g	12.12.17	12	10g	0.001g	±0.001g	Class 1	Yes	
Scale 100g	12.12.17	12	100g	0.001g	±0.001g	Class 1	Yes	

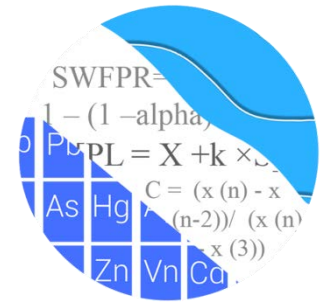


# APPENDIX D

## Statistical Analysis Reports

August 2021

# GROUNDWATER STATS CONSULTING



February 28, 2022

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 2021 Statistical Analysis

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August 2021 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 well:** 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-1, HGWA-2, and HGWA-3, are shared among Plant Hammond units AP-1, AP-2, and AP-3. Since AP-3 is a Phase II unit, the sampling schedule has historically differed from AP-1 and AP-2 Phase I units due to scan events. Therefore, data

included in this analysis from upgradient wells HGWA-1, HGWA-2, and HGWA-3 are consistent with the historical sample events performed for AP-3.

New 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 will be incorporated into the statistical analyses. Sampling began at new downgradient wells HGWC-125 and HGWC-126 in May 2020 and also have at least 8 rounds of background sampling; therefore, they are statistically analyzed in this report with prediction limits and confidence intervals.

Additionally, sampling at the following delineation wells and piezometer listed below began in 2020:

- **Delineation wells:** MW-32, MW-41, and MW-46D
- **Piezometer:** MW-39

Confidence intervals are constructed for the Appendix IV constituents at delineation wells when a minimum of 4 samples is available. Delineation wells MW-32 and MW-41 and piezometer MW-39 have at least 4 samples for a subset of constituents which are evaluated using confidence intervals. Well MW-46D currently has sufficient samples for fluoride and molybdenum only. Therefore, confidence intervals are included for these constituents at this delineation well.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Groundwater Statistician and Founder 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 and delineation 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 0.03 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 the following 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 in background, 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. 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 2021**

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed 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 new 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 2021 (Figure D). Interwell prediction limits use all available upgradient well data to establish a background limit for an individual constituent. The August 2021 sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs).

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, HGWC-124, and HGWC-125
- Calcium: HGWC-120, HGWC-121A, HGWC-125, and HGWC-126
- Sulfate: HGWC-120, HGWC-121A, 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 (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 natural 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 (upgradient)
- Calcium: HGWA-3 (upgradient)
- Sulfate: HGWA-2 (upgradient)

Decreasing trends:

- Boron: HGWA-122 (upgradient), HGWC-121A, HGWC-124
- Sulfate: HGWA-122 (upgradient), 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 (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 2021

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. No new values were flagged and a summary of previously flagged outliers follows this report (Figure C).

### Interwell Upper Tolerance Limits

First, interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through August 2021 for Appendix IV constituents (Figure F). As mentioned above, a reporting limit of 0.03 mg/L was substituted across all wells for lithium. Parametric tolerance limits are used 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.

### 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).

As described in 40 CFR §257.95(h) (1-3), the Federal 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, CCR-rule specified levels have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.04 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

On July 30, 2018, USEPA revised the Federal CCR Rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the State GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL

Following Georgia EPD Rule requirements and the Federal CCR requirements, Federal and State GWPS were established for statistical comparison of Appendix IV constituents at downgradient wells for the August 2021 sample event (Figures G and H).

### 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. Delineation wells were included in the confidence intervals when a minimum of 4 samples were available. As discussed earlier, confidence intervals are included only for fluoride and molybdenum at delineation well MW-46D. 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 and delineation wells and piezometer MW-39, no confidence intervals were required for these constituents.

The Sanitas software was used to calculate both the tolerance limits and the confidence intervals. For Federal requirements, confidence intervals were compared to the GWPS prepared according to the CCR Rule (Figure I). For the State requirements, confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a) (Figure J). 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.

Summaries of both the Federal and State confidence intervals follow this letter and exceedances were identified for the following well/constituent pairs:

Federal:

- No exceedances

State:

- Molybdenum: HGWC-120, MW-32, MW-39, and MW-41

### Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure K). Upgradient wells are included in the trend

analyses when a minimum of 5 samples are available to identify whether similar patterns exist upgradient of the site for the same constituents. Note that closure measures have been implemented; therefore, the trend test was used to evaluate data from observations from October 2018 to the present. When trends are present in upgradient trends, it is an indication of natural variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing trends:

- Molybdenum: HGWC-120

Decreasing trends:

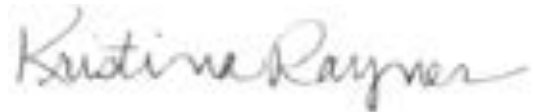
- None

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,



Easton Rayner  
Groundwater Analyst



Kristina Rayner  
Senior Statistician

# 100% Non-Detects: Appendix IV Downgradient, Delineation, & Piezometers

Analysis Run 12/14/2021 3:30 PM

Plant Hammond Client: Southern Company Data: Hammond AP-3

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Antimony (mg/L)

HGWC-121A, HGWC-124, MW-39, MW-41

Arsenic (mg/L)

MW-32, MW-39, MW-41

Beryllium (mg/L)

HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126, MW-32, MW-39, MW-41, MW-46D

Cadmium (mg/L)

HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126, MW-32, MW-39, MW-41, MW-46D

Chromium (mg/L)

MW-39

Cobalt (mg/L)

HGWC-124, HGWC-126

Lead (mg/L)

MW-32, MW-39, MW-41

Mercury (mg/L)

HGWC-121A, HGWC-125, HGWC-126, MW-32, MW-39, MW-41, MW-46D

Molybdenum (mg/L)

HGWC-121A, HGWC-126

Selenium (mg/L)

HGWC-125, HGWC-126, MW-32, MW-39, MW-41, MW-46D

Thallium (mg/L)

HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126, MW-32, MW-39, MW-41, MW-46D

# Interwell Prediction Limit Summary - Significant Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 10/18/2021, 1:02 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	0.39	n/a	8/16/2021	1.1	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-121A	0.39	n/a	8/16/2021	2	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-124	0.39	n/a	8/16/2021	0.44	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-125	0.39	n/a	8/19/2021	1.5	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-120	138	n/a	8/16/2021	171	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-121A	138	n/a	8/16/2021	162	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-125	138	n/a	8/19/2021	196	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-126	138	n/a	8/19/2021	139	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-120	88.2	n/a	8/16/2021	211	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-121A	88.2	n/a	8/16/2021	158	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-125	88.2	n/a	8/19/2021	264	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-125	632	n/a	8/19/2021	732	Yes	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2

# Interwell Prediction Limit Summary - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 10/18/2021, 1:02 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	0.39	n/a	8/16/2021	1.1	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-121A	0.39	n/a	8/16/2021	2	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-124	0.39	n/a	8/16/2021	0.44	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-125	0.39	n/a	8/19/2021	1.5	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-126	0.39	n/a	8/19/2021	0.011J	No	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-120	138	n/a	8/16/2021	171	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-121A	138	n/a	8/16/2021	162	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-124	138	n/a	8/16/2021	106	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-125	138	n/a	8/19/2021	196	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-126	138	n/a	8/19/2021	139	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-120	41.1	n/a	8/16/2021	2.4	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-121A	41.1	n/a	8/16/2021	18	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-124	41.1	n/a	8/16/2021	2.6	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-125	41.1	n/a	8/19/2021	4.5	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-126	41.1	n/a	8/19/2021	7.8	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-120	0.87	n/a	8/16/2021	0.39	No	100	n/a	n/a	26	n/a	n/a	0.0001934	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-121A	0.87	n/a	8/16/2021	0.15	No	100	n/a	n/a	26	n/a	n/a	0.0001934	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-124	0.87	n/a	8/16/2021	0.05ND	No	100	n/a	n/a	26	n/a	n/a	0.0001934	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-125	0.87	n/a	8/19/2021	0.17	No	100	n/a	n/a	26	n/a	n/a	0.0001934	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-126	0.87	n/a	8/19/2021	0.43	No	100	n/a	n/a	26	n/a	n/a	0.0001934	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-120	7.92	4.9	8/16/2021	6.92	No	99	n/a	n/a	0	n/a	n/a	0.0003956	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-121A	7.92	4.9	8/16/2021	6.74	No	99	n/a	n/a	0	n/a	n/a	0.0003956	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-124	7.92	4.9	8/16/2021	7.09	No	99	n/a	n/a	0	n/a	n/a	0.0003956	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-125	7.92	4.9	8/19/2021	7.24	No	99	n/a	n/a	0	n/a	n/a	0.0003956	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-126	7.92	4.9	8/19/2021	7.32	No	99	n/a	n/a	0	n/a	n/a	0.0003956	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-120	88.2	n/a	8/16/2021	211	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-121A	88.2	n/a	8/16/2021	158	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-124	88.2	n/a	8/16/2021	74	No	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-125	88.2	n/a	8/19/2021	264	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-126	88.2	n/a	8/19/2021	64.4	No	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-120	632	n/a	8/16/2021	632	No	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-121A	632	n/a	8/16/2021	626	No	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-124	632	n/a	8/16/2021	352	No	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-125	632	n/a	8/19/2021	732	Yes	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-126	632	n/a	8/19/2021	488	No	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2

# Trend Test - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/18/2021, 1:07 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-122 (bg)	-0.02558	-60	-53	Yes	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-2 (bg)	0.002396	83	63	Yes	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-121A	-0.2431	-70	-53	Yes	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-124	-0.02071	-55	-53	Yes	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	2.813	71	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-122 (bg)	-1.769	-61	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	1.201	66	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-120	-17.87	-77	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-121A	-27.04	-73	-53	Yes	15	0	n/a	n/a	0.01	NP



# Trend Test - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 10/18/2021, 1:07 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	0	-1	-68	No	18	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWA-122 (bg)</b>	<b>-0.02558</b>	<b>-60</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>0.002396</b>	<b>83</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWA-3 (bg)	0	-2	-68	No	18	16.67	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-43D (bg)	-0.02108	-9	-14	No	6	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-44D (bg)	0.2086	6	14	No	6	16.67	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-45D (bg)	0	1	14	No	6	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-120	-0.03782	-47	-58	No	16	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-121A</b>	<b>-0.2431</b>	<b>-70</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>HGWC-124</b>	<b>-0.02071</b>	<b>-55</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-125	0	6	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	3.476	57	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-122 (bg)	-2.405	-19	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	0.3671	20	63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>2.813</b>	<b>71</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWA-43D (bg)	-2.444	-1	-14	No	6	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-5.272	-5	-14	No	6	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-45D (bg)	-2.522	-5	-14	No	6	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-120	2.944	31	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-121A	-5.695	-43	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-125	31.47	13	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-126	13.94	23	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-1 (bg)	2.869	46	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-122 (bg)</b>	<b>-1.769</b>	<b>-61</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>1.201</b>	<b>66</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWA-3 (bg)	1.327	60	68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-12.17	-13	-14	No	6	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-44D (bg)	4.171	1	14	No	6	16.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-45D (bg)	1.043	1	14	No	6	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWC-120</b>	<b>-17.87</b>	<b>-77</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>HGWC-121A</b>	<b>-27.04</b>	<b>-73</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWC-125	-53.23	-20	-25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	5.962	23	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-122 (bg)	-12.03	-27	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	-2.657	-23	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	0	-2	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	-5.84	-3	-14	No	6	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	83.43	9	14	No	6	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-45D (bg)	-5.309	-1	-14	No	6	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-125	-76.58	-6	-25	No	9	0	n/a	n/a	0.01	NP

# Upper Tolerance Limits

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/18/2021, 1:14 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	85	84.71	n/a	0.01278	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	83	71.08	n/a	0.01416	NP Inter(normal...)
Barium (mg/L)	n/a	0.54	n/a	n/a	n/a	93	1.075	n/a	0.008478	NP Inter(normal...)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	85	82.35	n/a	0.01278	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	83	89.16	n/a	0.01416	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0079	n/a	n/a	n/a	87	75.86	n/a	0.01153	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.038	n/a	n/a	n/a	93	77.42	n/a	0.008478	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	4.36	n/a	n/a	n/a	86	0	n/a	0.01214	NP Inter(normal...)
Fluoride (mg/L)	n/a	0.87	n/a	n/a	n/a	100	26	n/a	0.005921	NP Inter(normal...)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	87	62.07	n/a	0.01153	NP Inter(normal...)
Lithium (mg/L)	n/a	0.032	n/a	n/a	n/a	93	34.41	n/a	0.008478	NP Inter(normal...)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	65	92.31	n/a	0.03565	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	95	68.42	n/a	0.007651	NP Inter(normal...)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	83	98.8	n/a	0.01416	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	83	98.8	n/a	0.01416	NP Inter(NDs)

<b>PLANT HAMMOND AP-3 GWPS (Federal)</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>Federal GWPS</b>
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		0.54	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		4.36	5
Fluoride, Total (mg/L)	4		0.87	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.032	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

*\*GWPS = Groundwater Protection Standard*

<b>PLANT HAMMOND AP-3 GWPS (State)</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>State GWPS</b>
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		0.54	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		4.36	5
Fluoride, Total (mg/L)	4		0.87	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.001
Lithium, Total (mg/L)	n/a	0.04	0.032	0.032
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.01
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

*\*GWPS = Groundwater Protection Standard*

# Federal Confidence Interval Summary Table - All Results (No Significant)

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 12/14/2021, 3:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	HGWC-120	0.003	0.0018	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-125	0.003	0.00047	0.006	No	9	77.78	No	0.002	NP (NDs)
Antimony (mg/L)	HGWC-126	0.003	0.0004	0.006	No	9	77.78	No	0.002	NP (NDs)
Antimony (mg/L)	MW-32	0.003	0.00035	0.006	No	4	75	No	0.0625	NP (NDs)
Arsenic (mg/L)	HGWC-120	0.005	0.001	0.01	No	11	63.64	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-121A	0.005	0.0014	0.01	No	11	72.73	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-124	0.005	0.005	0.01	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-125	0.005	0.00081	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	HGWC-126	0.005	0.00071	0.01	No	8	75	No	0.004	NP (NDs)
Barium (mg/L)	HGWC-120	0.05172	0.04601	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-121A	0.0824	0.06527	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-124	0.07319	0.06712	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-125	0.04698	0.04169	2	No	9	0	No	0.01	Param.
Barium (mg/L)	HGWC-126	0.2608	0.2237	2	No	9	0	No	0.01	Param.
Barium (mg/L)	MW-32	0.06217	0.05023	2	No	5	0	No	0.01	Param.
Barium (mg/L)	MW-39	0.06085	0.05715	2	No	4	0	No	0.01	Param.
Barium (mg/L)	MW-41	0.07551	0.05969	2	No	5	0	No	0.01	Param.
Chromium (mg/L)	HGWC-120	0.005	0.0015	0.1	No	15	80	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-121A	0.005	0.0005	0.1	No	15	93.33	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-124	0.005	0.00051	0.1	No	15	86.67	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-125	0.005	0.00052	0.1	No	9	66.67	No	0.002	NP (NDs)
Chromium (mg/L)	HGWC-126	0.005	0.00096	0.1	No	9	88.89	No	0.002	NP (NDs)
Chromium (mg/L)	MW-32	0.005	0.00058	0.1	No	5	80	No	0.031	NP (NDs)
Chromium (mg/L)	MW-41	0.005	0.0009	0.1	No	5	80	No	0.031	NP (NDs)
Cobalt (mg/L)	HGWC-120	0.003889	0.002898	0.038	No	15	0	No	0.01	Param.
Cobalt (mg/L)	HGWC-121A	0.005	0.0005	0.038	No	15	80	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-125	0.01279	0.007031	0.038	No	9	0	No	0.01	Param.
Cobalt (mg/L)	MW-32	0.005359	0.002881	0.038	No	5	0	No	0.01	Param.
Cobalt (mg/L)	MW-39	0.002742	0.002308	0.038	No	4	0	No	0.01	Param.
Cobalt (mg/L)	MW-41	0.0012	0.00057	0.038	No	5	0	No	0.031	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-120	1.138	0.614	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-121A	1.221	0.4747	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-124	0.9359	0.6159	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-125	1.553	0.6976	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-126	1.82	0.837	5	No	8	0	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-32	2.155	-0.1841	5	No	4	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-41	2.085	-0.05149	5	No	4	0	No	0.01	Param.
Fluoride (mg/L)	HGWC-120	1.2	0.37	4	No	18	0	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-121A	0.23	0.14	4	No	16	0	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-124	0.15	0.05	4	No	16	37.5	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-125	0.1683	0.105	4	No	9	0	No	0.01	Param.
Fluoride (mg/L)	HGWC-126	0.4862	0.4294	4	No	9	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-32	0.3747	0.2586	4	No	6	0	No	0.01	Param.
Fluoride (mg/L)	MW-39	0.3616	0.2464	4	No	5	0	No	0.01	Param.
Fluoride (mg/L)	MW-41	0.2754	0.1886	4	No	5	0	No	0.01	Param.
Fluoride (mg/L)	MW-46D	1.233	0.5472	4	No	4	0	No	0.01	Param.
Lead (mg/L)	HGWC-120	0.001	0.0002	0.015	No	15	80	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-121A	0.001	0.00036	0.015	No	15	80	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-124	0.001	0.000075	0.015	No	15	66.67	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-125	0.001	0.000044	0.015	No	9	44.44	No	0.002	NP (normality)
Lead (mg/L)	HGWC-126	0.001	0.000042	0.015	No	9	66.67	No	0.002	NP (NDs)
Lithium (mg/L)	HGWC-120	0.03325	0.0277	0.04	No	15	0	x^5	0.01	Param.
Lithium (mg/L)	HGWC-121A	0.009124	0.007729	0.04	No	15	0	No	0.01	Param.
Lithium (mg/L)	HGWC-124	0.015	0.001	0.04	No	15	33.33	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-125	0.005915	0.003691	0.04	No	9	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	HGWC-126	0.004244	0.003133	0.04	No	9	0	No	0.01	Param.
Lithium (mg/L)	MW-32	0.03438	0.03002	0.04	No	5	0	No	0.01	Param.
Lithium (mg/L)	MW-39	0.03385	0.02872	0.04	No	5	20	x^4	0.01	Param.
Lithium (mg/L)	MW-41	0.03031	0.02649	0.04	No	5	0	No	0.01	Param.
Mercury (mg/L)	HGWC-120	0.0002	0.00007	0.002	No	11	81.82	No	0.006	NP (NDs)
Mercury (mg/L)	HGWC-124	0.0002	0.0002	0.002	No	11	90.91	No	0.006	NP (NDs)
Molybdenum (mg/L)	HGWC-120	0.03817	0.02554	0.1	No	15	0	No	0.01	Param.
Molybdenum (mg/L)	HGWC-124	0.005	0.00091	0.1	No	15	33.33	No	0.01	NP (normality)
Molybdenum (mg/L)	HGWC-125	0.00835	0.0005302	0.1	No	9	33.33	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	MW-32	0.06369	0.05917	0.1	No	7	0	No	0.01	Param.
Molybdenum (mg/L)	MW-39	0.064	0.012	0.1	No	6	0	No	0.0155	NP (normality)
Molybdenum (mg/L)	MW-41	0.04715	0.03205	0.1	No	5	0	No	0.01	Param.
Molybdenum (mg/L)	MW-46D	0.03867	-0.01542	0.1	No	4	0	No	0.01	Param.

# Federal Confidence Interval Summary Table - All Results (No Significant) Page 2

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 12/14/2021, 3:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Selenium (mg/L)	HGWC-120	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	HGWC-121A	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	HGWC-124	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)

# State Confidence Interval Summary Table - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 12/14/2021, 3:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Molybdenum (mg/L)	HGWC-120	0.03817	0.02554	0.01	Yes	15	0	No	0.01	Param.
Molybdenum (mg/L)	MW-32	0.06369	0.05917	0.01	Yes	7	0	No	0.01	Param.
Molybdenum (mg/L)	MW-39	0.064	0.012	0.01	Yes	6	0	No	0.0155	NP (normality)
Molybdenum (mg/L)	MW-41	0.04715	0.03205	0.01	Yes	5	0	No	0.01	Param.

# State Confidence Interval Summary Table - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 12/14/2021, 3:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	HGWC-120	0.003	0.0018	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-125	0.003	0.00047	0.006	No	9	77.78	No	0.002	NP (NDs)
Antimony (mg/L)	HGWC-126	0.003	0.0004	0.006	No	9	77.78	No	0.002	NP (NDs)
Antimony (mg/L)	MW-32	0.003	0.00035	0.006	No	4	75	No	0.0625	NP (NDs)
Arsenic (mg/L)	HGWC-120	0.005	0.001	0.01	No	11	63.64	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-121A	0.005	0.0014	0.01	No	11	72.73	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-124	0.005	0.005	0.01	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-125	0.005	0.00081	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	HGWC-126	0.005	0.00071	0.01	No	8	75	No	0.004	NP (NDs)
Barium (mg/L)	HGWC-120	0.05172	0.04601	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-121A	0.0824	0.06527	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-124	0.07319	0.06712	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-125	0.04698	0.04169	2	No	9	0	No	0.01	Param.
Barium (mg/L)	HGWC-126	0.2608	0.2237	2	No	9	0	No	0.01	Param.
Barium (mg/L)	MW-32	0.06217	0.05023	2	No	5	0	No	0.01	Param.
Barium (mg/L)	MW-39	0.06085	0.05715	2	No	4	0	No	0.01	Param.
Barium (mg/L)	MW-41	0.07551	0.05969	2	No	5	0	No	0.01	Param.
Chromium (mg/L)	HGWC-120	0.005	0.0015	0.1	No	15	80	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-121A	0.005	0.0005	0.1	No	15	93.33	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-124	0.005	0.00051	0.1	No	15	86.67	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-125	0.005	0.00052	0.1	No	9	66.67	No	0.002	NP (NDs)
Chromium (mg/L)	HGWC-126	0.005	0.00096	0.1	No	9	88.89	No	0.002	NP (NDs)
Chromium (mg/L)	MW-32	0.005	0.00058	0.1	No	5	80	No	0.031	NP (NDs)
Chromium (mg/L)	MW-41	0.005	0.0009	0.1	No	5	80	No	0.031	NP (NDs)
Cobalt (mg/L)	HGWC-120	0.003889	0.002898	0.038	No	15	0	No	0.01	Param.
Cobalt (mg/L)	HGWC-121A	0.005	0.0005	0.038	No	15	80	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-125	0.01279	0.007031	0.038	No	9	0	No	0.01	Param.
Cobalt (mg/L)	MW-32	0.005359	0.002881	0.038	No	5	0	No	0.01	Param.
Cobalt (mg/L)	MW-39	0.002742	0.002308	0.038	No	4	0	No	0.01	Param.
Cobalt (mg/L)	MW-41	0.0012	0.00057	0.038	No	5	0	No	0.031	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-120	1.138	0.614	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-121A	1.221	0.4747	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-124	0.9359	0.6159	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-125	1.553	0.6976	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-126	1.82	0.837	5	No	8	0	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-32	2.155	-0.1841	5	No	4	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-41	2.085	-0.05149	5	No	4	0	No	0.01	Param.
Fluoride (mg/L)	HGWC-120	1.2	0.37	4	No	18	0	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-121A	0.23	0.14	4	No	16	0	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-124	0.15	0.05	4	No	16	37.5	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-125	0.1683	0.105	4	No	9	0	No	0.01	Param.
Fluoride (mg/L)	HGWC-126	0.4862	0.4294	4	No	9	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-32	0.3747	0.2586	4	No	6	0	No	0.01	Param.
Fluoride (mg/L)	MW-39	0.3616	0.2464	4	No	5	0	No	0.01	Param.
Fluoride (mg/L)	MW-41	0.2754	0.1886	4	No	5	0	No	0.01	Param.
Fluoride (mg/L)	MW-46D	1.233	0.5472	4	No	4	0	No	0.01	Param.
Lead (mg/L)	HGWC-120	0.001	0.0002	0.001	No	15	80	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-121A	0.001	0.00036	0.001	No	15	80	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-124	0.001	0.000075	0.001	No	15	66.67	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-125	0.001	0.000044	0.001	No	9	44.44	No	0.002	NP (normality)
Lead (mg/L)	HGWC-126	0.001	0.000042	0.001	No	9	66.67	No	0.002	NP (NDs)
Lithium (mg/L)	HGWC-120	0.03325	0.0277	0.032	No	15	0	x^5	0.01	Param.
Lithium (mg/L)	HGWC-121A	0.009124	0.007729	0.032	No	15	0	No	0.01	Param.
Lithium (mg/L)	HGWC-124	0.015	0.001	0.032	No	15	33.33	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-125	0.005915	0.003691	0.032	No	9	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	HGWC-126	0.004244	0.003133	0.032	No	9	0	No	0.01	Param.
Lithium (mg/L)	MW-32	0.03438	0.03002	0.032	No	5	0	No	0.01	Param.
Lithium (mg/L)	MW-39	0.03385	0.02872	0.032	No	5	20	x^4	0.01	Param.
Lithium (mg/L)	MW-41	0.03031	0.02649	0.032	No	5	0	No	0.01	Param.
Mercury (mg/L)	HGWC-120	0.0002	0.00007	0.002	No	11	81.82	No	0.006	NP (NDs)
Mercury (mg/L)	HGWC-124	0.0002	0.0002	0.002	No	11	90.91	No	0.006	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>HGWC-120</b>	<b>0.03817</b>	<b>0.02554</b>	<b>0.01</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	HGWC-124	0.005	0.00091	0.01	No	15	33.33	No	0.01	NP (normality)
Molybdenum (mg/L)	HGWC-125	0.00835	0.0005302	0.01	No	9	33.33	x^(1/3)	0.01	Param.
<b>Molybdenum (mg/L)</b>	<b>MW-32</b>	<b>0.06369</b>	<b>0.05917</b>	<b>0.01</b>	<b>Yes</b>	<b>7</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Molybdenum (mg/L)</b>	<b>MW-39</b>	<b>0.064</b>	<b>0.012</b>	<b>0.01</b>	<b>Yes</b>	<b>6</b>	<b>0</b>	<b>No</b>	<b>0.0155</b>	<b>NP (normality)</b>
<b>Molybdenum (mg/L)</b>	<b>MW-41</b>	<b>0.04715</b>	<b>0.03205</b>	<b>0.01</b>	<b>Yes</b>	<b>5</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	MW-46D	0.03867	-0.01542	0.01	No	4	0	No	0.01	Param.



# State Confidence Interval Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 12/14/2021, 3:34 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Selenium (mg/L)	HGWC-120	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	HGWC-121A	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	HGWC-124	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)

# Appendix IV Trend Tests - All Results (No Significant)

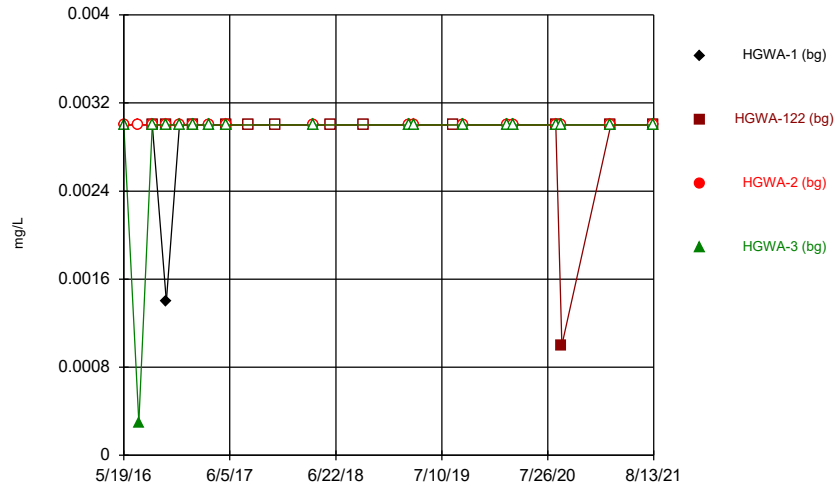
Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 1/31/2022, 1:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Molybdenum (mg/L)	HGWA-1 (bg)	0	0	34	No	11	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-122 (bg)	-0.002326	-14	-21	No	8	12.5	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-2 (bg)	0	0	30	No	10	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-3 (bg)	0	0	34	No	11	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-43D (bg)	-0.001527	-6	-14	No	6	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-44D (bg)	0.001043	6	14	No	6	16.67	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-45D (bg)	0.006769	7	14	No	6	16.67	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWC-120	-0.0006924	-2	-21	No	8	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-32	0.0006155	3	18	No	7	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-39	0.001127	6	14	No	6	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-41	0.006357	6	12	No	5	0	n/a	n/a	0.01	NP

FIGURE A.

Sanitas™ v.9.6.31 . UG  
Hollow symbols indicate censored values.

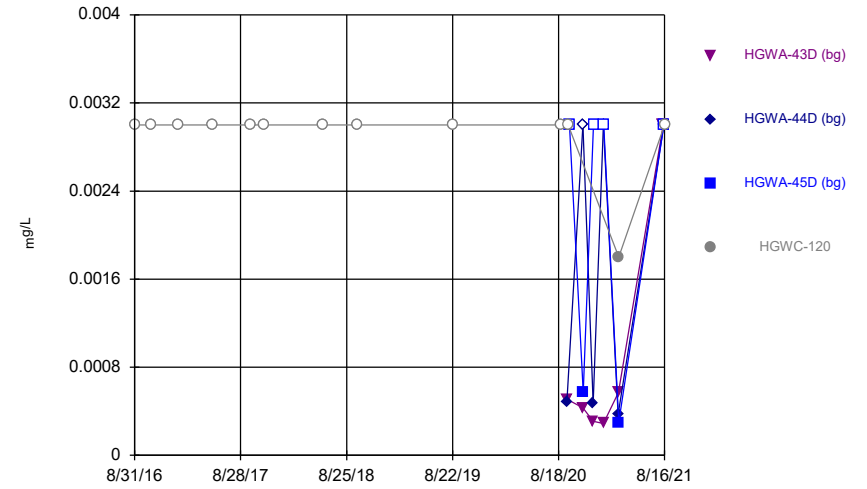
### Time Series



Constituent: Antimony Analysis Run 10/14/2021 2:03 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.9.6.31 . UG  
Hollow symbols indicate censored values.

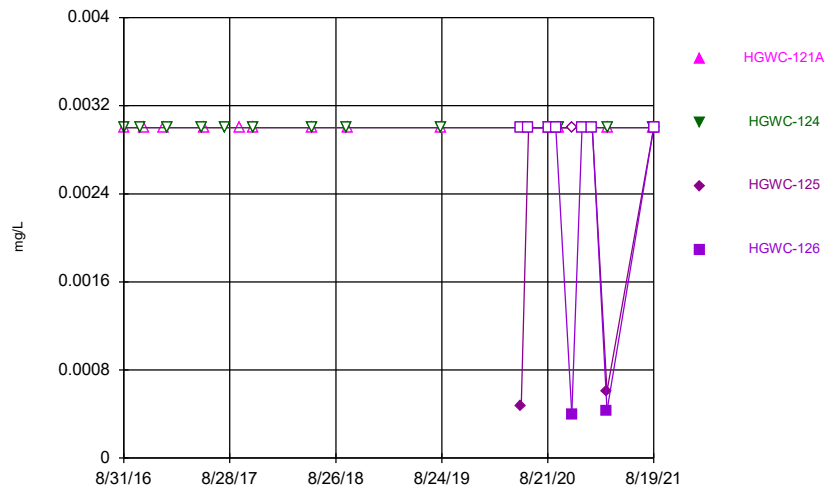
### Time Series



Constituent: Antimony Analysis Run 10/14/2021 2:03 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sanitas™ v.9.6.31 . UG  
Hollow symbols indicate censored values.

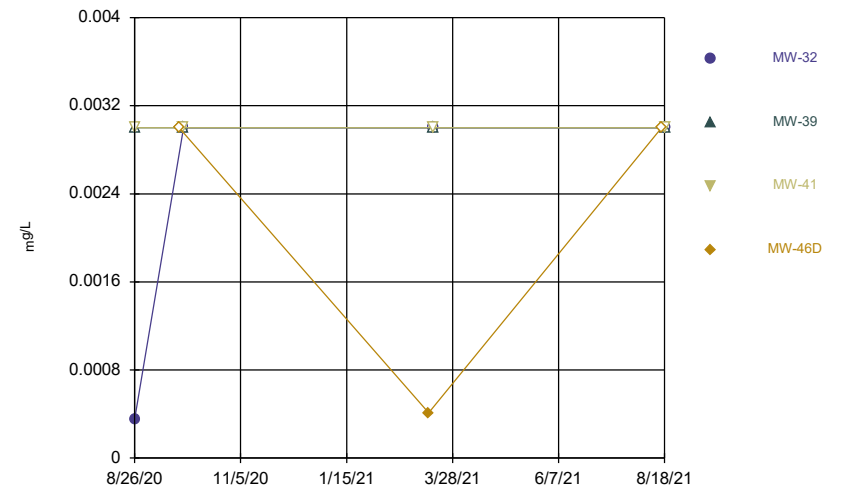
### Time Series



Constituent: Antimony Analysis Run 10/14/2021 2:03 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

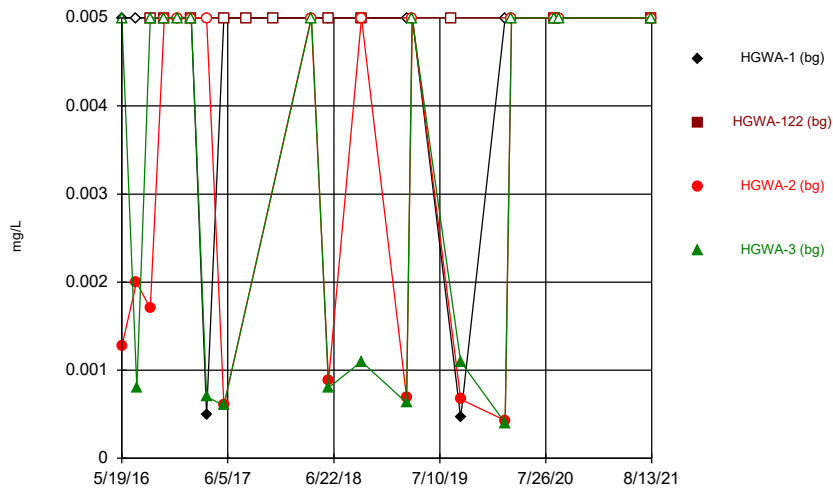
Sanitas™ v.9.6.31 . UG  
Hollow symbols indicate censored values.

### Time Series



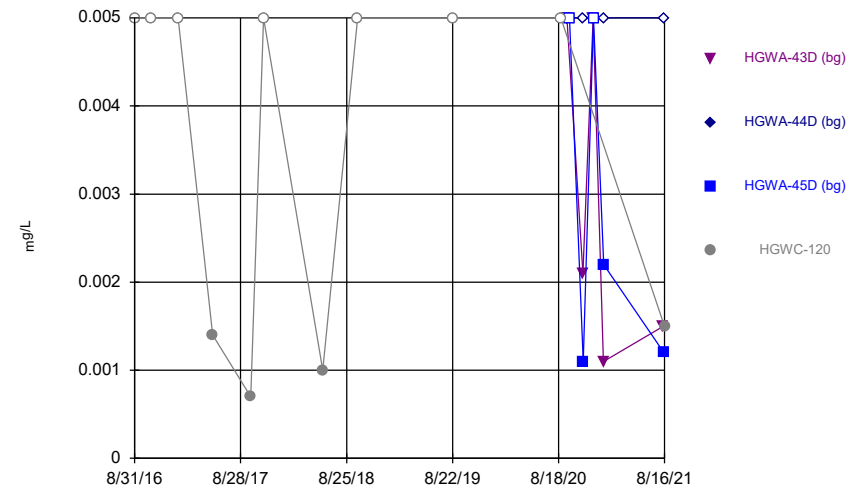
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



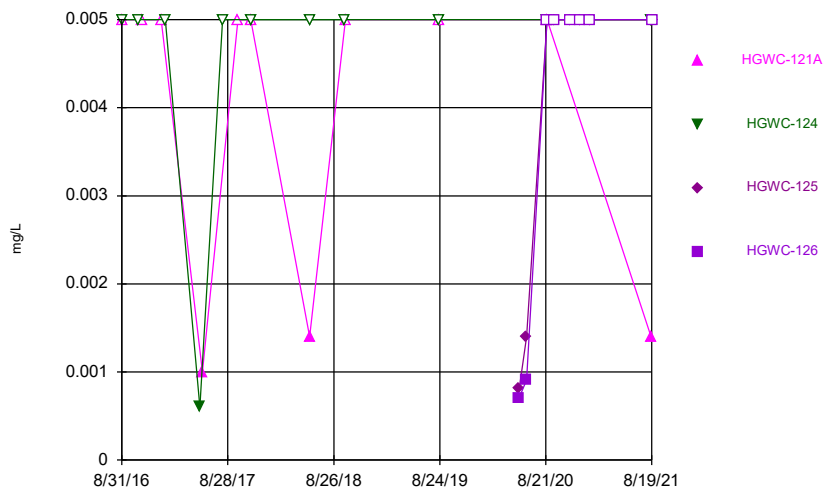
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



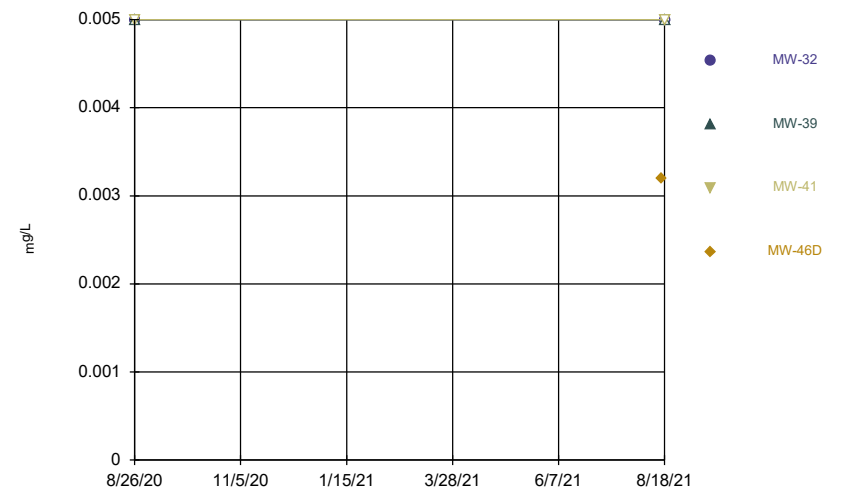
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



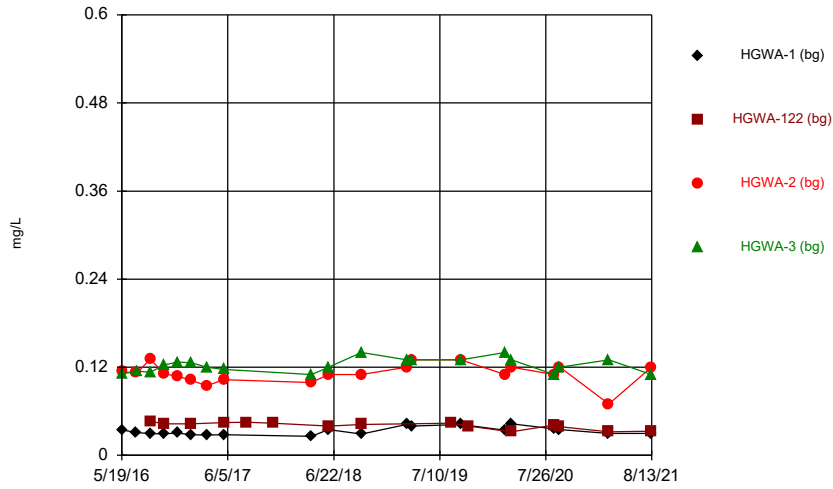
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



Constituent: Arsenic Analysis Run 10/14/2021 2:03 AM  
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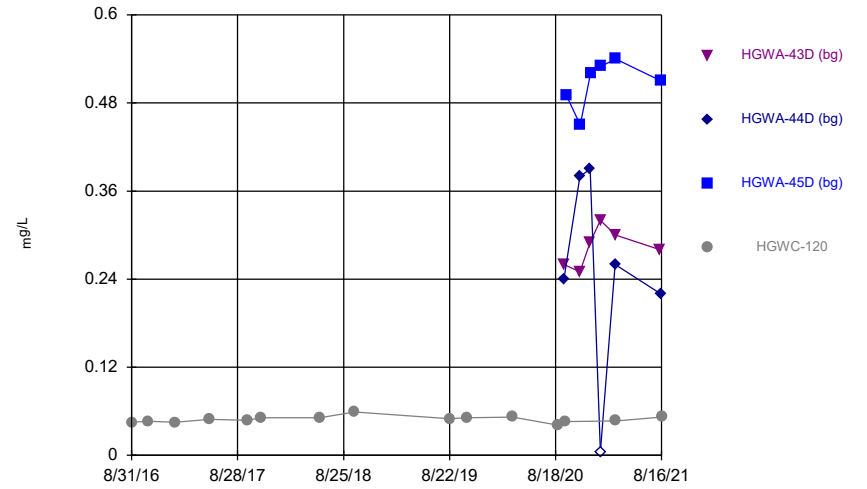
Time Series



Constituent: Barium Analysis Run 10/14/2021 2:03 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

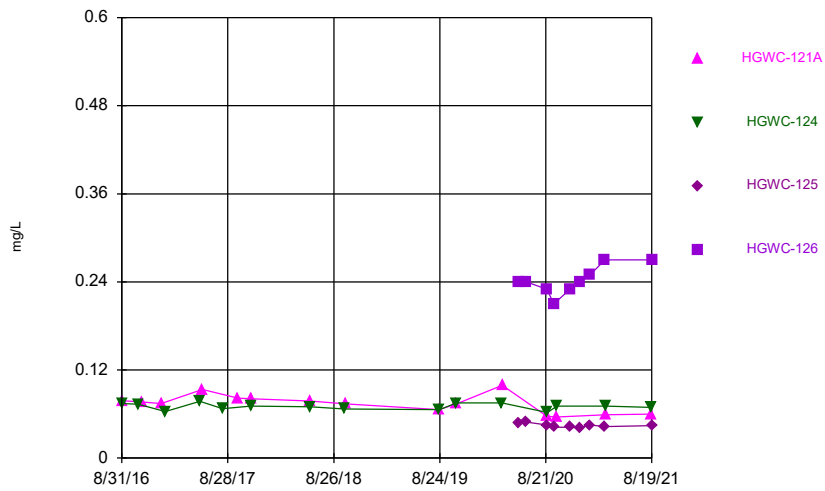
Hollow symbols indicate censored values.

Time Series



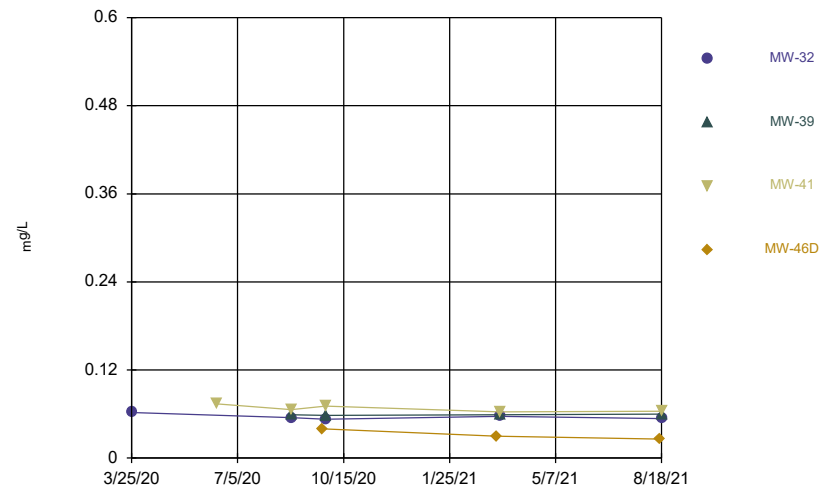
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Time Series



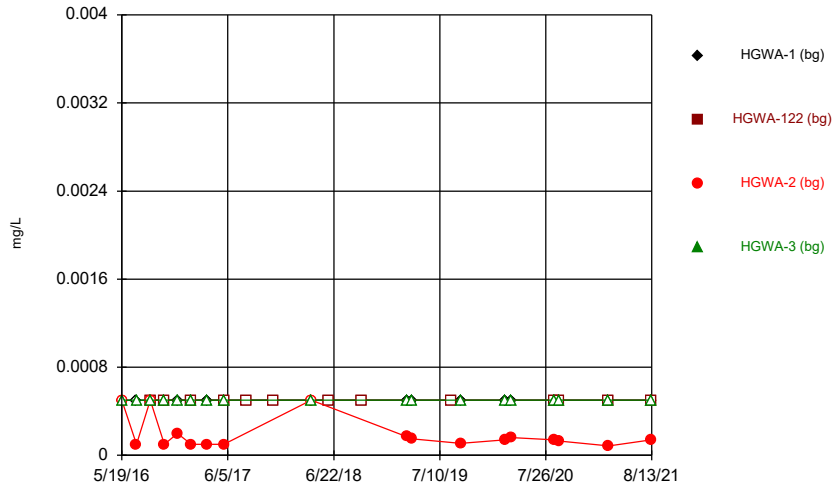
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Time Series



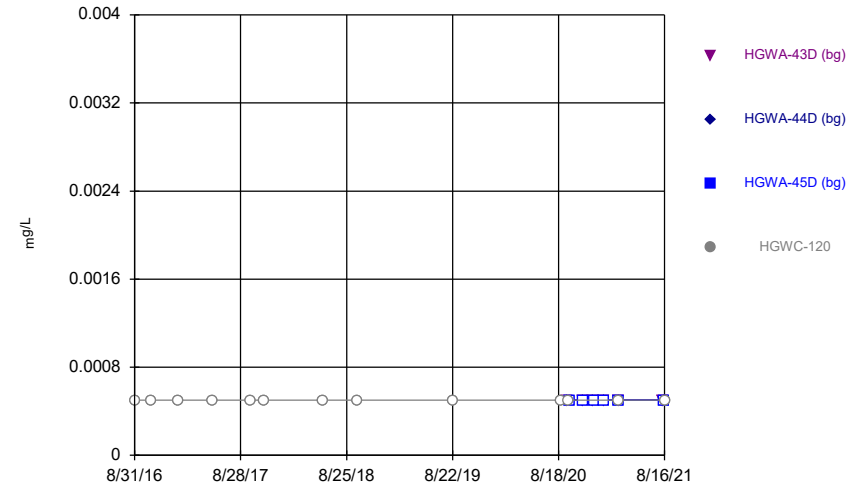
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



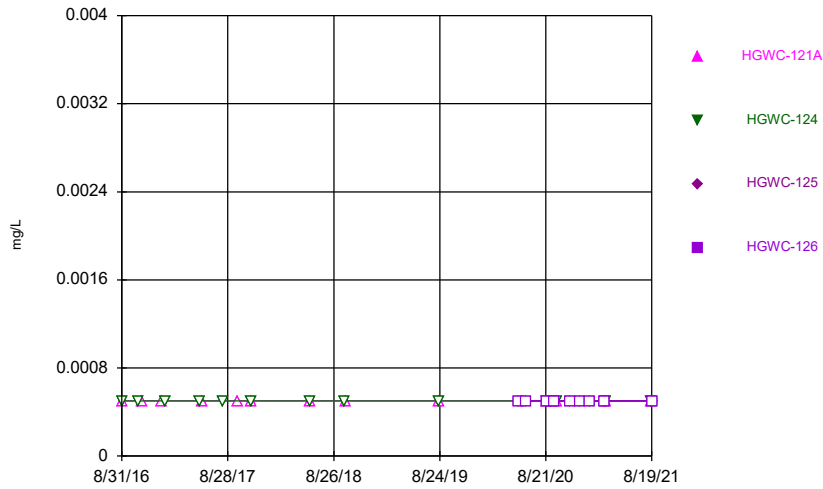
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



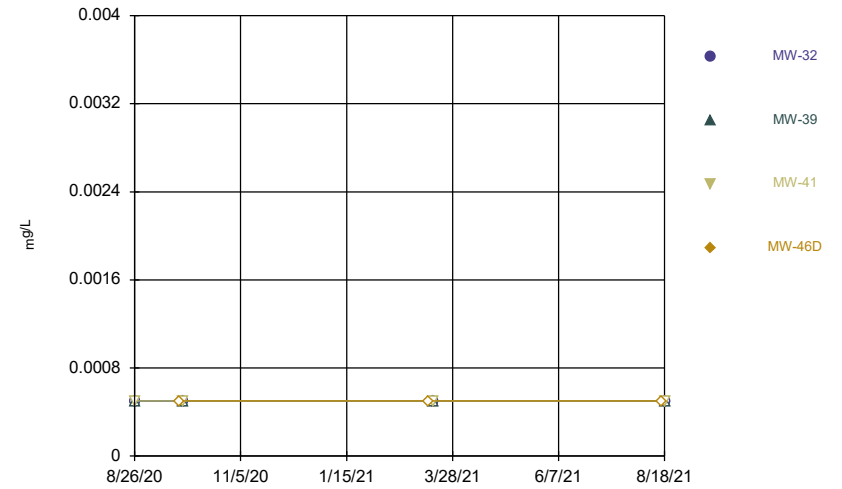
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



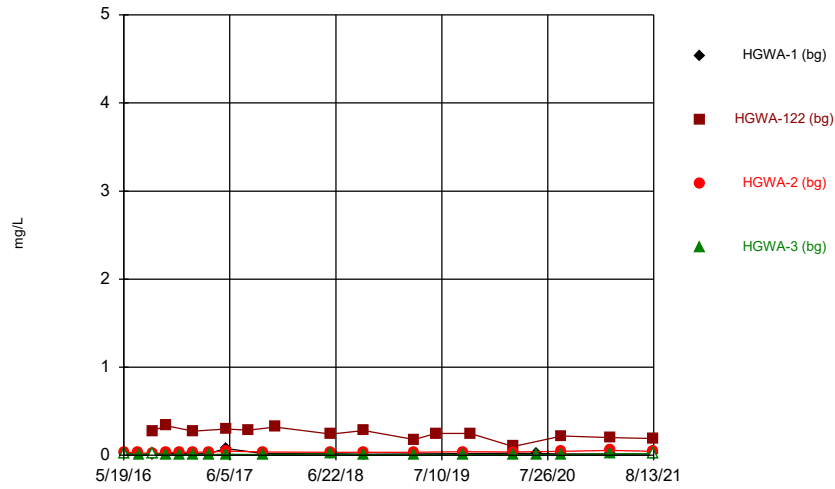
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



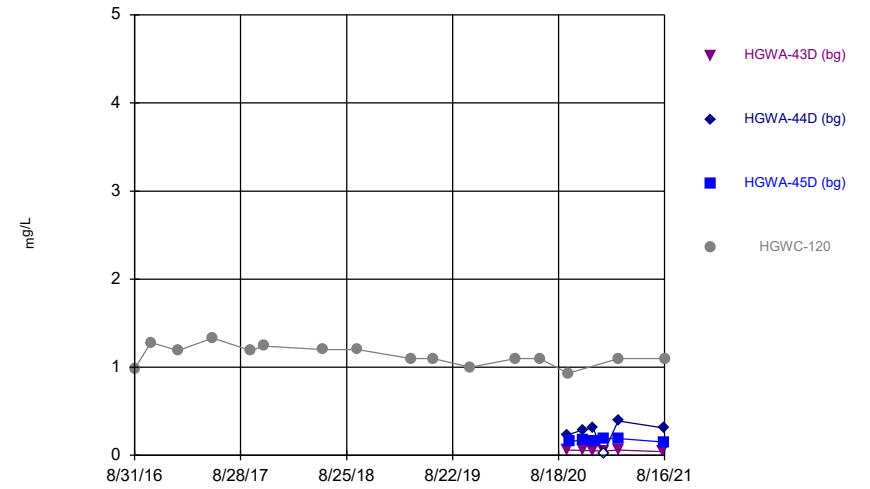
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



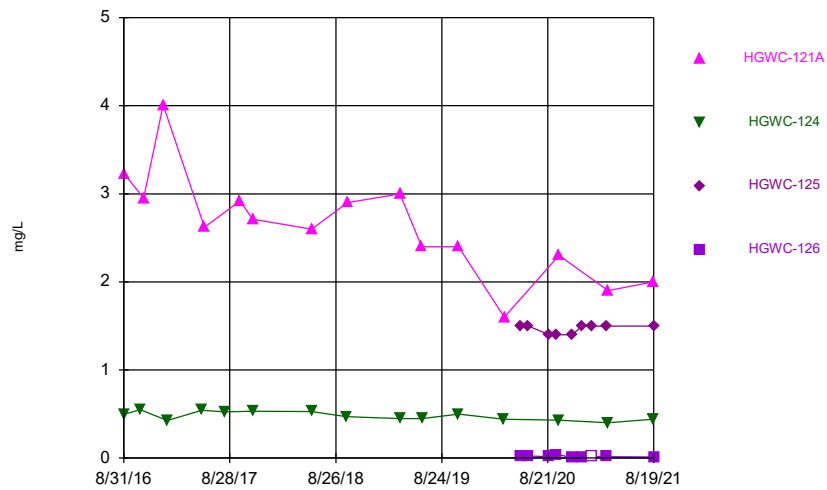
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



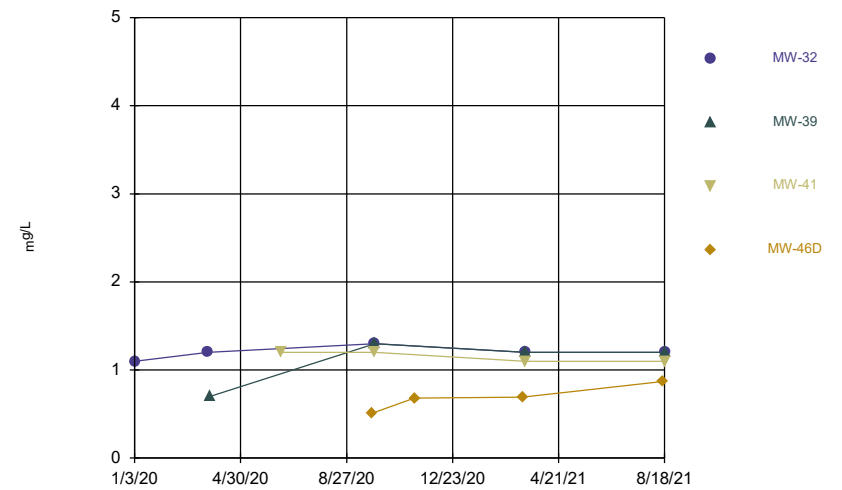
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



Constituent: Boron Analysis Run 10/14/2021 2:03 AM  
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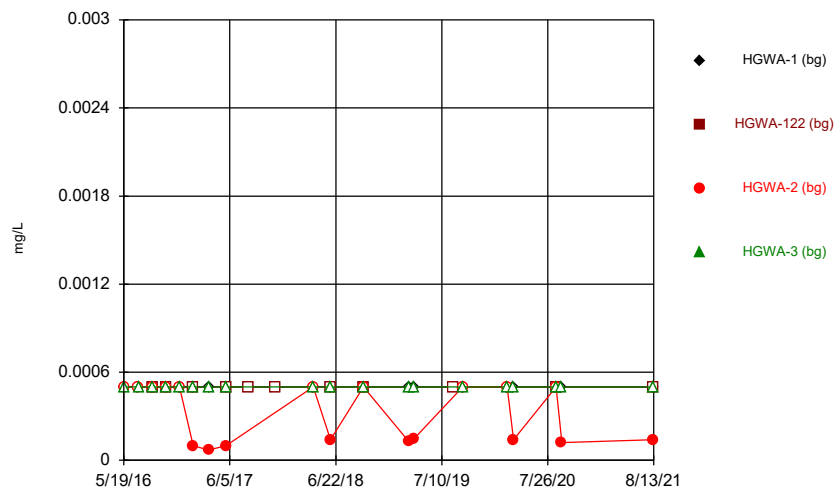
### Time Series



Constituent: Boron Analysis Run 10/14/2021 2:03 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

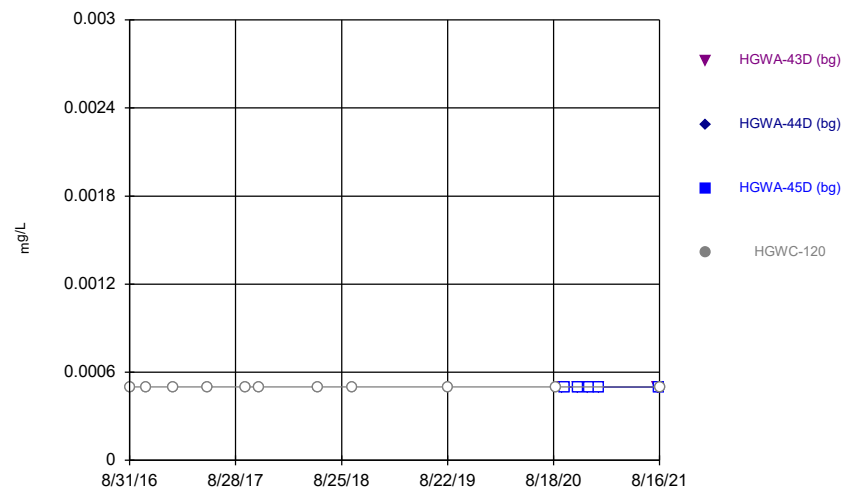


Time Series



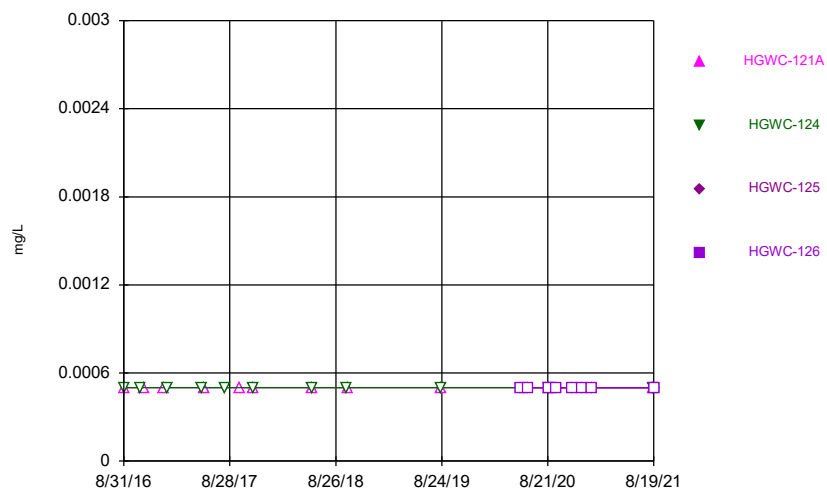
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



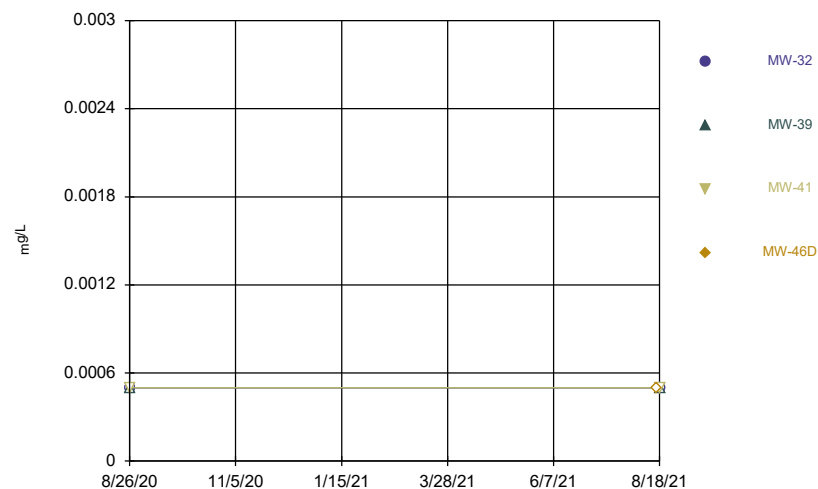
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Time Series



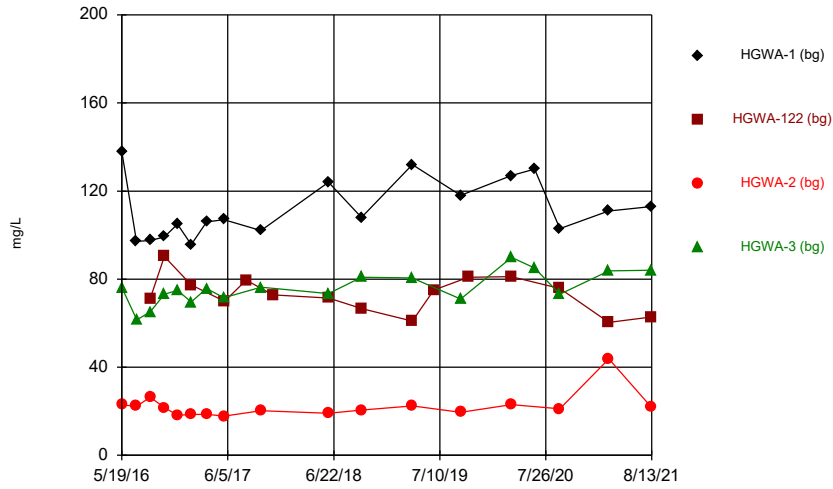
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Time Series



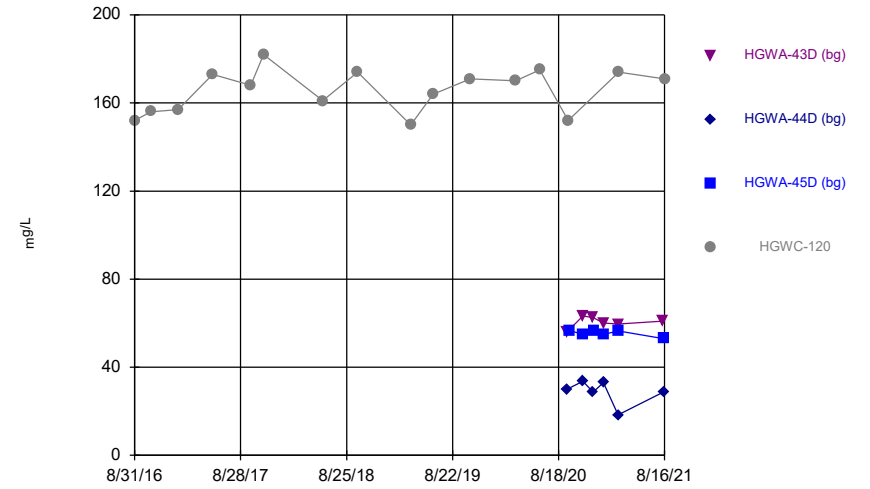
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



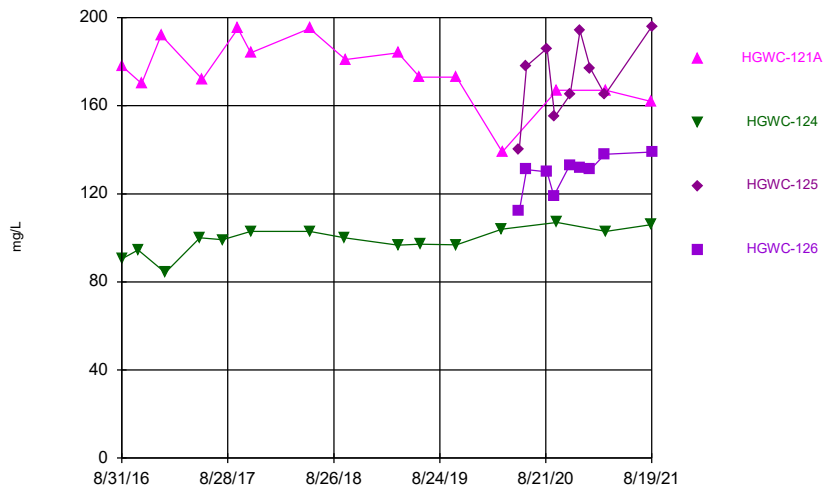
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



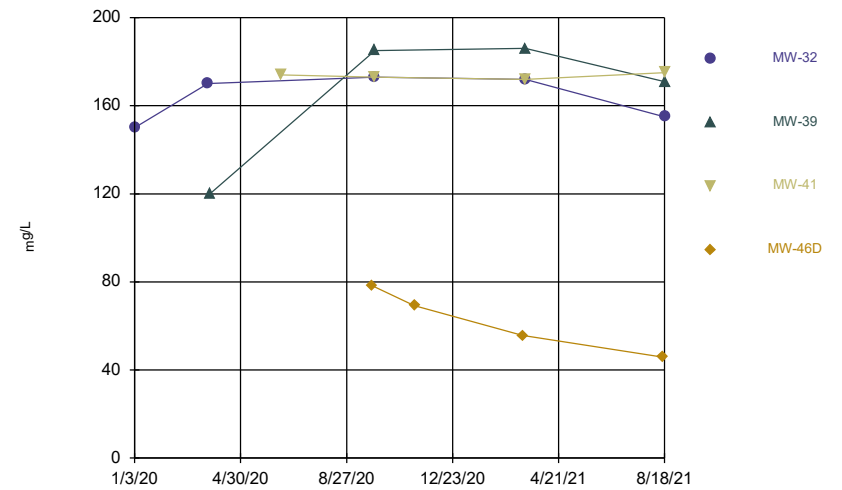
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



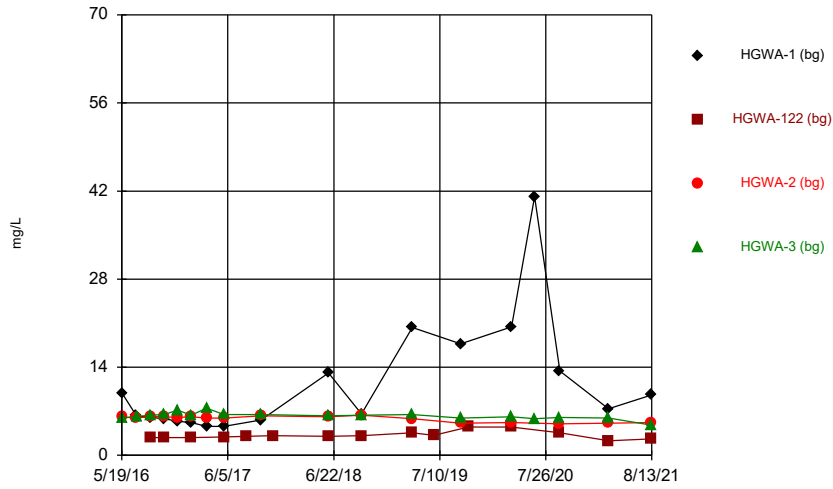
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Time Series



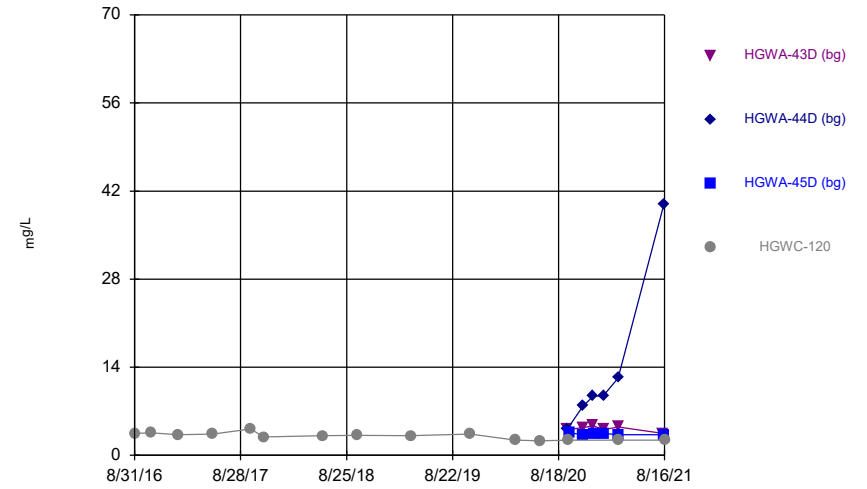
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Time Series



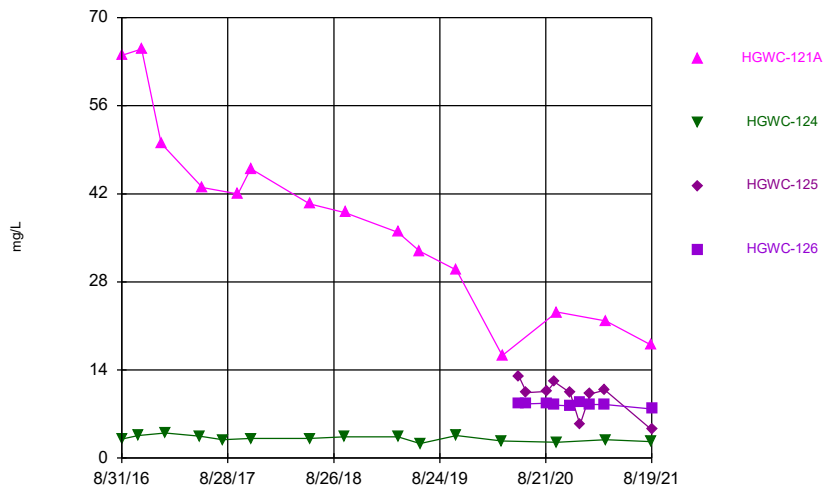
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



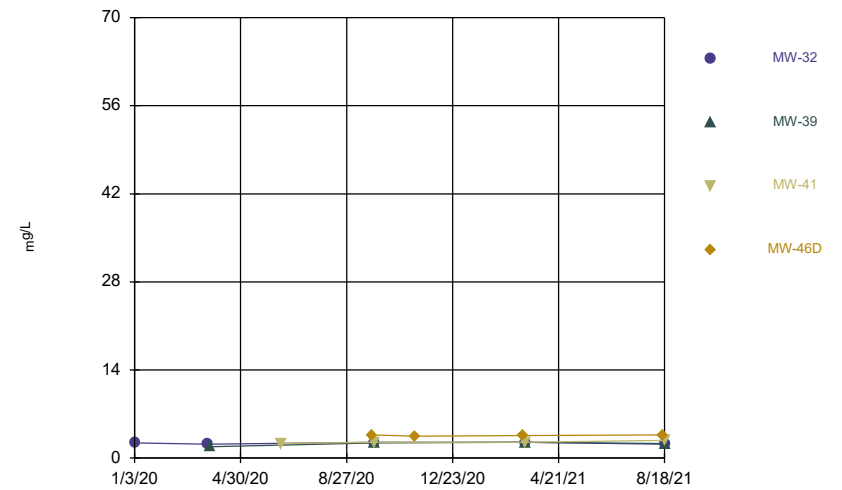
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



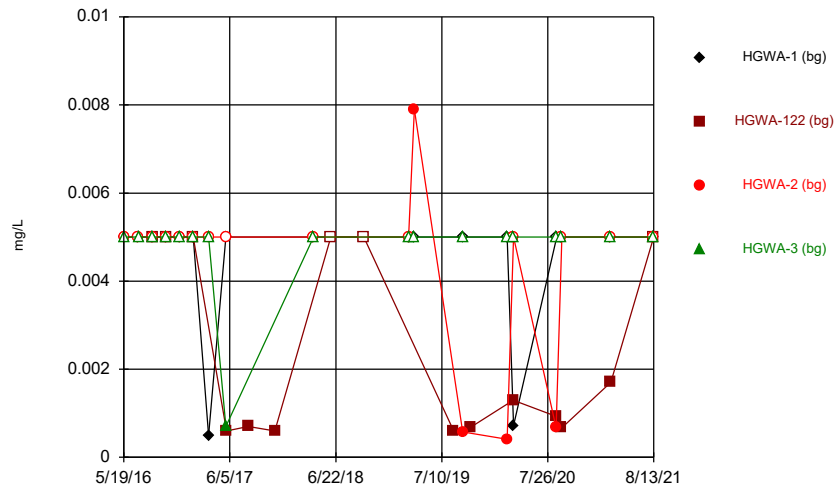
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



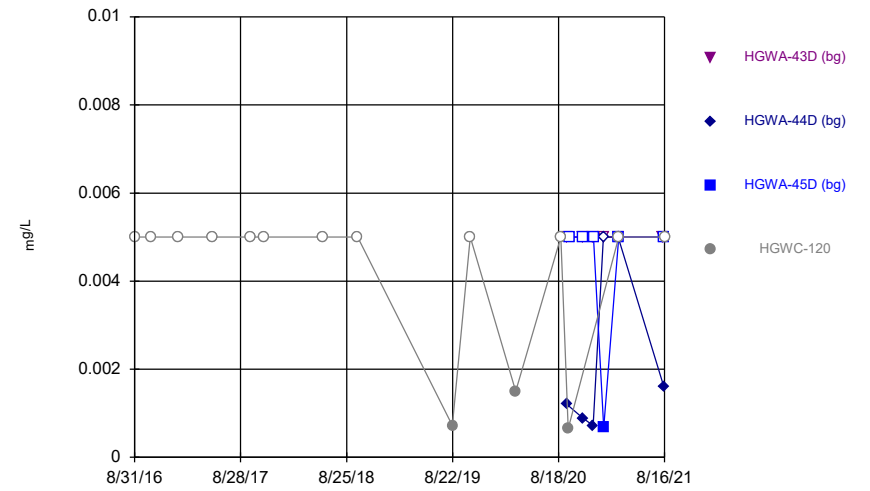
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Time Series



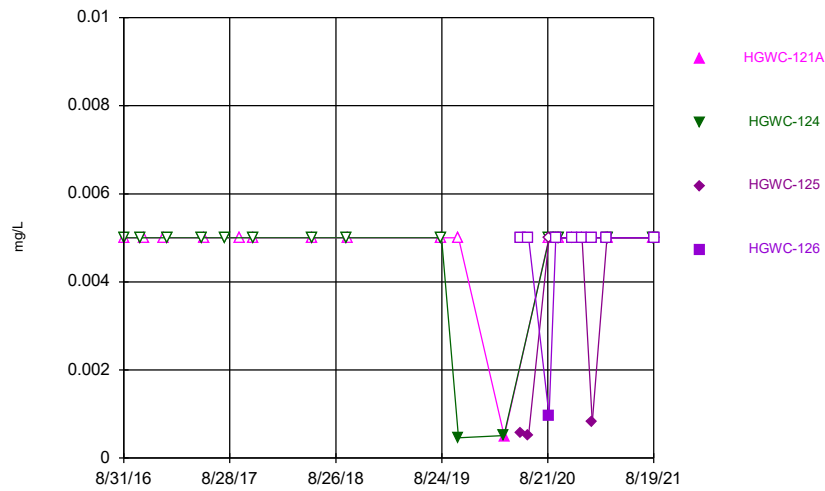
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



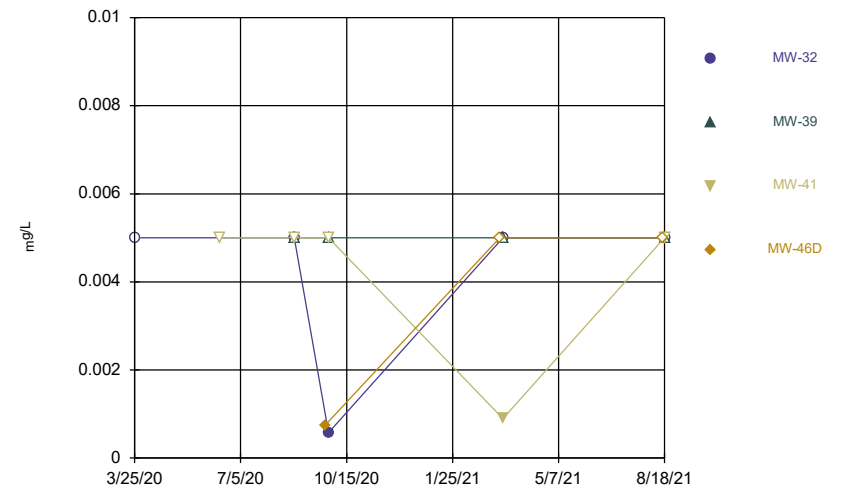
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



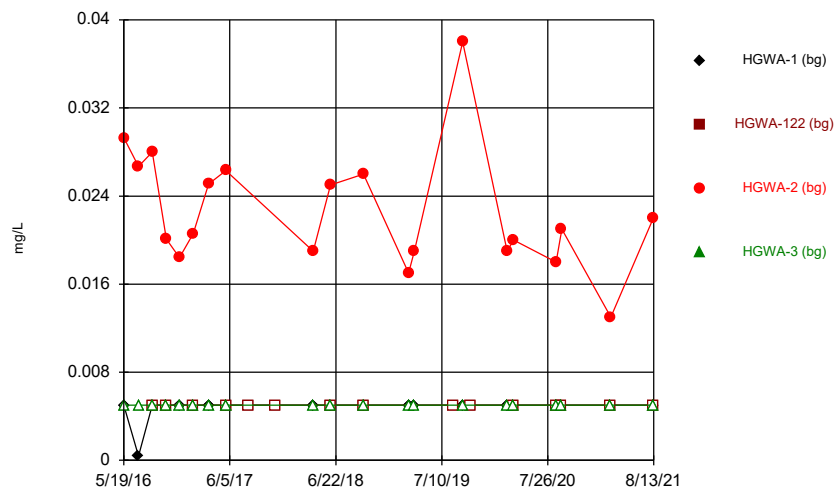
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Time Series



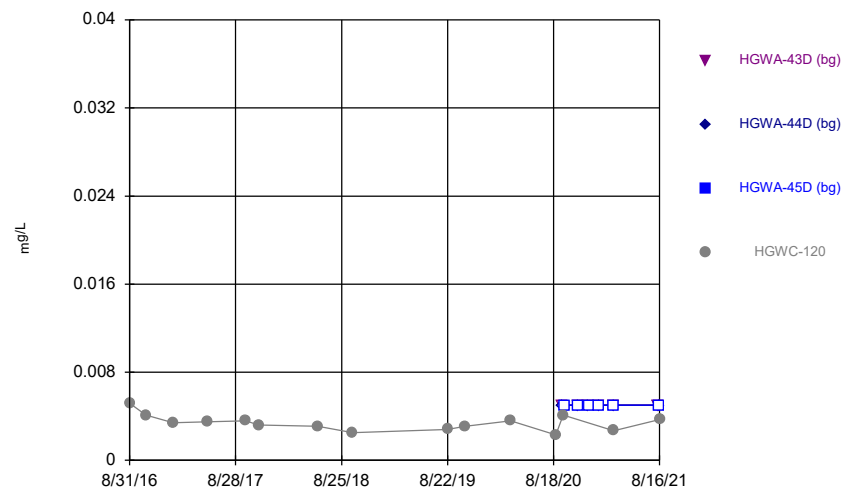
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Time Series



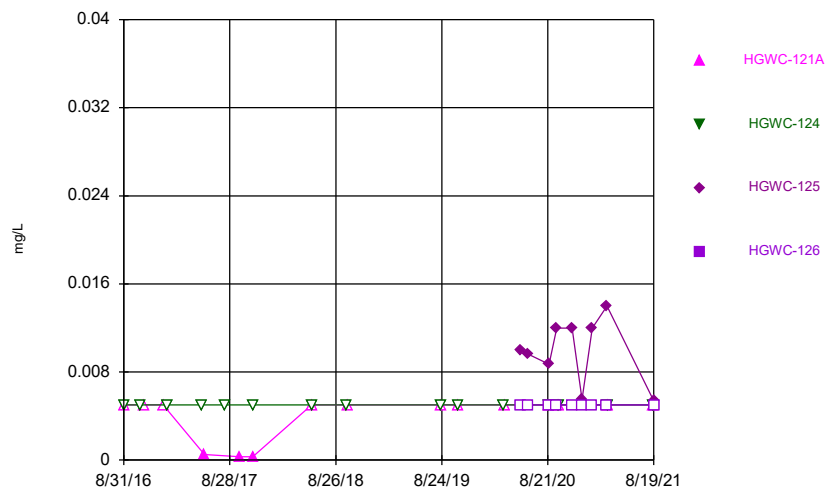
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



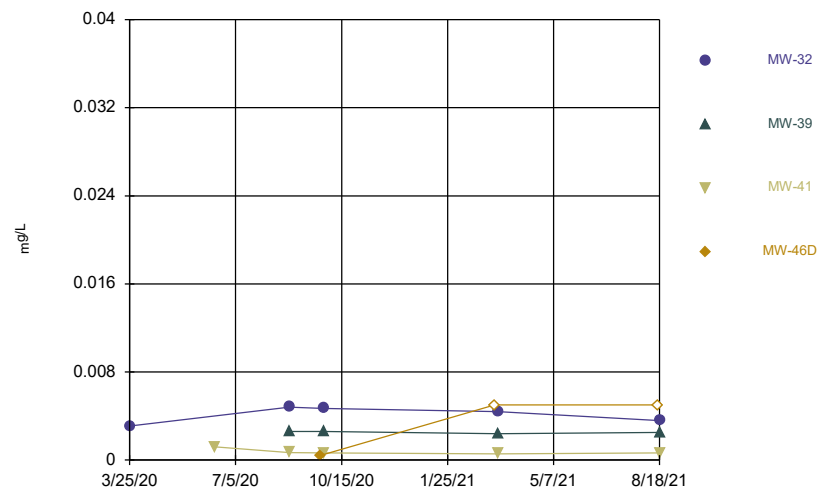
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Time Series



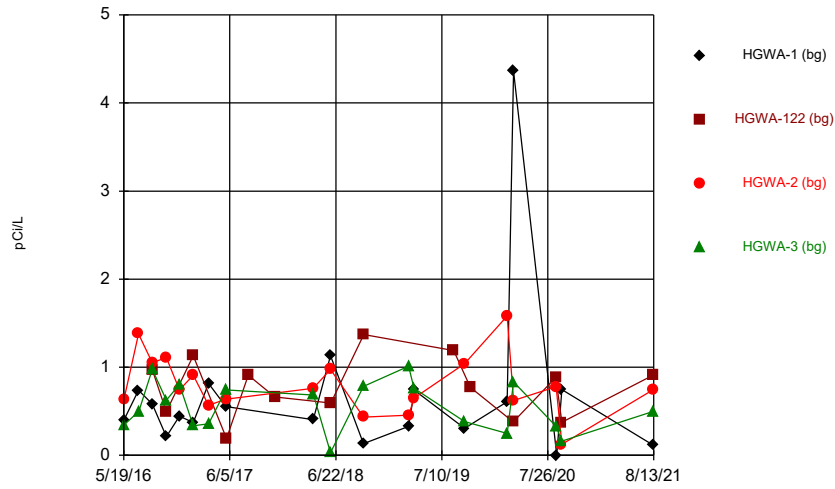
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Time Series



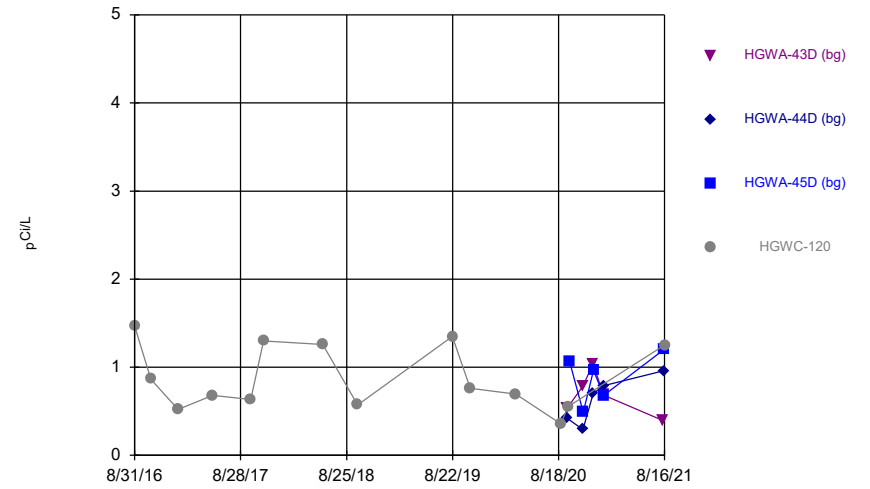
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



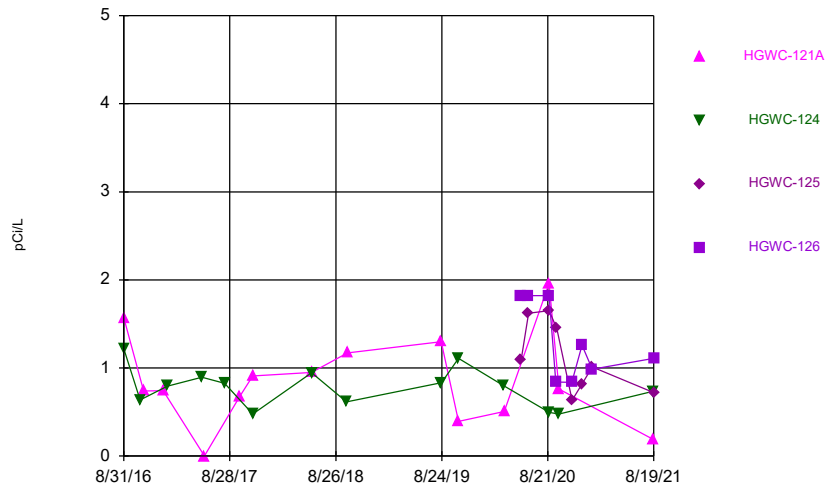
Constituent: Combined Radium 226 + 228 Analysis Run 10/14/2021 2:03 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



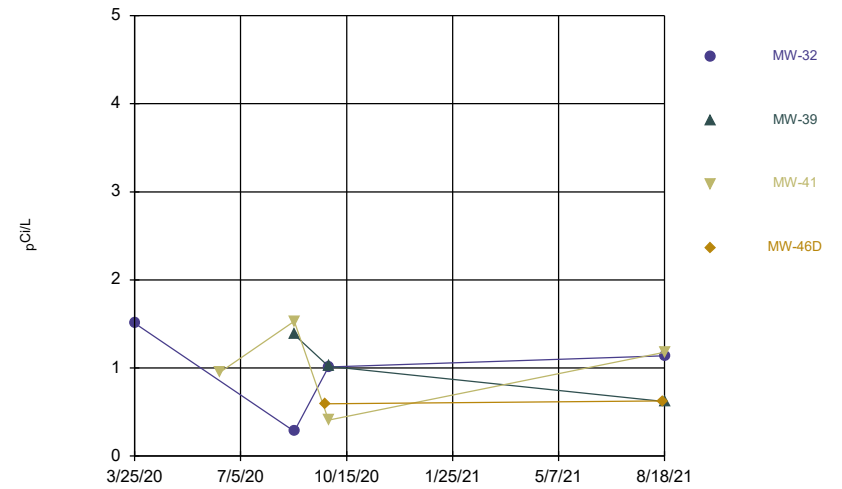
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



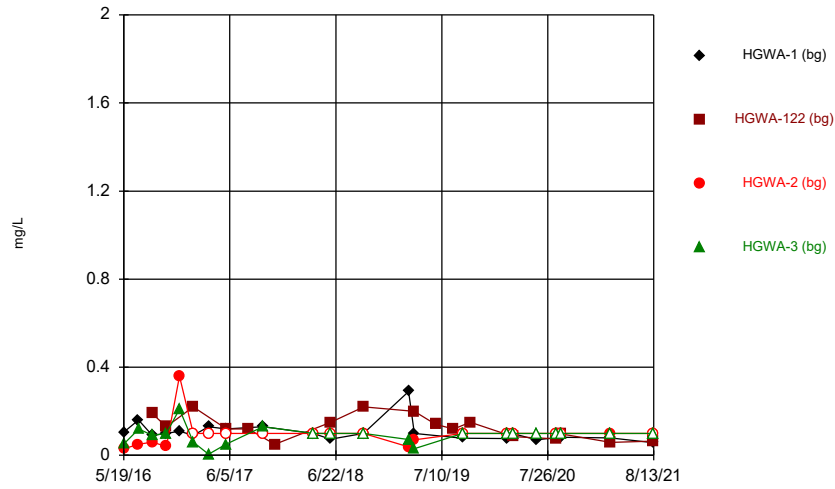
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



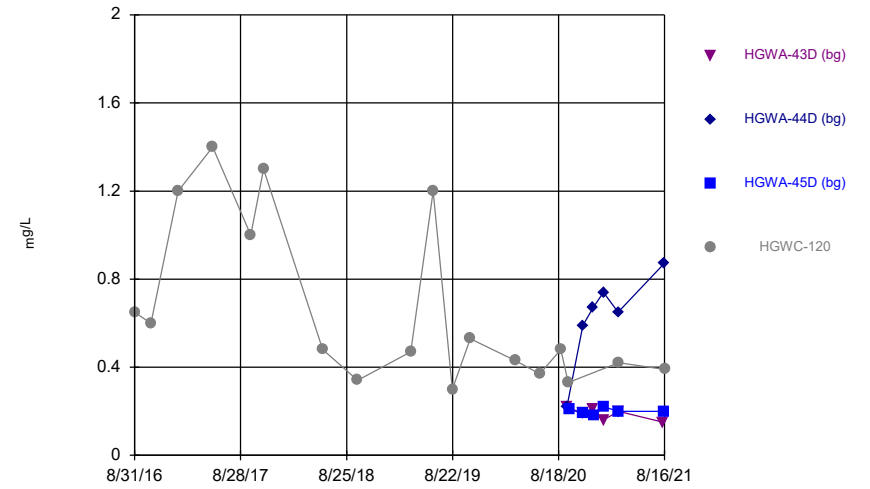
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



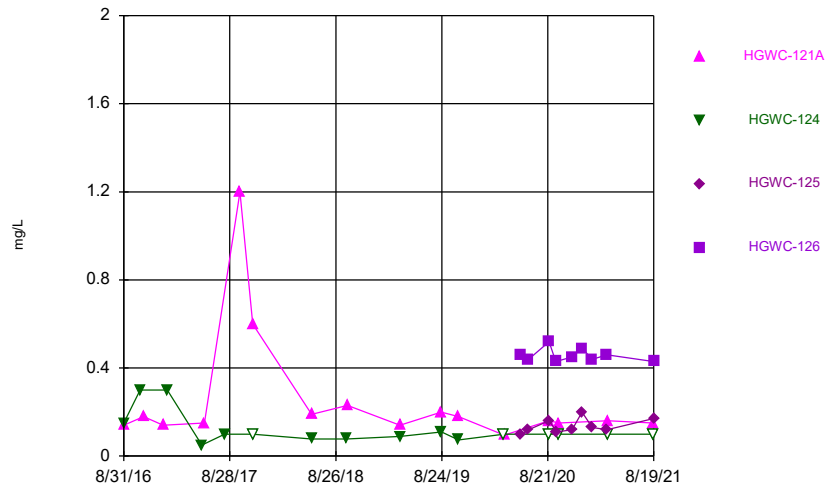
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



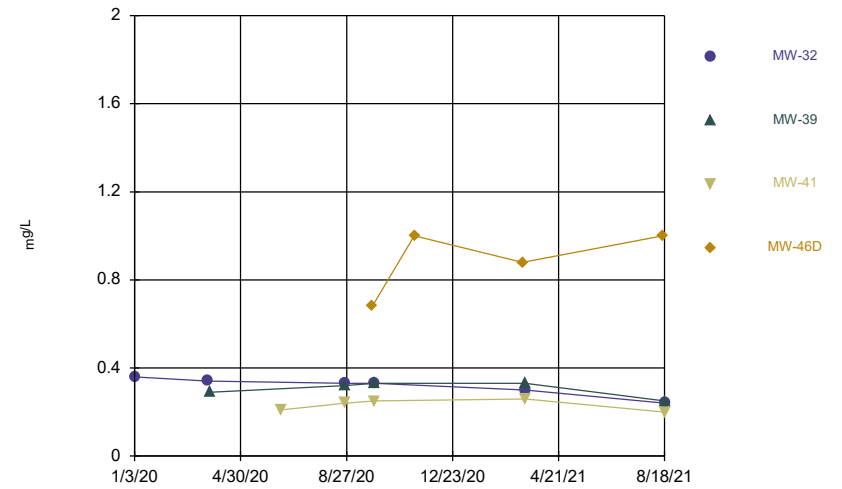
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### Time Series



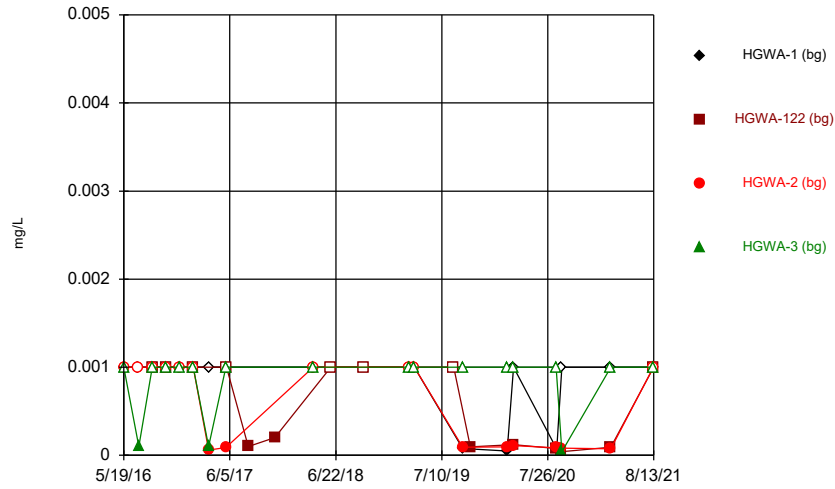
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### Time Series



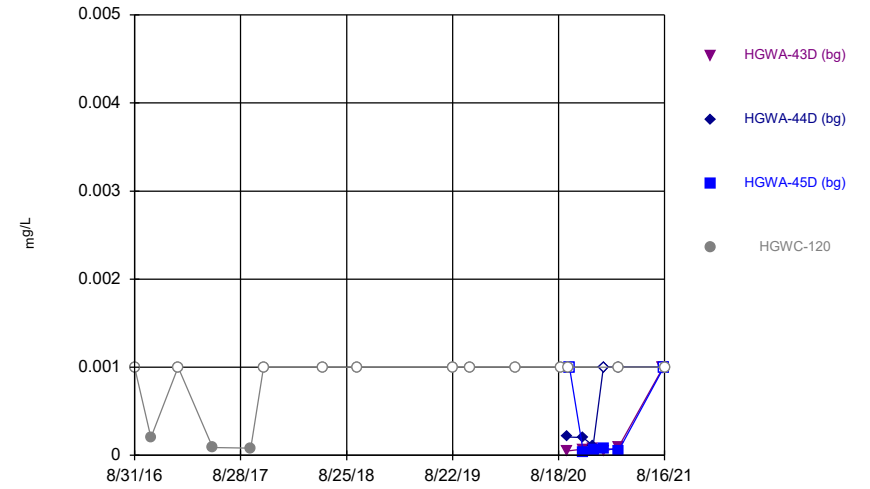
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### Time Series



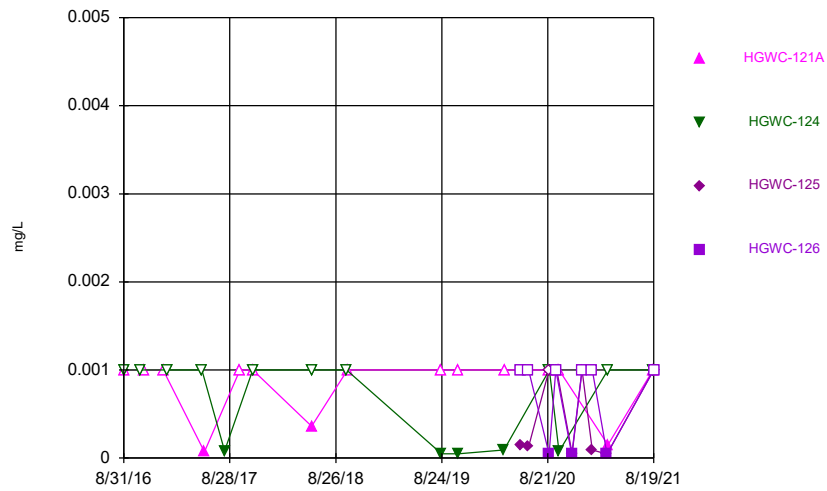
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



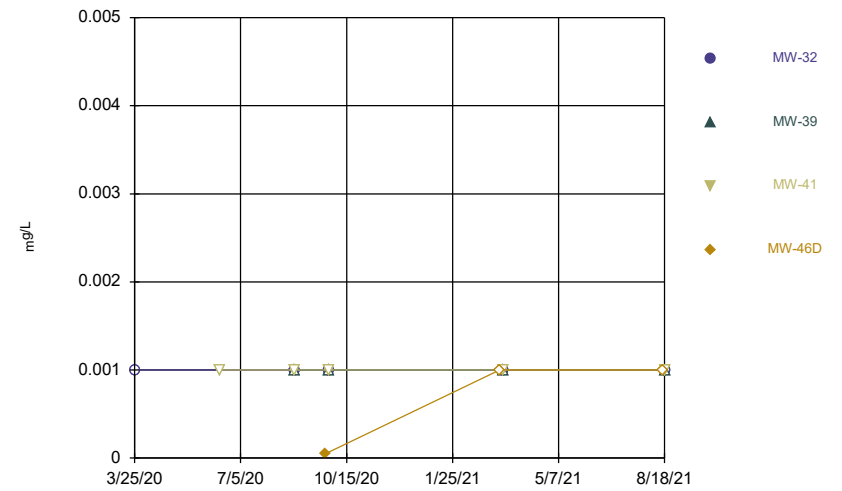
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



Constituent: Lead Analysis Run 10/14/2021 2:03 AM  
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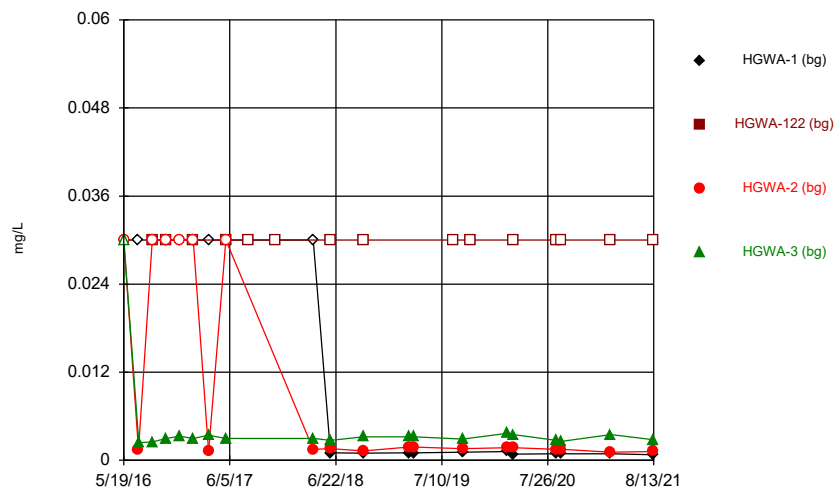
### Time Series



Constituent: Lead Analysis Run 10/14/2021 2:03 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

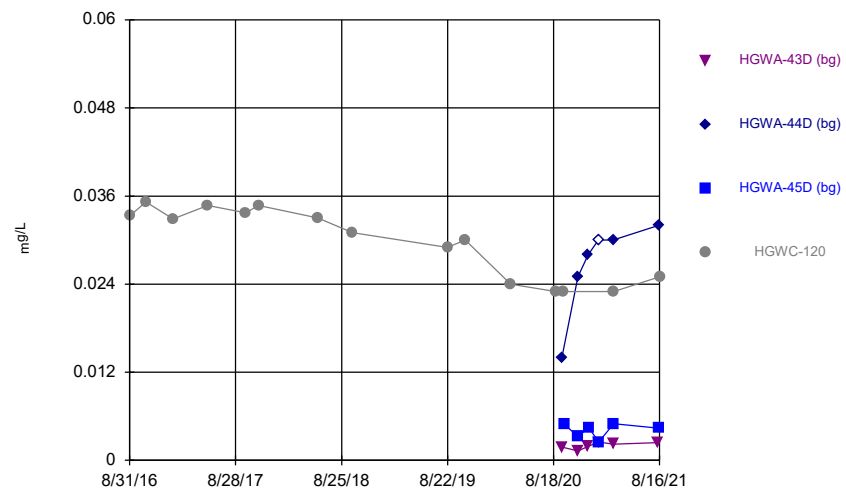


Time Series



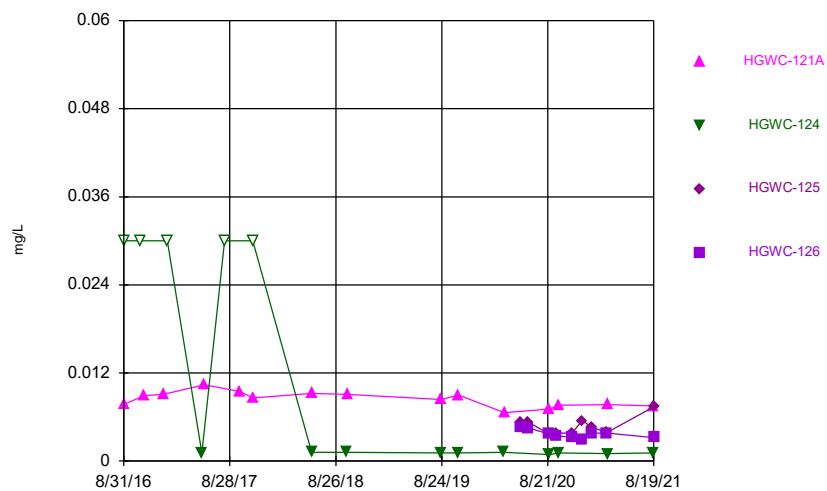
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



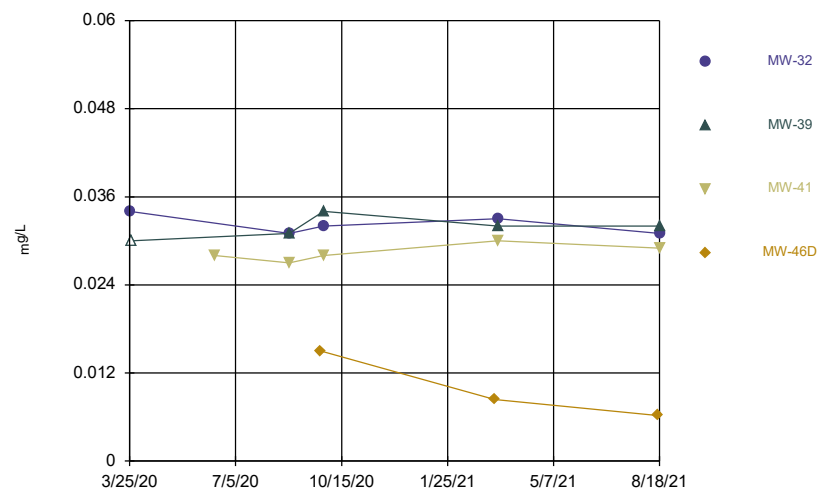
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



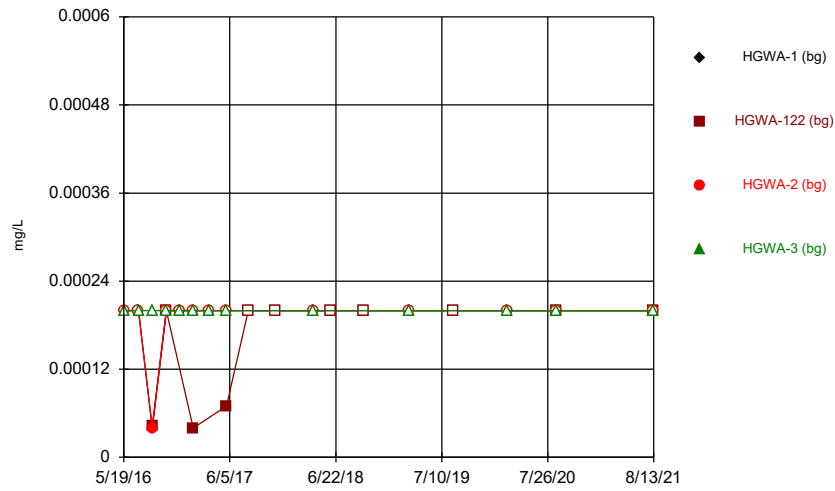
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



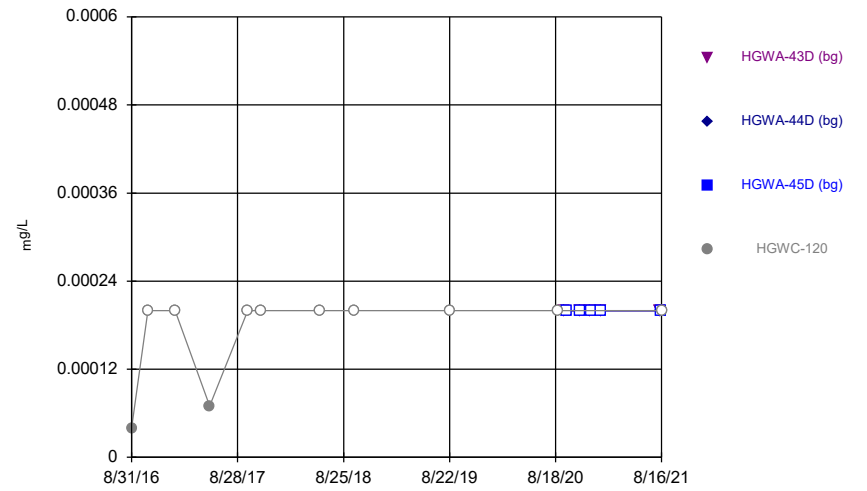
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



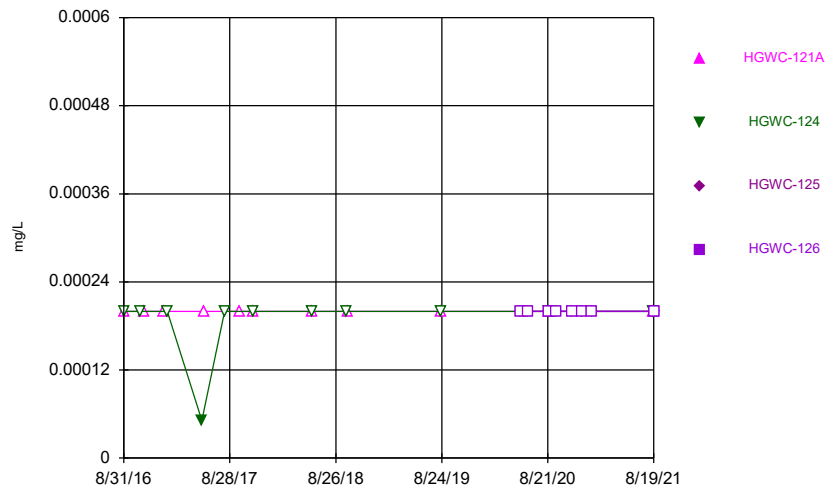
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series

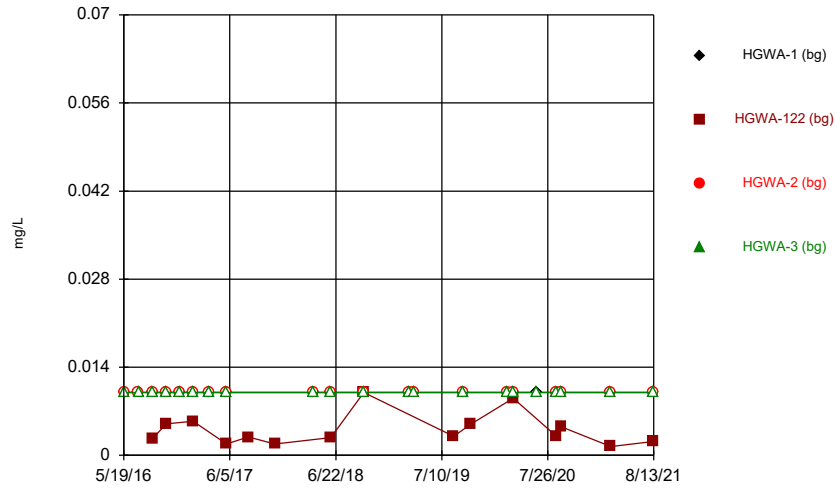


Constituent: Mercury Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series

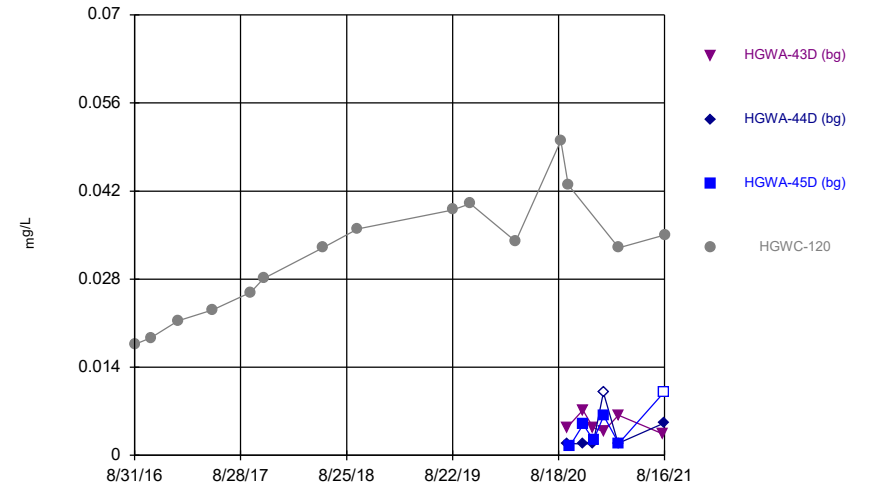


Time Series



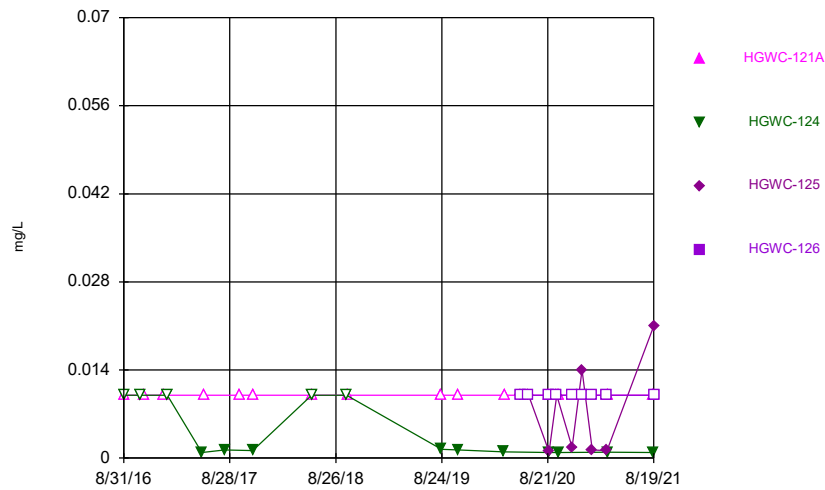
Constituent: Molybdenum Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



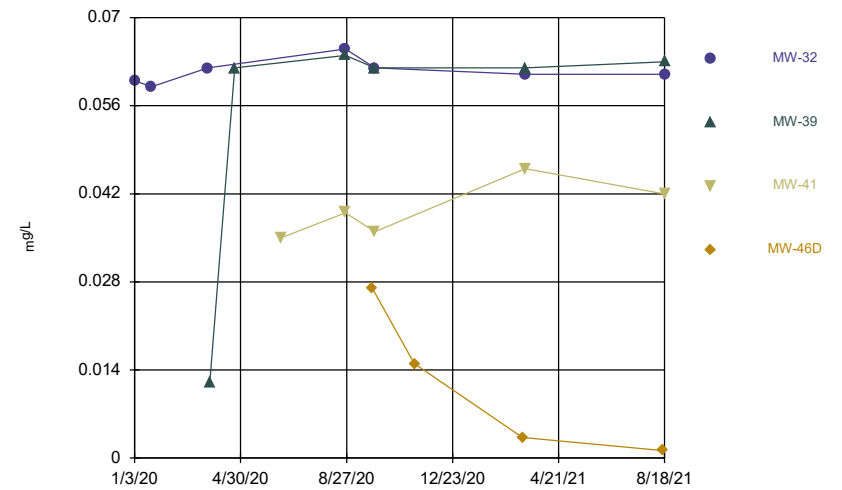
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



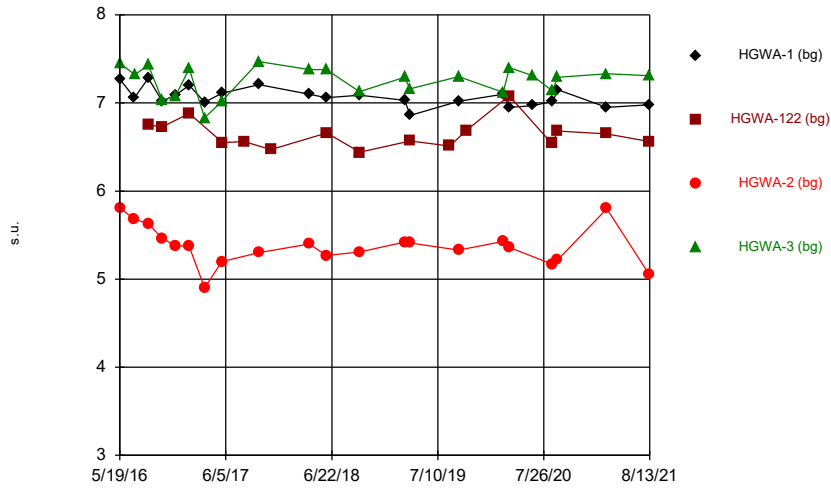
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



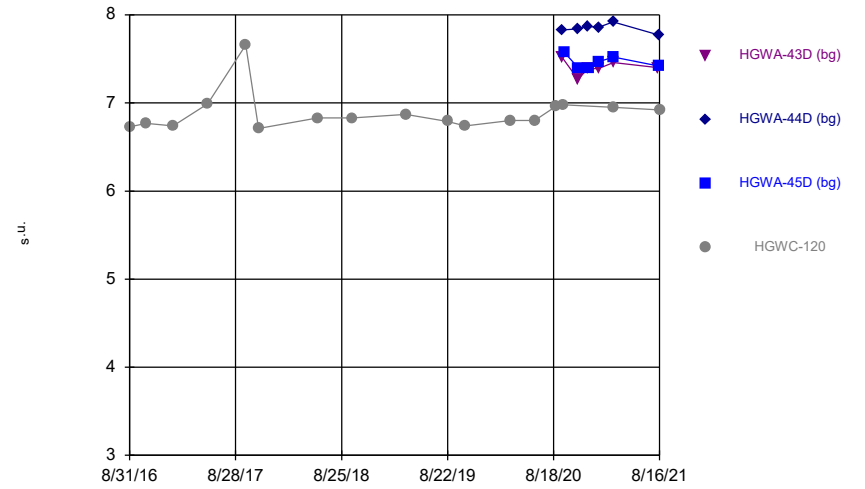
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Time Series



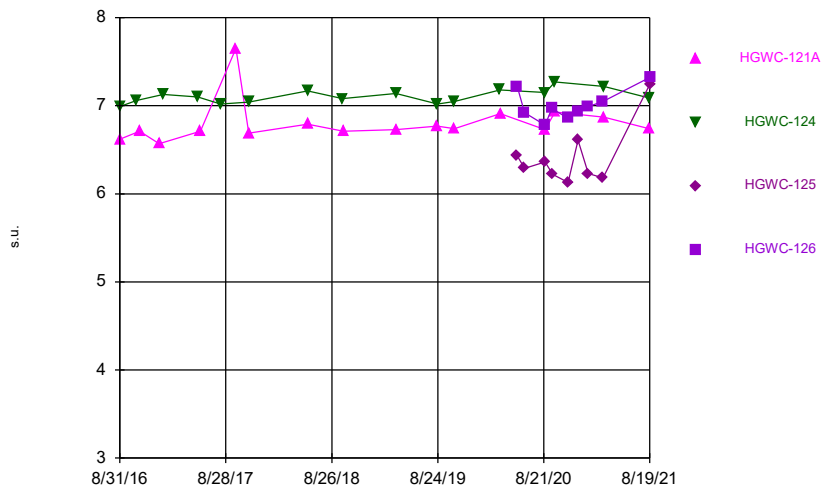
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



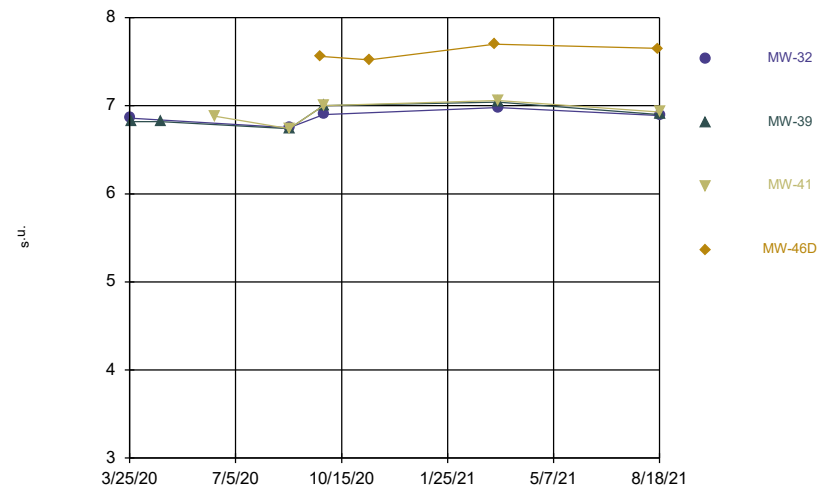
Constituent: pH Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



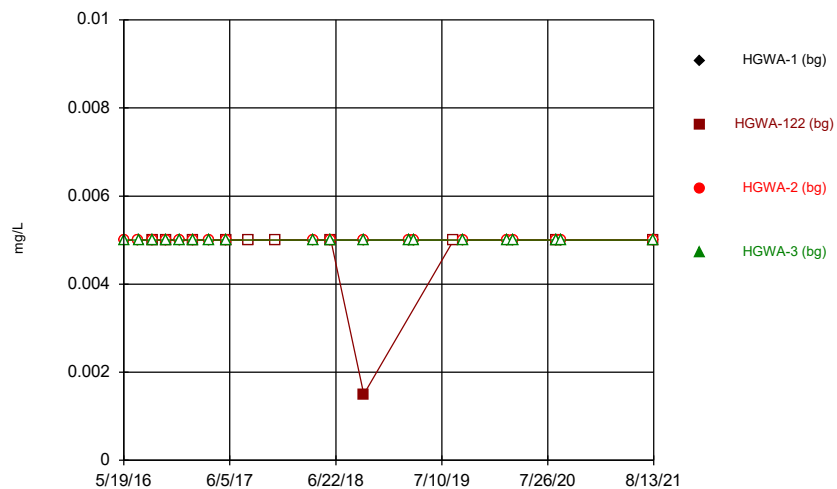
Constituent: pH Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



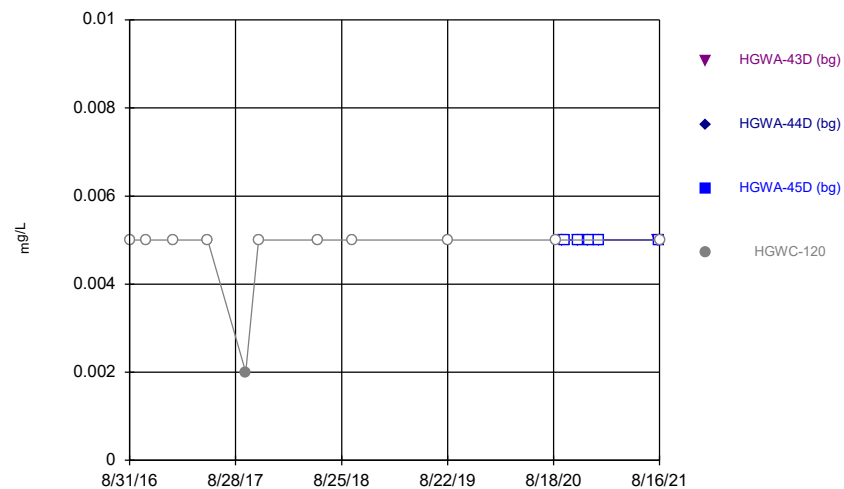
Constituent: pH Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



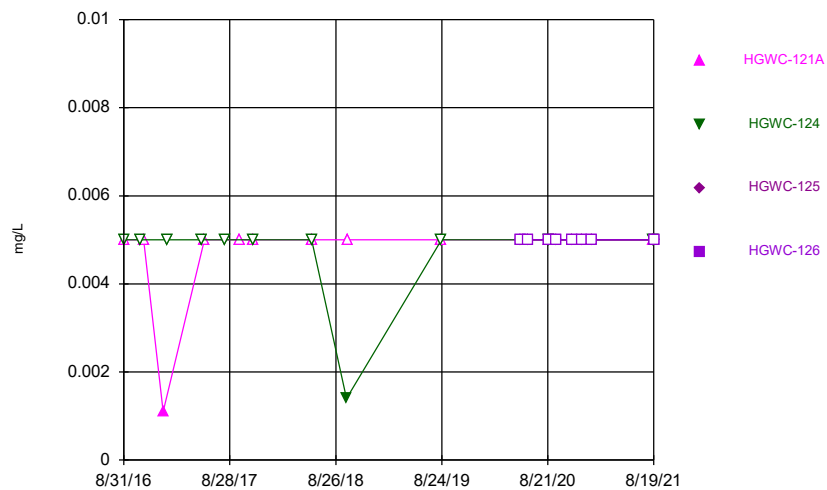
Constituent: Selenium Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



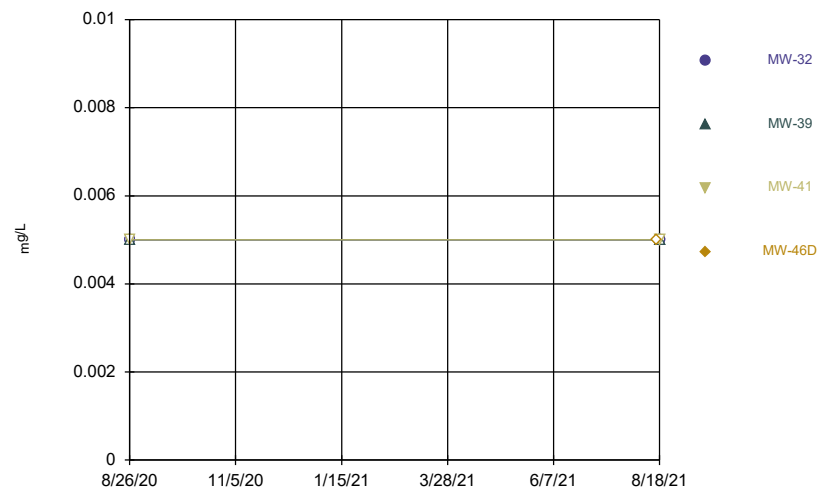
Constituent: Selenium Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



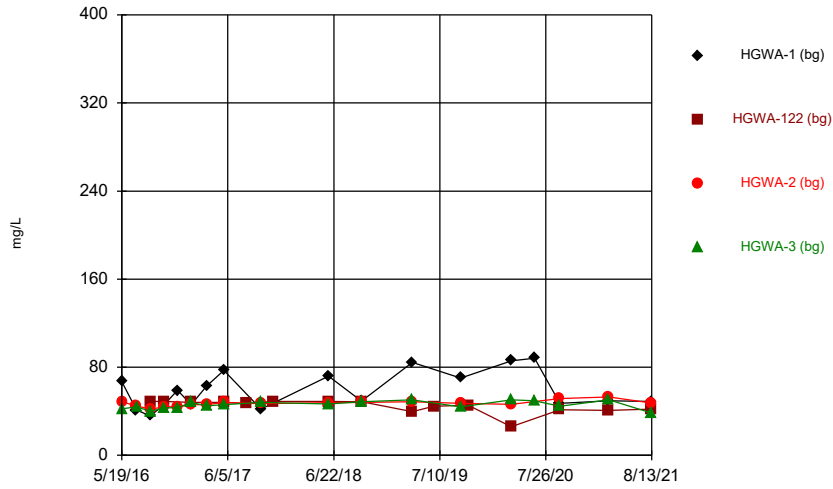
Constituent: Selenium Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



Constituent: Selenium Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

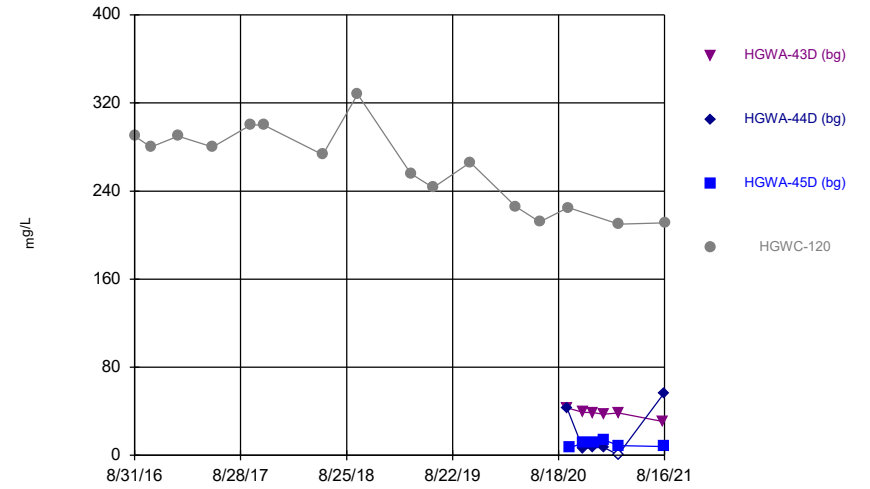
Time Series



Constituent: Sulfate Analysis Run 10/14/2021 2:04 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

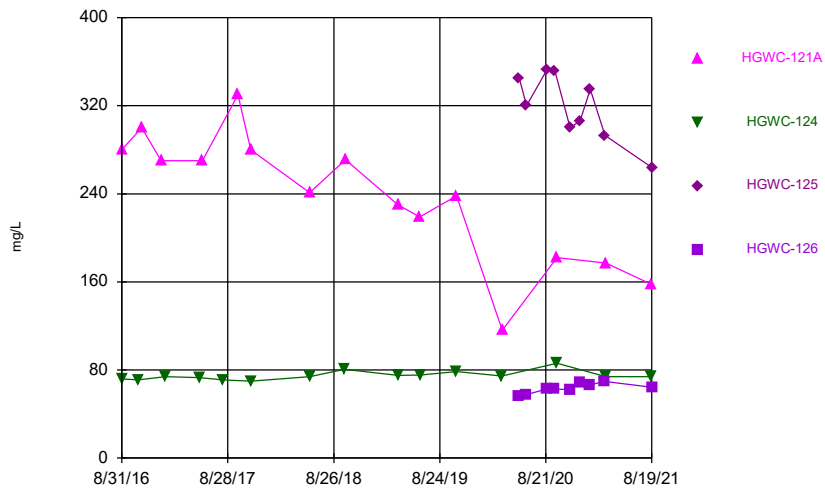
Hollow symbols indicate censored values.

Time Series



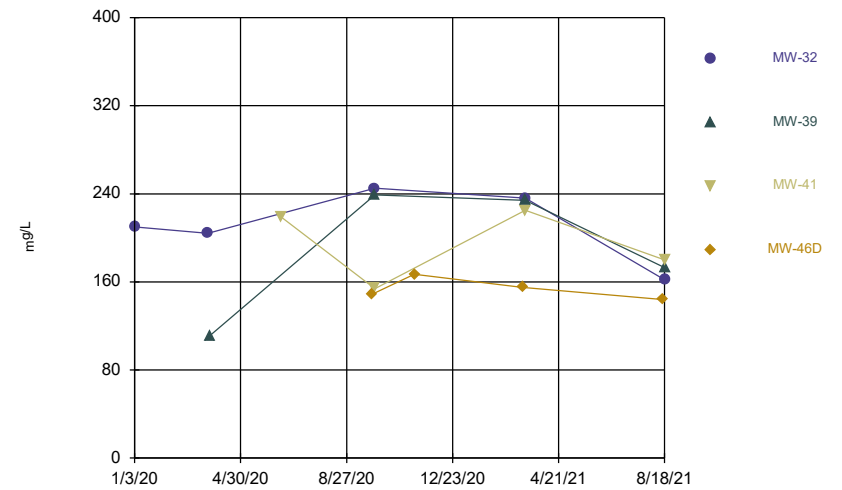
Constituent: Sulfate Analysis Run 10/14/2021 2:04 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



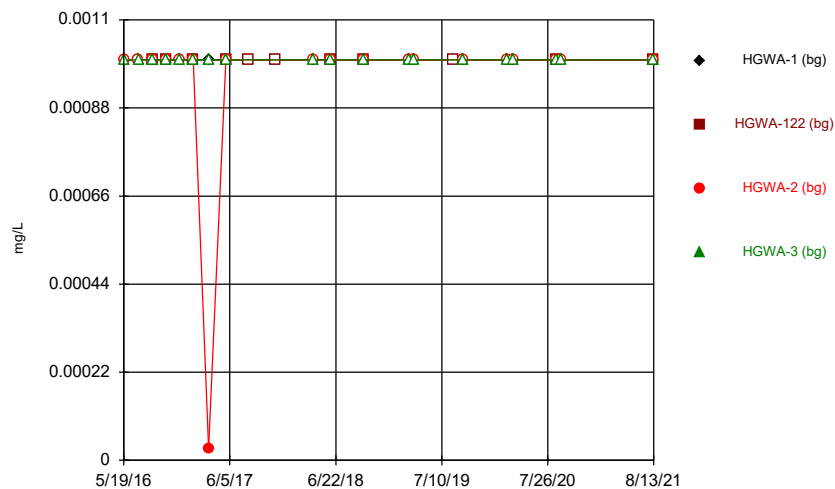
Constituent: Sulfate Analysis Run 10/14/2021 2:04 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



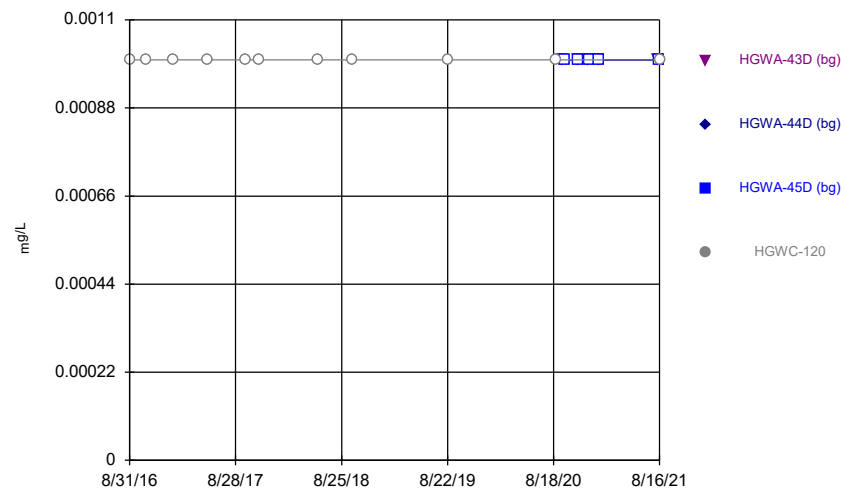
Constituent: Sulfate Analysis Run 10/14/2021 2:04 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



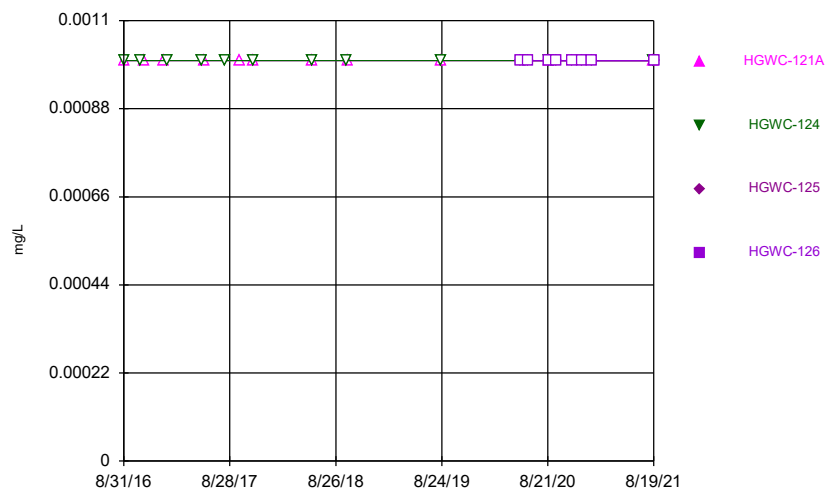
Constituent: Thallium Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



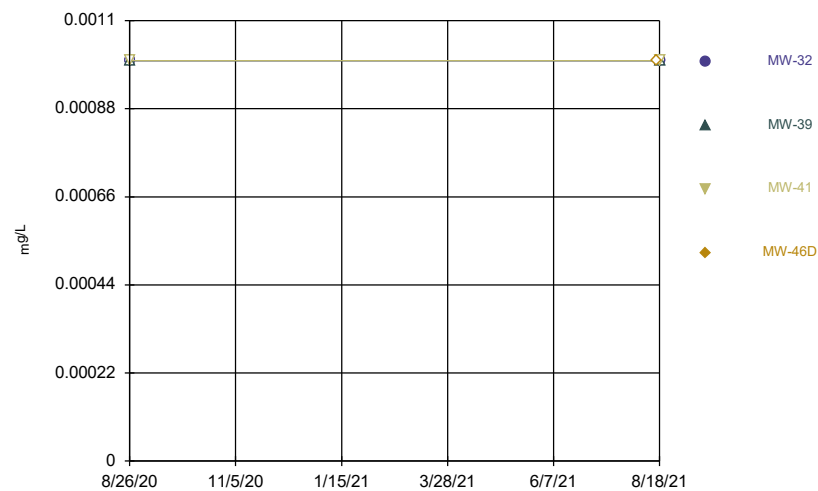
Constituent: Thallium Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



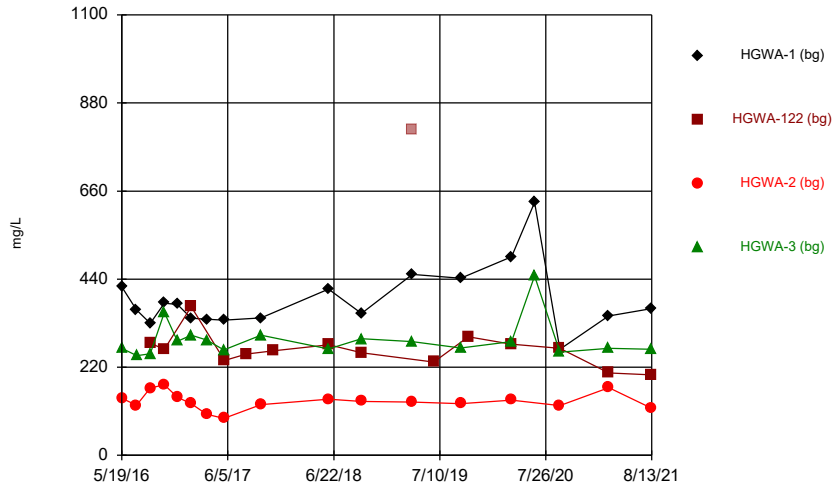
Constituent: Thallium Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



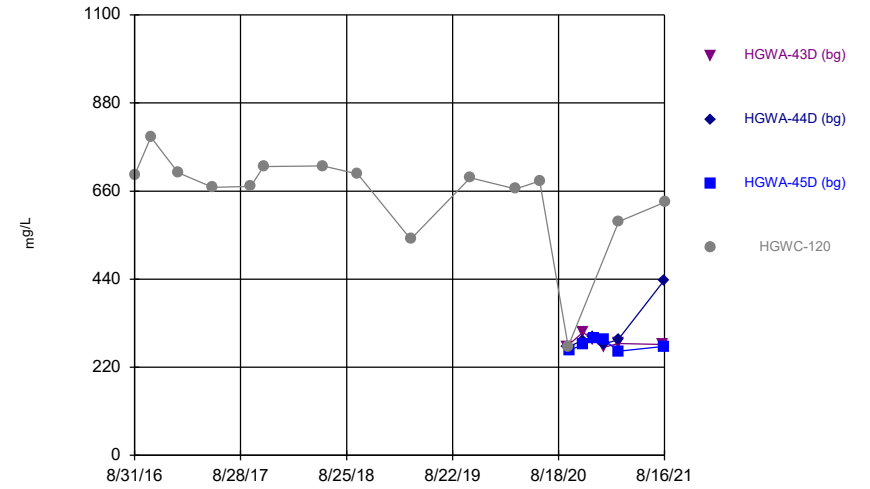
Constituent: Thallium Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



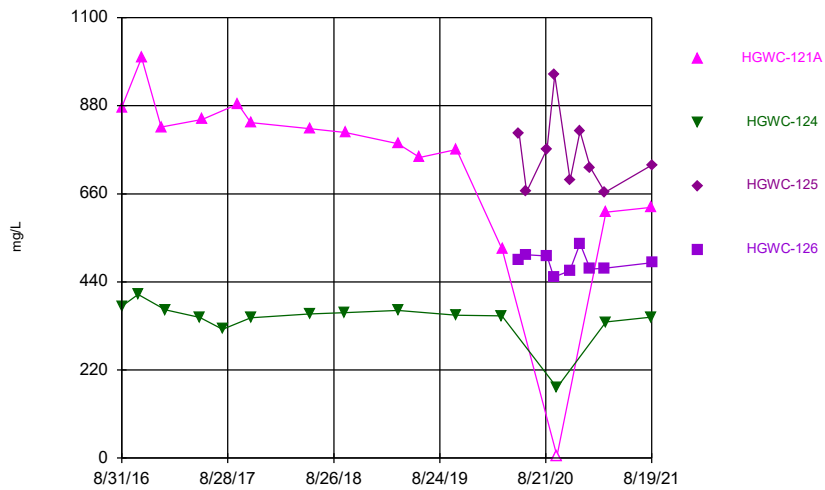
Constituent: Total Dissolved Solids Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



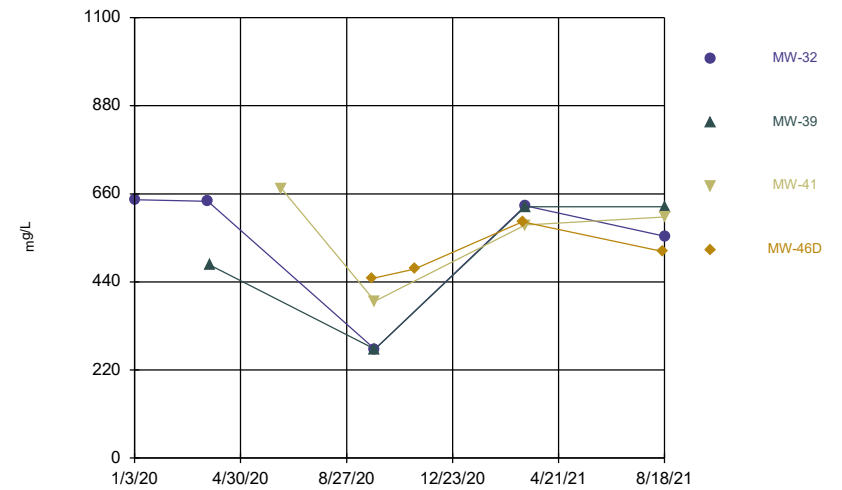
Constituent: Total Dissolved Solids Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



Constituent: Total Dissolved Solids Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



Constituent: Total Dissolved Solids Analysis Run 10/14/2021 2:04 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3



# Time Series

Constituent: Antimony (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	<0.003			
3/11/2021		<0.003	<0.003	<0.003
8/11/2021	<0.003			
8/12/2021			<0.003	<0.003
8/13/2021		<0.003		

# Time Series

Constituent: Antimony (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.003
10/26/2016				<0.003
1/27/2017				<0.003
5/25/2017				<0.003
10/2/2017				<0.003
11/15/2017				<0.003
6/5/2018				<0.003
10/2/2018				<0.003
8/22/2019				<0.003
8/26/2020				<0.003
9/16/2020	0.00051 (J)	0.00049 (J)		
9/21/2020				<0.003
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)	<0.003		
1/20/2021			<0.003	
3/10/2021		0.00037 (J)		
3/11/2021	0.00057 (J)			
3/12/2021			0.0003 (J)	0.0018 (J)
8/11/2021	<0.003			
8/13/2021		<0.003	<0.003	
8/16/2021				<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.003	<0.003		
10/26/2016		<0.003		
11/7/2016	<0.003			
1/13/2017	<0.003			
1/27/2017		<0.003		
5/25/2017		<0.003		
6/3/2017	<0.003			
8/11/2017		<0.003		
10/2/2017	<0.003			
11/15/2017	<0.003	<0.003		
6/5/2018	<0.003	<0.003		
10/2/2018		<0.003		
10/5/2018	<0.003			
8/22/2019	<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			
8/27/2020		<0.003		
9/18/2020				<0.003
9/21/2020			<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			0.00061 (J)	0.00043 (J)
3/15/2021	<0.003	<0.003		
8/16/2021	<0.003	<0.003		
8/19/2021			<0.003	<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	0.00035 (J)	<0.003	<0.003	
9/25/2020				<0.003
9/28/2020	<0.003	<0.003	<0.003	
3/12/2021				0.00041 (J)
3/15/2021	<0.003	<0.003	<0.003	
8/16/2021				<0.003
8/18/2021	<0.003	<0.003	<0.003	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
8/11/2021	<0.005			
8/12/2021			<0.005	<0.005
8/13/2021		<0.005		

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.005
10/26/2016				<0.005
1/27/2017				<0.005
5/25/2017				0.0014 (J)
10/2/2017				0.0007 (J)
11/15/2017				<0.005
6/5/2018				0.001 (J)
10/2/2018				<0.005
8/22/2019				<0.005
8/26/2020				<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)	
8/11/2021	0.0015 (J)			
8/13/2021		<0.005	0.0012 (J)	
8/16/2021				0.0015 (J)

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005		
10/26/2016		<0.005		
11/7/2016	<0.005			
1/13/2017	<0.005			
1/27/2017		<0.005		
5/25/2017		0.0006 (J)		
6/3/2017	0.001 (J)			
8/11/2017		<0.005		
10/2/2017	<0.005			
11/15/2017	<0.005	<0.005		
6/5/2018	0.0014 (J)	<0.005		
10/2/2018		<0.005		
10/5/2018	<0.005			
8/22/2019	<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			
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	0.0014 (J)	<0.005		
8/19/2021			<0.005	<0.005

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

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	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.005	<0.005	<0.005	
8/16/2021				0.0032 (J)
8/18/2021	<0.005	<0.005	<0.005	



# Time Series

Constituent: Barium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	0.03			
3/11/2021		0.032	0.07	0.13
8/11/2021	0.03			
8/12/2021			0.12	0.11
8/13/2021		0.033		

# Time Series

Constituent: Barium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.045
10/26/2016				0.0462
1/27/2017				0.0451
5/25/2017				0.0488
10/2/2017				0.0479
11/15/2017				0.051
6/5/2018				0.051
10/2/2018				0.059
8/22/2019				0.05
10/22/2019				0.051
3/25/2020				0.052
8/26/2020				0.041
9/16/2020	0.26	0.24		
9/21/2020				0.046
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	<0.01		
1/20/2021			0.53	
3/10/2021		0.26		
3/11/2021	0.3			
3/12/2021			0.54	0.047
8/11/2021	0.28			
8/13/2021		0.22	0.51	
8/16/2021				0.052

# Time Series

Constituent: Barium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.0782	0.0744		
10/26/2016		0.0735		
11/7/2016	0.0764			
1/13/2017	0.0744			
1/27/2017		0.0632		
5/25/2017		0.0773		
6/3/2017	0.0933			
8/11/2017		0.0672		
10/2/2017	0.0815			
11/15/2017	0.0807	0.0707		
6/5/2018	0.078	0.07		
10/2/2018		0.067		
10/5/2018	0.074			
8/22/2019	0.066			
8/23/2019		0.066		
10/21/2019	0.074	0.075		
3/24/2020		0.075		
3/25/2020	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	0.057			
8/27/2020		0.062		
9/18/2020				0.21
9/21/2020			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			0.043	0.27
3/15/2021	0.059	0.071		
8/16/2021	0.06	0.069		
8/19/2021			0.044	0.27

# Time Series

Constituent: Barium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	0.062			
6/15/2020			0.074	
8/26/2020	0.055	0.059	0.066	
9/25/2020				0.04
9/28/2020	0.053	0.058	0.071	
3/12/2021				0.03
3/15/2021	0.057	0.059	0.063	
8/16/2021				0.026
8/18/2021	0.054	0.06	0.064	

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)
5/19/2016	<0.0005		<0.0005	<0.0005
7/11/2016	<0.0005		0.0001 (J)	
7/12/2016				<0.0005
8/30/2016	<0.0005	<0.0005	<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		<0.0005	
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
3/10/2021	<0.0005			
3/11/2021		<0.0005	8.6E-05 (J)	<0.0005
8/11/2021	<0.0005			
8/12/2021			0.00014 (J)	<0.0005
8/13/2021		<0.0005		

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.0005
10/26/2016				<0.0005
1/27/2017				<0.0005
5/25/2017				<0.0005
10/2/2017				<0.0005
11/15/2017				<0.0005
6/5/2018				<0.0005
10/2/2018				<0.0005
8/22/2019				<0.0005
8/26/2020				<0.0005
9/16/2020	<0.0005	<0.0005		
9/21/2020				<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	
3/10/2021		<0.0005		
3/11/2021	<0.0005			
3/12/2021			<0.0005	<0.0005
8/11/2021	<0.0005			
8/13/2021		<0.0005	<0.0005	
8/16/2021				<0.0005

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.0005	<0.0005		
10/26/2016		<0.0005		
11/7/2016	<0.0005			
1/13/2017	<0.0005			
1/27/2017		<0.0005		
5/25/2017		<0.0005		
6/3/2017	<0.0005			
8/11/2017		<0.0005		
10/2/2017	<0.0005			
11/15/2017	<0.0005	<0.0005		
6/5/2018	<0.0005	<0.0005		
10/2/2018		<0.0005		
10/5/2018	<0.0005			
8/22/2019	<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			
8/27/2020		<0.0005		
9/18/2020				<0.0005
9/21/2020			<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
3/15/2021	<0.0005	<0.0005		
8/16/2021	<0.0005	<0.0005		
8/19/2021			<0.0005	<0.0005

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.0005	<0.0005	<0.0005	
9/25/2020				<0.0005
9/28/2020	<0.0005	<0.0005	<0.0005	
3/12/2021				<0.0005
3/15/2021	<0.0005	<0.0005	<0.0005	
8/16/2021				<0.0005
8/18/2021	<0.0005	<0.0005	<0.0005	



# Time Series

Constituent: Boron (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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)
3/10/2021	0.015 (J)			
3/11/2021		0.2	0.056	0.015 (J)
8/11/2021	0.02 (J)			
8/12/2021			0.044	<0.04
8/13/2021		0.19		

# Time Series

Constituent: Boron (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.981
10/26/2016				1.28
1/27/2017				1.19
5/25/2017				1.33
10/2/2017				1.19
11/15/2017				1.24
6/5/2018				1.2
10/2/2018				1.2
4/2/2019				1.1
6/17/2019				1.1
10/22/2019				1
3/25/2020				1.1
6/15/2020				1.1
9/16/2020	0.061 (J)	0.23		
9/21/2020				0.93
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)	<0.04		
1/20/2021			0.19	
3/10/2021		0.39		
3/11/2021	0.06			
3/12/2021			0.19	1.1
8/11/2021	0.042			
8/13/2021		0.31	0.15	
8/16/2021				1.1

# Time Series

Constituent: Boron (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	3.23	0.494		
10/26/2016		0.55		
11/7/2016	2.95			
1/13/2017	4.01			
1/27/2017		0.428		
5/25/2017		0.544		
6/3/2017	2.62			
8/11/2017		0.524		
10/2/2017	2.92			
11/15/2017	2.71	0.531		
6/5/2018	2.6	0.53		
10/2/2018		0.47		
10/5/2018	2.9			
4/3/2019	3	0.45		
6/17/2019	2.4			
6/18/2019		0.45		
10/21/2019	2.4	0.5		
3/24/2020		0.44		
3/25/2020	1.6			
5/22/2020			1.5	0.026 (J)
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			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	<0.04
3/12/2021			1.5	0.016 (J)
3/15/2021	1.9	0.4		
8/16/2021	2	0.44		
8/19/2021			1.5	0.011 (J)

# Time Series

Constituent: Boron (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	1.1			
3/25/2020	1.2			
3/27/2020		0.7		
6/15/2020			1.2	
9/25/2020				0.51
9/28/2020	1.3	1.3	1.2	
11/11/2020				0.68
3/12/2021				0.69
3/15/2021	1.2	1.2	1.1	
8/16/2021				0.87
8/18/2021	1.2	1.2	1.1	

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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	<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
8/11/2021	<0.0005			
8/12/2021			0.00014 (J)	<0.0005
8/13/2021		<0.0005		

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.0005
10/26/2016				<0.0005
1/27/2017				<0.0005
5/25/2017				<0.0005
10/2/2017				<0.0005
11/15/2017				<0.0005
6/5/2018				<0.0005
10/2/2018				<0.0005
8/22/2019				<0.0005
8/26/2020				<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	
8/11/2021	<0.0005			
8/13/2021		<0.0005	<0.0005	
8/16/2021				<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.0005	<0.0005		
10/26/2016		<0.0005		
11/7/2016	<0.0005			
1/13/2017	<0.0005			
1/27/2017		<0.0005		
5/25/2017		<0.0005		
6/3/2017	<0.0005			
8/11/2017		<0.0005		
10/2/2017	<0.0005			
11/15/2017	<0.0005	<0.0005		
6/5/2018	<0.0005	<0.0005		
10/2/2018		<0.0005		
10/5/2018	<0.0005			
8/22/2019	<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			
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		
8/19/2021			<0.0005	<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.0005	<0.0005	<0.0005	
8/16/2021				<0.0005
8/18/2021	<0.0005	<0.0005	<0.0005	



# Time Series

Constituent: Calcium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	111			
3/11/2021		60.4 (M1)	43.8	83.8
8/11/2021	113			
8/12/2021			21.9	84
8/13/2021		62.9		

# Time Series

Constituent: Calcium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				152
10/26/2016				156
1/27/2017				157
5/25/2017				173
10/2/2017				168
11/15/2017				182
6/5/2018				161
10/2/2018				174
4/2/2019				150
6/17/2019				164
10/22/2019				171
3/25/2020				170
6/15/2020				175
9/16/2020	56	30		
9/21/2020				152
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		18.3		
3/11/2021	59.6			
3/12/2021			56.5	174
8/11/2021	61			
8/13/2021		28.9	53	
8/16/2021				171

# Time Series

Constituent: Calcium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	178	90.4		
10/26/2016		94.5		
11/7/2016	170			
1/13/2017	192			
1/27/2017		84.2		
5/25/2017		100		
6/3/2017	172			
8/11/2017		99.1		
10/2/2017	195			
11/15/2017	184	103		
6/5/2018	195	103		
10/2/2018		100		
10/5/2018	181			
4/3/2019	184	96.7		
6/17/2019	173			
6/18/2019		97.1		
10/21/2019	173	96.9		
3/24/2020		104		
3/25/2020	139			
5/22/2020			140	112
6/16/2020			178	131
8/25/2020			186	130
9/18/2020				119
9/21/2020			155	
9/28/2020	167	107		
11/11/2020				133
11/12/2020			165	
12/16/2020			194	132
1/20/2021			177 (M1)	131
3/12/2021			165	138
3/15/2021	167	103		
8/16/2021	162	106		
8/19/2021			196	139

# Time Series

Constituent: Calcium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	150			
3/25/2020	170			
3/27/2020		120		
6/15/2020			174	
9/25/2020				78.3
9/28/2020	173	185	173	
11/11/2020				69.3
3/12/2021				55.7
3/15/2021	172	186	172	
8/16/2021				45.8
8/18/2021	155	171	175	

# Time Series

Constituent: Chloride (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	7.4			
3/11/2021		2.3	5.1	5.9
8/11/2021	9.6			
8/12/2021			5.2	4.8
8/13/2021		2.6		

# Time Series

Constituent: Chloride (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				3.5
10/26/2016				3.6
1/27/2017				3.3
5/25/2017				3.4
10/2/2017				4.2
11/15/2017				2.9
6/5/2018				3.1
10/2/2018				3.2
4/2/2019				3.1
10/22/2019				3.4
3/25/2020				2.4
6/15/2020				2.3
9/16/2020	4.1	4.1		
9/21/2020				2.4
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		12.3		
3/11/2021	4.5			
3/12/2021			3.3	2.4
8/11/2021	3.5			
8/13/2021		39.9	3.3	
8/16/2021				2.4

# Time Series

Constituent: Chloride (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	64	3		
10/26/2016		3.6		
11/7/2016	65			
1/13/2017	50			
1/27/2017		4		
5/25/2017		3.5		
6/3/2017	43			
8/11/2017		2.9		
10/2/2017	42			
11/15/2017	46	3.1		
6/5/2018	40.4	3.1		
10/2/2018		3.4		
10/5/2018	39			
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		
3/24/2020		2.7		
3/25/2020	16.3			
5/22/2020			12.9	8.6
6/16/2020			10.4	8.6
8/25/2020			10.6	8.7
9/18/2020				8.4
9/21/2020			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			10.8	8.5
3/15/2021	21.8	2.9		
8/16/2021	18	2.6		
8/19/2021			4.5	7.8

# Time Series

Constituent: Chloride (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	2.4			
3/25/2020	2.2			
3/27/2020		1.8		
6/15/2020			2.3	
9/25/2020				3.7
9/28/2020	2.5	2.4	2.5	
11/11/2020				3.5
3/12/2021				3.6
3/15/2021	2.5	2.5	2.5	
8/16/2021				3.7
8/18/2021	2.2	2.3	2.8	



# Time Series

Constituent: Chromium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	<0.005			
3/11/2021		0.0017 (J)	<0.005	<0.005
8/11/2021	<0.005			
8/12/2021			<0.005	<0.005
8/13/2021		<0.005		

# Time Series

Constituent: Chromium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.005
10/26/2016				<0.005
1/27/2017				<0.005
5/25/2017				<0.005
10/2/2017				<0.005
11/15/2017				<0.005
6/5/2018				<0.005
10/2/2018				<0.005
8/22/2019				0.00072 (J)
10/22/2019				<0.005
3/25/2020				0.0015 (J)
8/26/2020				<0.005
9/16/2020	<0.005	0.0012 (J)		
9/21/2020				0.00065 (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	<0.005		
1/20/2021			0.00067 (J)	
3/10/2021		<0.005		
3/11/2021	<0.005			
3/12/2021			<0.005	<0.005
8/11/2021	<0.005			
8/13/2021		0.0016 (J)	<0.005	
8/16/2021				<0.005

# Time Series

Constituent: Chromium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005		
10/26/2016		<0.005		
11/7/2016	<0.005			
1/13/2017	<0.005			
1/27/2017		<0.005		
5/25/2017		<0.005		
6/3/2017	<0.005			
8/11/2017		<0.005		
10/2/2017	<0.005			
11/15/2017	<0.005	<0.005		
6/5/2018	<0.005	<0.005		
10/2/2018		<0.005		
10/5/2018	<0.005			
8/22/2019	<0.005			
8/23/2019		<0.005		
10/21/2019	<0.005	0.00046 (J)		
3/24/2020		0.00051 (J)		
3/25/2020	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			
8/27/2020		<0.005		
9/18/2020				<0.005
9/21/2020			<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
3/15/2021	<0.005	<0.005		
8/16/2021	<0.005	<0.005		
8/19/2021			<0.005	<0.005

# Time Series

Constituent: Chromium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	<0.005			
6/15/2020			<0.005	
8/26/2020	<0.005	<0.005	<0.005	
9/25/2020				0.00075 (J)
9/28/2020	0.00058 (J)	<0.005	<0.005	
3/12/2021				<0.005
3/15/2021	<0.005	<0.005	0.0009 (J)	
8/16/2021				<0.005
8/18/2021	<0.005	<0.005	<0.005	

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	<0.005			
3/11/2021		<0.005	0.013	<0.005
8/11/2021	<0.005			
8/12/2021			0.022	<0.005
8/13/2021		<0.005		

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.0052 (J)
10/26/2016				0.0041 (J)
1/27/2017				0.0034 (J)
5/25/2017				0.0035 (J)
10/2/2017				0.0036 (J)
11/15/2017				0.0032 (J)
6/5/2018				0.0031 (J)
10/2/2018				0.0025 (J)
8/22/2019				0.0028 (J)
10/22/2019				0.0031 (J)
3/25/2020				0.0036 (J)
8/26/2020				0.0023 (J)
9/16/2020	<0.005	<0.005		
9/21/2020				0.0041 (J)
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	
3/10/2021		<0.005		
3/11/2021	<0.005			
3/12/2021			<0.005	0.0027 (J)
8/11/2021	<0.005			
8/13/2021		<0.005	<0.005	
8/16/2021				0.0037 (J)

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005		
10/26/2016		<0.005		
11/7/2016	<0.005			
1/13/2017	<0.005			
1/27/2017		<0.005		
5/25/2017		<0.005		
6/3/2017	0.0005 (J)			
8/11/2017		<0.005		
10/2/2017	0.0003 (J)			
11/15/2017	0.0003 (J)	<0.005		
6/5/2018	<0.005	<0.005		
10/2/2018		<0.005		
10/5/2018	<0.005			
8/22/2019	<0.005			
8/23/2019		<0.005		
10/21/2019	<0.005	<0.005		
3/24/2020		<0.005		
3/25/2020	<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	<0.005			
8/27/2020		<0.005		
9/18/2020				<0.005
9/21/2020			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			0.014	<0.005
3/15/2021	<0.005	<0.005		
8/16/2021	<0.005	<0.005		
8/19/2021			0.0054	<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	0.0031 (J)			
6/15/2020			0.0012 (J)	
8/26/2020	0.0048 (J)	0.0026 (J)	0.00068 (J)	
9/25/2020				0.00041 (J)
9/28/2020	0.0047 (J)	0.0026 (J)	0.00066 (J)	
3/12/2021				<0.005
3/15/2021	0.0044 (J)	0.0024 (J)	0.00057 (J)	
8/16/2021				<0.005
8/18/2021	0.0036 (J)	0.0025 (J)	0.00064 (J)	



# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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)
8/11/2021	0.115 (U)			
8/12/2021			0.746 (U)	0.498 (U)
8/13/2021		0.914 (U)		

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				1.47
10/26/2016				0.864 (U)
1/27/2017				0.521 (U)
5/25/2017				0.681 (U)
10/2/2017				0.632 (U)
11/15/2017				1.3
6/5/2018				1.26 (U)
10/2/2018				0.572 (U)
8/22/2019				1.35
10/22/2019				0.76 (U)
3/25/2020				0.696 (U)
8/26/2020				0.357 (U)
9/16/2020	0.531 (U)	0.422 (U)		
9/21/2020				0.553 (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)	
8/11/2021	0.394 (U)			
8/13/2021		0.959 (U)	1.2	
8/16/2021				1.25

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	1.57	1.22		
10/26/2016		0.637 (U)		
11/7/2016	0.739 (U)			
1/13/2017	0.744 (U)			
1/27/2017		0.795 (U)		
5/25/2017		0.896 (U)		
6/3/2017	0 (U)			
8/11/2017		0.828 (U)		
10/2/2017	0.68 (U)			
11/15/2017	0.911 (U)	0.478 (U)		
6/5/2018	0.948 (U)	0.947 (U)		
10/2/2018		0.617 (U)		
10/5/2018	1.17 (U)			
8/22/2019	1.3			
8/23/2019		0.834		
10/21/2019	0.393 (U)	1.11 (U)		
3/24/2020		0.796 (U)		
3/25/2020	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	1.96			
8/27/2020		0.494 (U)		
9/18/2020				0.841 (U)
9/21/2020			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	0.192 (U)	0.734 (U)		
8/19/2021			0.721 (U)	1.11

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	1.51			
6/15/2020			0.948 (U)	
8/26/2020	0.281 (U)	1.38	1.53	
9/25/2020				0.594 (U)
9/28/2020	1.01 (U)	1.02 (U)	0.409 (U)	
8/16/2021				0.625 (U)
8/18/2021	1.14	0.619 (U)	1.18	

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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	<0.1		<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	<0.1		<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
3/10/2021	0.079 (J)			
3/11/2021		0.059 (J)	0.1	<0.1
8/11/2021	0.058 (J)			
8/12/2021			<0.1	<0.1
8/13/2021		0.065 (J)		

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.65
10/26/2016				0.6
1/27/2017				1.2
5/25/2017				1.4
10/2/2017				1
11/15/2017				1.3
6/5/2018				0.48
10/2/2018				0.34
4/2/2019				0.47
6/17/2019				1.2
8/22/2019				0.3 (J)
10/22/2019				0.53
3/25/2020				0.43
6/15/2020				0.37
8/26/2020				0.48
9/16/2020	0.22	0.22		
9/21/2020				0.33
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	
3/10/2021		0.65		
3/11/2021	0.2			
3/12/2021			0.2	0.42
8/11/2021	0.15			
8/13/2021		0.87	0.2	
8/16/2021				0.39

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.14 (J)	0.15 (J)		
10/26/2016		0.3		
11/7/2016	0.18 (J)			
1/13/2017	0.14 (J)			
1/27/2017		0.3		
5/25/2017		0.05 (J)		
6/3/2017	0.15 (J)			
8/11/2017		0.1 (J)		
10/2/2017	1.2			
11/15/2017	0.6	<0.1		
6/5/2018	0.19 (J)	0.078 (J)		
10/2/2018		0.078 (J)		
10/5/2018	0.23 (J)			
4/3/2019	0.14 (J)	0.089 (J)		
8/22/2019	0.2 (J)			
8/23/2019		0.11 (J)		
10/21/2019	0.18 (J)	0.073 (J)		
3/24/2020		<0.1		
3/25/2020	0.095 (J)			
5/22/2020			0.1 (J)	0.46
6/16/2020			0.12	0.44
8/25/2020			0.16	0.52
8/26/2020	0.16			
8/27/2020		<0.1		
9/18/2020				0.43
9/21/2020			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			0.12	0.46
3/15/2021	0.16	<0.1		
8/16/2021	0.15	<0.1		
8/19/2021			0.17	0.43

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	0.36			
3/25/2020	0.34			
3/27/2020		0.29		
6/15/2020			0.21	
8/26/2020	0.33	0.32	0.24	
9/25/2020				0.68
9/28/2020	0.33	0.33	0.25	
11/11/2020				1
3/12/2021				0.88
3/15/2021	0.3	0.33	0.26	
8/16/2021				1
8/18/2021	0.24	0.25	0.2	



# Time Series

Constituent: Lead (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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)
3/10/2021	<0.001			
3/11/2021		9.3E-05 (J)	7.6E-05 (J)	<0.001
8/11/2021	<0.001			
8/12/2021			<0.001	<0.001
8/13/2021		<0.001		

# Time Series

Constituent: Lead (mg/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.001
10/26/2016				0.0002 (J)
1/27/2017				<0.001
5/25/2017				9E-05 (J)
10/2/2017				8E-05 (J)
11/15/2017				<0.001
6/5/2018				<0.001
10/2/2018				<0.001
8/22/2019				<0.001
10/22/2019				<0.001
3/25/2020				<0.001
8/26/2020				<0.001
9/16/2020	5E-05 (J)	0.00021 (J)		
9/21/2020				<0.001
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)	<0.001		
1/20/2021			8.2E-05 (J)	
3/10/2021		<0.001		
3/11/2021	9.4E-05 (J)			
3/12/2021			5.5E-05 (J)	<0.001
8/11/2021	<0.001			
8/13/2021		<0.001	<0.001	
8/16/2021				<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.001	<0.001		
10/26/2016		<0.001		
11/7/2016	<0.001			
1/13/2017	<0.001			
1/27/2017		<0.001		
5/25/2017		<0.001		
6/3/2017	7E-05 (J)			
8/11/2017		8E-05 (J)		
10/2/2017	<0.001			
11/15/2017	<0.001	<0.001		
6/5/2018	0.00036 (J)	<0.001		
10/2/2018		<0.001		
10/5/2018	<0.001			
8/22/2019	<0.001			
8/23/2019		4.9E-05 (J)		
10/21/2019	<0.001	4.9E-05 (J)		
3/24/2020		9.4E-05 (J)		
3/25/2020	<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			
8/27/2020		<0.001		
9/18/2020				<0.001
9/21/2020			<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			4.4E-05 (J)	4.6E-05 (J)
3/15/2021	0.00015 (J)	<0.001		
8/16/2021	<0.001	<0.001		
8/19/2021			<0.001	<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	<0.001			
6/15/2020			<0.001	
8/26/2020	<0.001	<0.001	<0.001	
9/25/2020				4.8E-05 (J)
9/28/2020	<0.001	<0.001	<0.001	
3/12/2021				<0.001
3/15/2021	<0.001	<0.001	<0.001	
8/16/2021				<0.001
8/18/2021	<0.001	<0.001	<0.001	

# Time Series

Constituent: Lithium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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)
3/10/2021	0.0009 (J)			
3/11/2021		<0.03	0.0011 (J)	0.0035 (J)
8/11/2021	0.00078 (J)			
8/12/2021			0.0012 (J)	0.0028 (J)
8/13/2021		<0.03		

# Time Series

Constituent: Lithium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.0333 (J)
10/26/2016				0.0352 (J)
1/27/2017				0.0329 (J)
5/25/2017				0.0347 (J)
10/2/2017				0.0337 (J)
11/15/2017				0.0347 (J)
6/5/2018				0.033 (J)
10/2/2018				0.031 (J)
8/22/2019				0.029 (J)
10/22/2019				0.03 (J)
3/25/2020				0.024 (J)
8/26/2020				0.023 (J)
9/16/2020	0.0018 (J)	0.014 (J)		
9/21/2020				0.023 (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)	<0.03		
1/20/2021			0.0025 (J)	
3/10/2021		0.03		
3/11/2021	0.0022 (J)			
3/12/2021			0.005 (J)	0.023 (J)
8/11/2021	0.0024 (J)			
8/13/2021		0.032	0.0044 (J)	
8/16/2021				0.025 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 10/14/2021 2:07 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.0077 (J)	<0.03		
10/26/2016		<0.03		
11/7/2016	0.0089 (J)			
1/13/2017	0.0091 (J)			
1/27/2017		<0.03		
5/25/2017		0.0011 (J)		
6/3/2017	0.0104 (J)			
8/11/2017		<0.03		
10/2/2017	0.0095 (J)			
11/15/2017	0.0086 (J)	<0.03		
6/5/2018	0.0092 (J)	0.0012 (J)		
10/2/2018		0.0012 (J)		
10/5/2018	0.0091 (J)			
8/22/2019	0.0084 (J)			
8/23/2019		0.0011 (J)		
10/21/2019	0.009 (J)	0.0011 (J)		
3/24/2020		0.0012 (J)		
3/25/2020	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	0.0071 (J)			
8/27/2020		0.00091 (J)		
9/18/2020				0.0035 (J)
9/21/2020			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			0.0039 (J)	0.0038 (J)
3/15/2021	0.0077 (J)	0.001 (J)		
8/16/2021	0.0075 (J)	0.0011 (J)		
8/19/2021			0.0074 (J)	0.0032 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	0.034			
3/27/2020		<0.03		
6/15/2020			0.028 (J)	
8/26/2020	0.031	0.031	0.027 (J)	
9/25/2020				0.015 (J)
9/28/2020	0.032	0.034	0.028 (J)	
3/12/2021				0.0084 (J)
3/15/2021	0.033	0.032	0.03 (J)	
8/16/2021				0.0062 (J)
8/18/2021	0.031	0.032	0.029 (J)	



# Time Series

Constituent: Mercury (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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			
8/11/2021	<0.0002			
8/12/2021			<0.0002	<0.0002
8/13/2021		<0.0002		

# Time Series

Constituent: Mercury (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				4E-05 (J)
10/26/2016				<0.0002
1/27/2017				<0.0002
5/25/2017				7E-05 (J)
10/2/2017				<0.0002
11/15/2017				<0.0002
6/5/2018				<0.0002
10/2/2018				<0.0002
8/22/2019				<0.0002
8/26/2020				<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	
8/11/2021	<0.0002			
8/13/2021		<0.0002	<0.0002	
8/16/2021				<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.0002	<0.0002		
10/26/2016		<0.0002		
11/7/2016	<0.0002			
1/13/2017	<0.0002			
1/27/2017		<0.0002		
5/25/2017		5.1E-05 (J)		
6/3/2017	<0.0002			
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		
10/5/2018	<0.0002			
8/22/2019	<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			
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		
8/19/2021			<0.0002	<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.0002	<0.0002	<0.0002	
8/16/2021				<0.0002
8/18/2021	<0.0002	<0.0002	<0.0002	

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	<0.01			
3/11/2021		0.0014 (J)	<0.01	<0.01
8/11/2021	<0.01			
8/12/2021			<0.01	<0.01
8/13/2021		0.0022 (J)		

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.0176
10/26/2016				0.0187
1/27/2017				0.0214
5/25/2017				0.0231
10/2/2017				0.0259
11/15/2017				0.0281
6/5/2018				0.033
10/2/2018				0.036
8/22/2019				0.039
10/22/2019				0.04
3/25/2020				0.034
8/26/2020				0.05
9/16/2020	0.0044 (J)	0.0019 (J)		
9/21/2020				0.043
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)	<0.01		
1/20/2021			0.0063 (J)	
3/10/2021		0.0019 (J)		
3/11/2021	0.0064 (J)			
3/12/2021			0.0019 (J)	0.033
8/11/2021	0.0034 (J)			
8/13/2021		0.0051 (J)	<0.01	
8/16/2021				0.035

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.01	<0.01		
10/26/2016		<0.01		
11/7/2016	<0.01			
1/13/2017	<0.01			
1/27/2017		<0.01		
5/25/2017		0.0009 (J)		
6/3/2017	<0.01			
8/11/2017		0.0013 (J)		
10/2/2017	<0.01			
11/15/2017	<0.01	0.0012 (J)		
6/5/2018	<0.01	<0.01		
10/2/2018		<0.01		
10/5/2018	<0.01			
8/22/2019	<0.01			
8/23/2019		0.0014 (J)		
10/21/2019	<0.01	0.0013 (J)		
3/24/2020		0.001 (J)		
3/25/2020	<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	<0.01			
8/27/2020		0.00091 (J)		
9/18/2020				<0.01
9/21/2020			<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			0.0012 (J)	<0.01
3/15/2021	<0.01	0.00092 (J)		
8/16/2021	<0.01	0.00091 (J)		
8/19/2021			0.021	<0.01

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	0.06			
1/22/2020	0.059			
3/25/2020	0.062			
3/27/2020		0.012		
4/24/2020		0.062		
6/15/2020			0.035	
8/26/2020	0.065	0.064	0.039	
9/25/2020				0.027
9/28/2020	0.062	0.062	0.036	
11/11/2020				0.015
3/12/2021				0.0033 (J)
3/15/2021	0.061	0.062	0.046	
8/16/2021				0.0012 (J)
8/18/2021	0.061	0.063	0.042	



# Time Series

Constituent: pH (s.u.) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	6.95			
3/11/2021		6.65	5.8	7.33
8/11/2021	6.98			
8/12/2021			5.05	7.31
8/13/2021		6.56		

# Time Series

Constituent: pH (s.u.) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				6.73
10/27/2016				6.77
1/27/2017				6.74
5/25/2017				6.99
10/2/2017				7.66
11/15/2017				6.71
6/5/2018				6.83
10/2/2018				6.83
4/2/2019				6.87
8/22/2019				6.79
10/22/2019				6.74
3/25/2020				6.8
6/15/2020				6.8
8/26/2020				6.96
9/16/2020	7.52	7.83		
9/21/2020				6.98
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	
3/10/2021		7.92		
3/11/2021	7.46			
3/12/2021			7.52	6.95
8/11/2021	7.4			
8/13/2021		7.77	7.42	
8/16/2021				6.92

# Time Series

Constituent: pH (s.u.) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	6.62	6.99		
10/27/2016		7.06		
11/7/2016	6.71			
1/13/2017	6.57			
1/27/2017		7.13		
5/25/2017		7.1		
6/3/2017	6.71			
8/11/2017		7.02		
10/2/2017	7.65			
11/15/2017	6.69	7.04		
6/5/2018	6.79	7.17		
10/2/2018		7.08		
10/5/2018	6.71			
4/3/2019	6.73	7.14		
8/22/2019	6.77			
8/23/2019		7.02		
10/21/2019	6.74	7.05		
3/24/2020		7.18		
3/25/2020	6.91			
5/22/2020			6.43	7.22
6/16/2020			6.29	6.92
8/25/2020			6.36	6.78
8/26/2020	6.73			
8/27/2020		7.15		
9/18/2020				6.97
9/21/2020			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			6.18	7.05
3/15/2021	6.87	7.22		
8/16/2021	6.74	7.09		
8/19/2021			7.24	7.32

# Time Series

Constituent: pH (s.u.) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	6.86			
3/27/2020		6.82		
4/24/2020		6.82		
6/15/2020			6.88	
8/26/2020	6.75	6.74	6.74	
9/25/2020				7.56
9/28/2020	6.9	7	7	
11/11/2020				7.52
3/12/2021				7.7
3/15/2021	6.98	7.04	7.06	
8/16/2021				7.65
8/18/2021	6.89	6.9	6.93	

# Time Series

Constituent: Selenium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
8/11/2021	<0.005			
8/12/2021			<0.005	<0.005
8/13/2021		<0.005		

# Time Series

Constituent: Selenium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.005
10/26/2016				<0.005
1/27/2017				<0.005
5/25/2017				<0.005
10/2/2017				0.002 (J)
11/15/2017				<0.005
6/5/2018				<0.005
10/2/2018				<0.005
8/22/2019				<0.005
8/26/2020				<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	
8/11/2021	<0.005			
8/13/2021		<0.005	<0.005	
8/16/2021				<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005		
10/26/2016		<0.005		
11/7/2016	<0.005			
1/13/2017	0.0011 (J)			
1/27/2017		<0.005		
5/25/2017		<0.005		
6/3/2017	<0.005			
8/11/2017		<0.005		
10/2/2017	<0.005			
11/15/2017	<0.005	<0.005		
6/5/2018	<0.005	<0.005		
10/2/2018		0.0014 (J)		
10/5/2018	<0.005			
8/22/2019	<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			
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		
8/19/2021			<0.005	<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.005	<0.005	<0.005	
8/16/2021				<0.005
8/18/2021	<0.005	<0.005	<0.005	



# Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	49.6			
3/11/2021		40.7	52.9	50.4
8/11/2021	48.9			
8/12/2021			47.4	38.6
8/13/2021		42.1		

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				290
10/26/2016				280
1/27/2017				290
5/25/2017				280
10/2/2017				300
11/15/2017				300
6/5/2018				273
10/2/2018				328
4/2/2019				256
6/17/2019				243
10/22/2019				266
3/25/2020				226
6/15/2020				212
9/16/2020	43	43		
9/21/2020				225
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		<1		
3/11/2021	38.6			
3/12/2021			8.7	210
8/11/2021	30.5			
8/13/2021		56.1	8.1	
8/16/2021				211

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	280	72		
10/26/2016		71		
11/7/2016	300			
1/13/2017	270			
1/27/2017		74		
5/25/2017		73		
6/3/2017	270			
8/11/2017		71		
10/2/2017	330			
11/15/2017	280	70		
6/5/2018	241	74		
10/2/2018		80.7		
10/5/2018	271			
4/3/2019	230	75.2		
6/17/2019	219			
6/18/2019		75.3		
10/21/2019	238	78.5		
3/24/2020		74.6		
3/25/2020	116			
5/22/2020			345	56.1
6/16/2020			320	57.6
8/25/2020			353	62.8
9/18/2020				62.7
9/21/2020			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			293	69.7
3/15/2021	177	74		
8/16/2021	158	74		
8/19/2021			264	64.4

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	210			
3/25/2020	204			
3/27/2020		111		
6/15/2020			219	
9/25/2020				149
9/28/2020	245	239	154	
11/11/2020				167
3/12/2021				155
3/15/2021	236	234	225	
8/16/2021				144
8/18/2021	162	173	180	

# Time Series

Constituent: Thallium (mg/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
8/11/2021	<0.001			
8/12/2021			<0.001	<0.001
8/13/2021		<0.001		

# Time Series

Constituent: Thallium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.001
10/26/2016				<0.001
1/27/2017				<0.001
5/25/2017				<0.001
10/2/2017				<0.001
11/15/2017				<0.001
6/5/2018				<0.001
10/2/2018				<0.001
8/22/2019				<0.001
8/26/2020				<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	
8/11/2021	<0.001			
8/13/2021		<0.001	<0.001	
8/16/2021				<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.001	<0.001		
10/26/2016		<0.001		
11/7/2016	<0.001			
1/13/2017	<0.001			
1/27/2017		<0.001		
5/25/2017		<0.001		
6/3/2017	<0.001			
8/11/2017		<0.001		
10/2/2017	<0.001			
11/15/2017	<0.001	<0.001		
6/5/2018	<0.001	<0.001		
10/2/2018		<0.001		
10/5/2018	<0.001			
8/22/2019	<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			
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		
8/19/2021			<0.001	<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 10/14/2021 2:07 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.001	<0.001	<0.001	
8/16/2021				<0.001
8/18/2021	<0.001	<0.001	<0.001	



# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	348			
3/11/2021		206	169	267
8/11/2021	366			
8/12/2021			118	265
8/13/2021		201		

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				700
10/26/2016				795
1/27/2017				706
5/25/2017				669
10/2/2017				672
11/15/2017				721
6/5/2018				723
10/2/2018				703
4/2/2019				540
10/22/2019				693
3/25/2020				665
6/15/2020				685
9/16/2020	272	270		
9/21/2020				272
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		289		
3/11/2021	279			
3/12/2021			260	584
8/11/2021	277			
8/13/2021		436	272	
8/16/2021				632

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	876	379		
10/26/2016		409		
11/7/2016	1000			
1/13/2017	827			
1/27/2017		370		
5/25/2017		351		
6/3/2017	846			
8/11/2017		322		
10/2/2017	884			
11/15/2017	838	350		
6/5/2018	823	360		
10/2/2018		363		
10/5/2018	813			
4/3/2019	785	369		
6/17/2019	751			
10/21/2019	771	357		
3/24/2020		355		
3/25/2020	521			
5/22/2020			809	496
6/16/2020			665	508
8/25/2020			772	505
9/18/2020				452
9/21/2020			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			664	474
3/15/2021	614	340		
8/16/2021	626	352		
8/19/2021			732	488

# Time Series

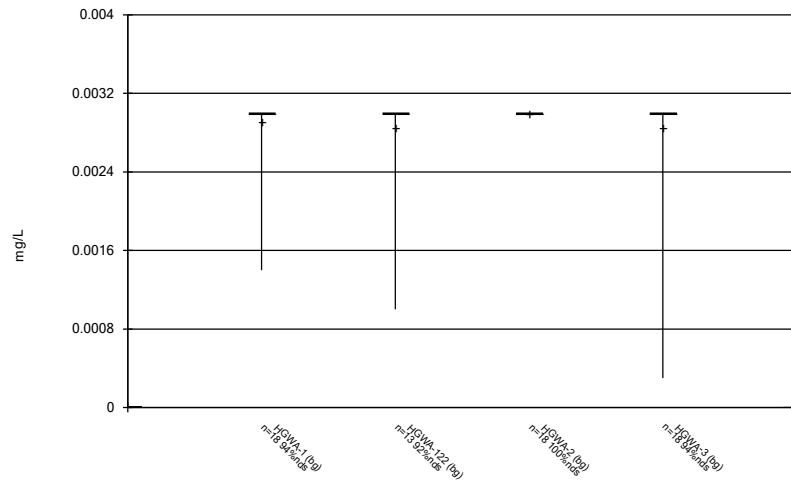
Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/14/2021 2:07 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	645			
3/25/2020	641			
3/27/2020		482		
6/15/2020			674	
9/25/2020				449
9/28/2020	272	272	392	
11/11/2020				472
3/12/2021				590
3/15/2021	630	628	582	
8/16/2021				516
8/18/2021	554	628	602	

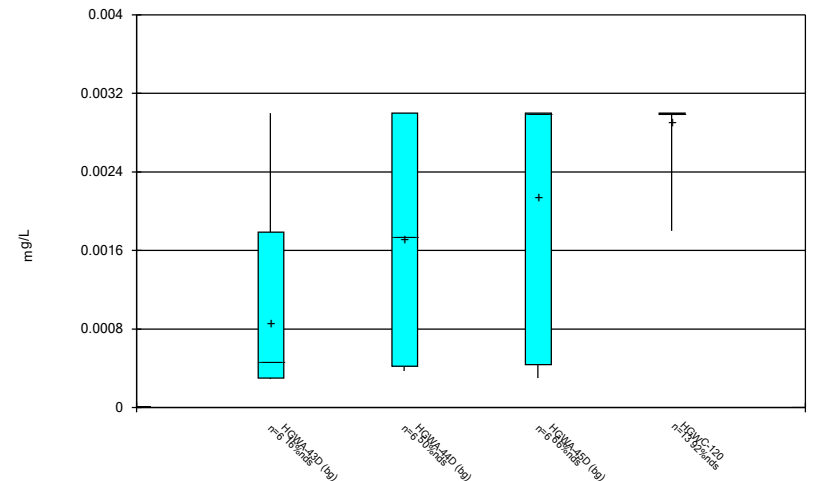
FIGURE B.

### Box & Whiskers Plot



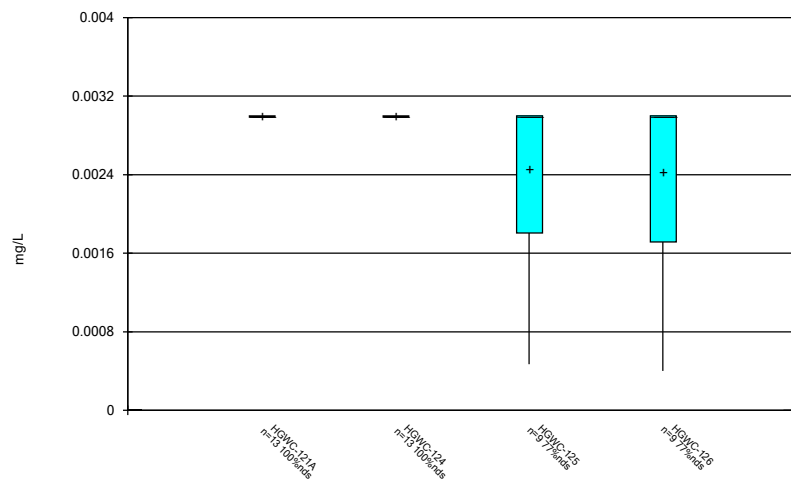
Constituent: Antimony Analysis Run 10/14/2021 2:18 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



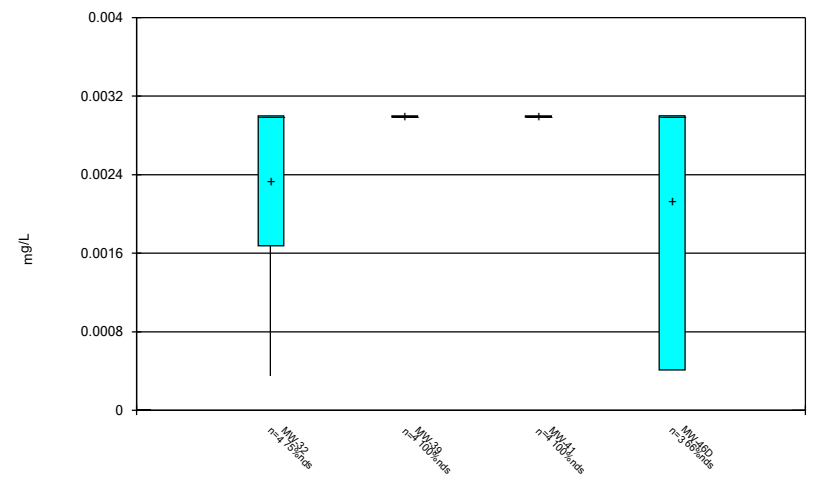
Constituent: Antimony Analysis Run 10/14/2021 2:18 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



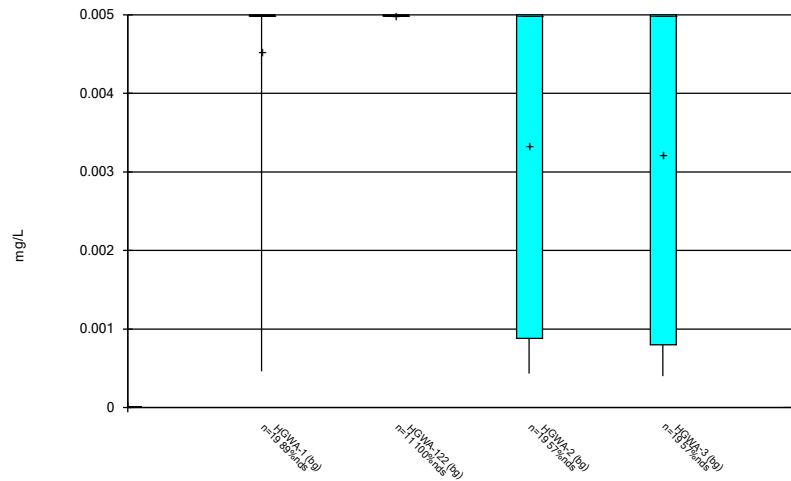
Constituent: Antimony Analysis Run 10/14/2021 2:18 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



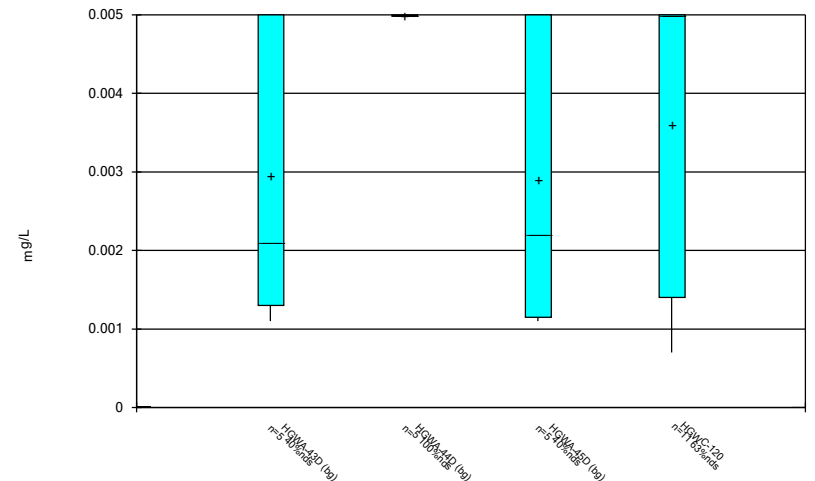
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



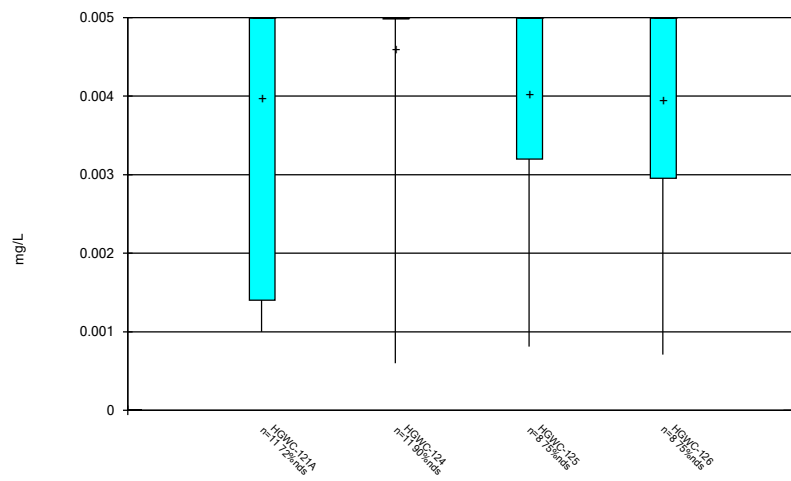
Constituent: Arsenic Analysis Run 10/14/2021 2:18 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



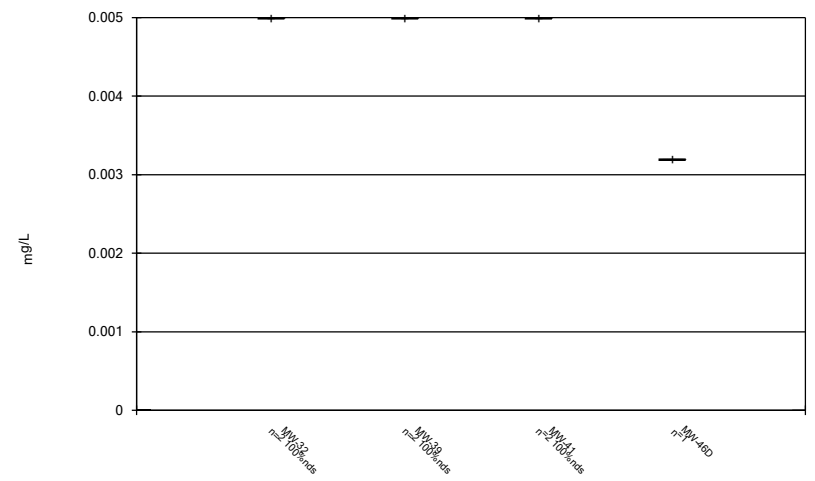
Constituent: Arsenic Analysis Run 10/14/2021 2:18 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



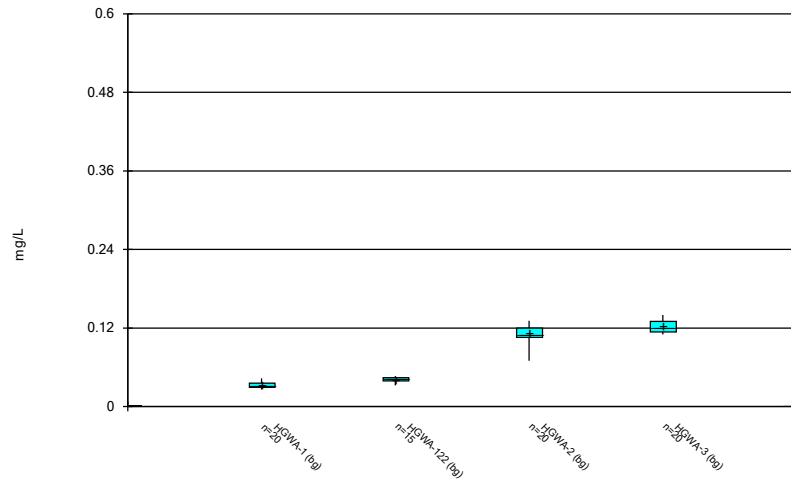
Constituent: Arsenic Analysis Run 10/14/2021 2:18 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



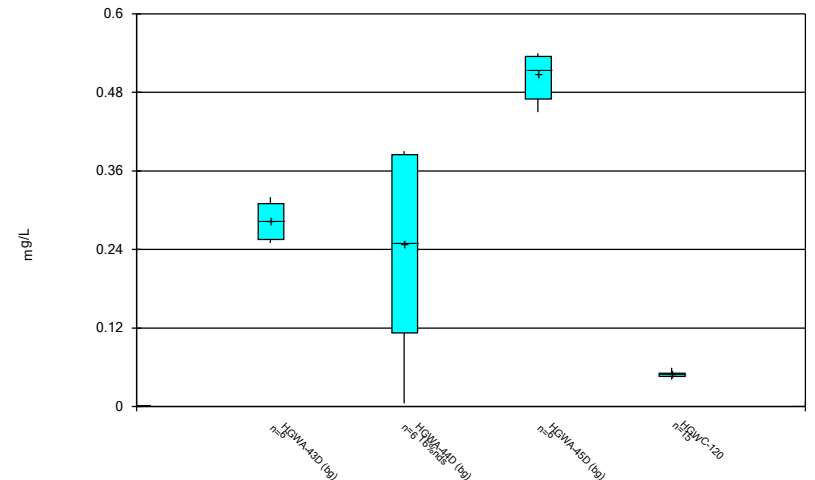
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



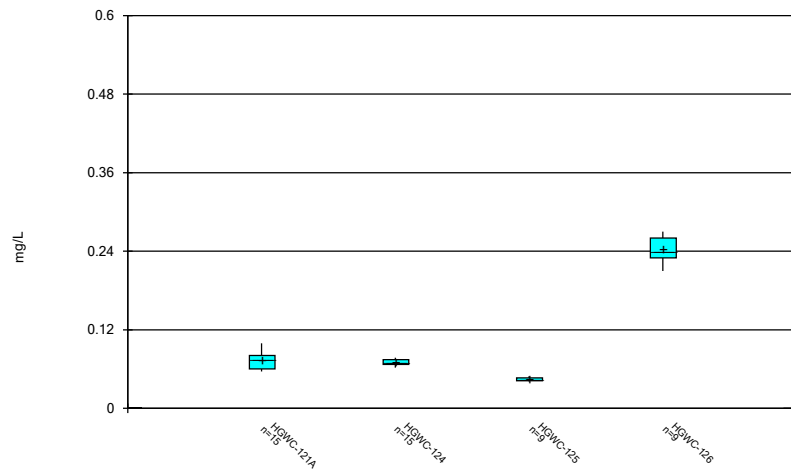
Constituent: Barium Analysis Run 10/14/2021 2:18 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



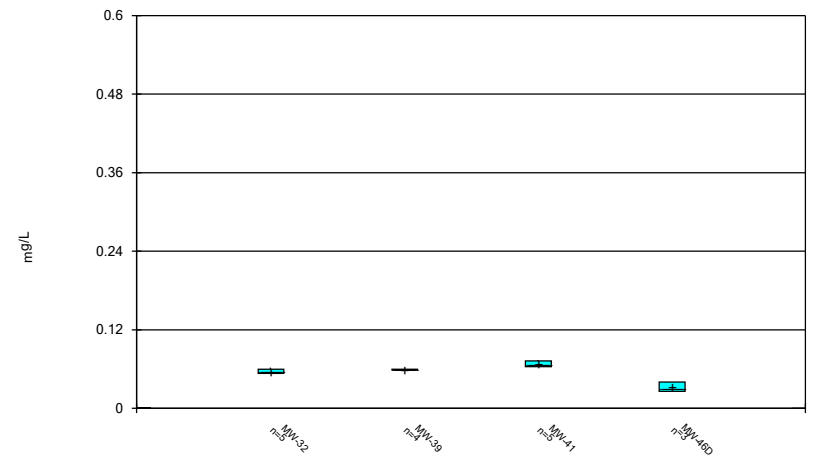
Constituent: Barium Analysis Run 10/14/2021 2:18 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



Constituent: Barium Analysis Run 10/14/2021 2:18 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

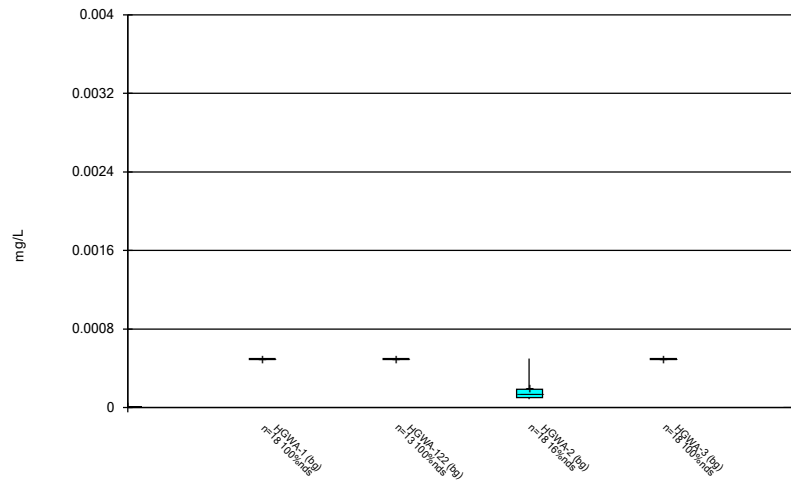
### Box & Whiskers Plot



Constituent: Barium Analysis Run 10/14/2021 2:18 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

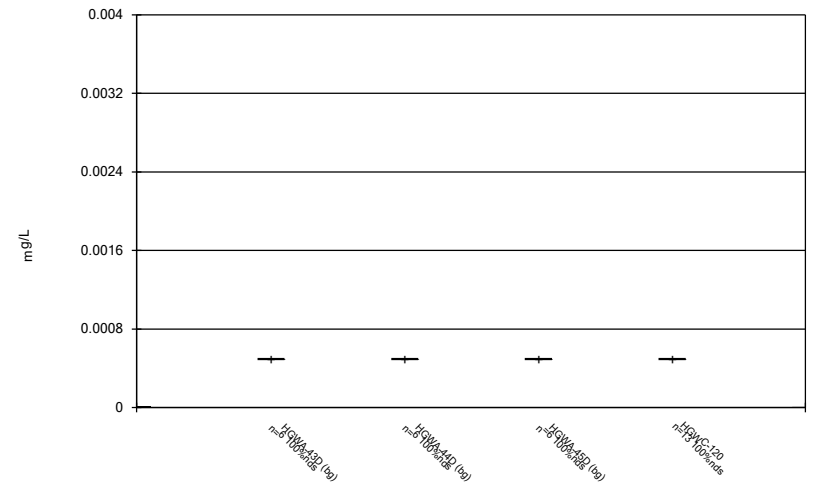


Box & Whiskers Plot



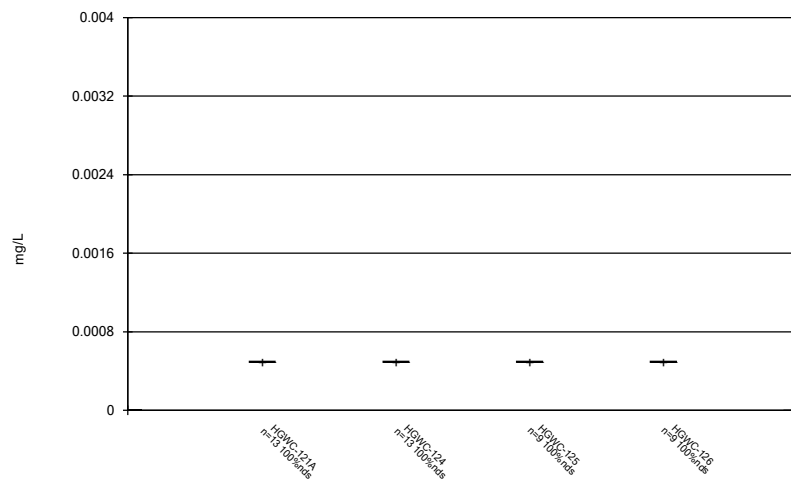
Constituent: Beryllium Analysis Run 10/14/2021 2:18 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



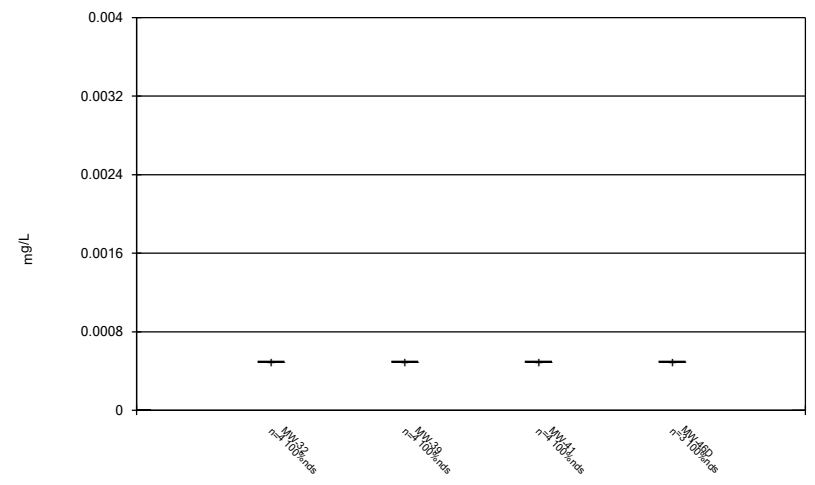
Constituent: Beryllium Analysis Run 10/14/2021 2:18 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



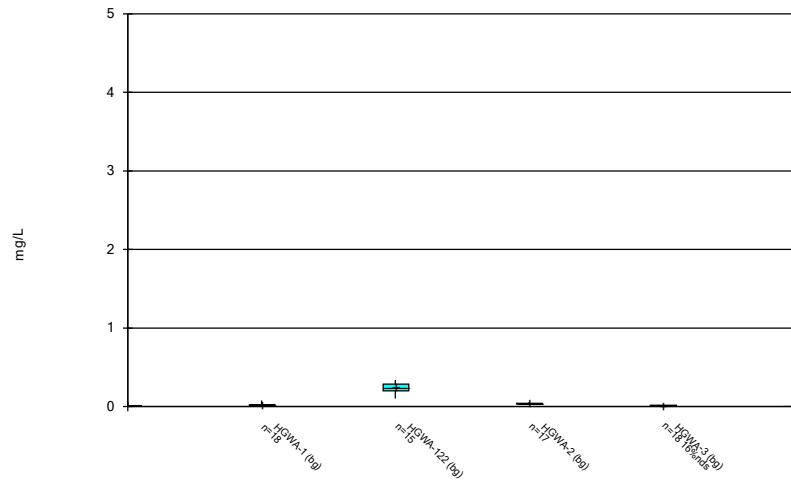
Constituent: Beryllium Analysis Run 10/14/2021 2:18 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



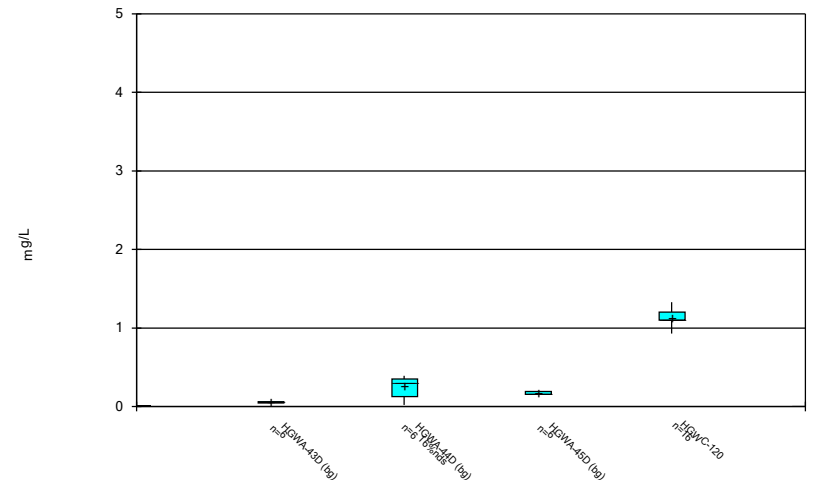
Constituent: Beryllium Analysis Run 10/14/2021 2:18 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



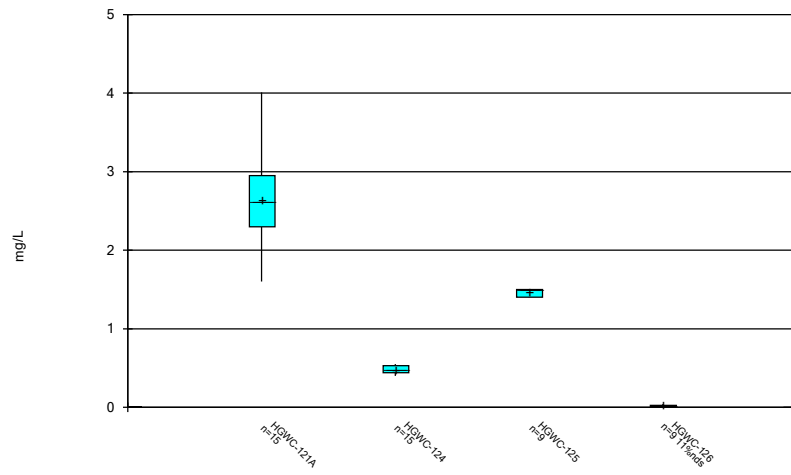
Constituent: Boron Analysis Run 10/14/2021 2:18 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



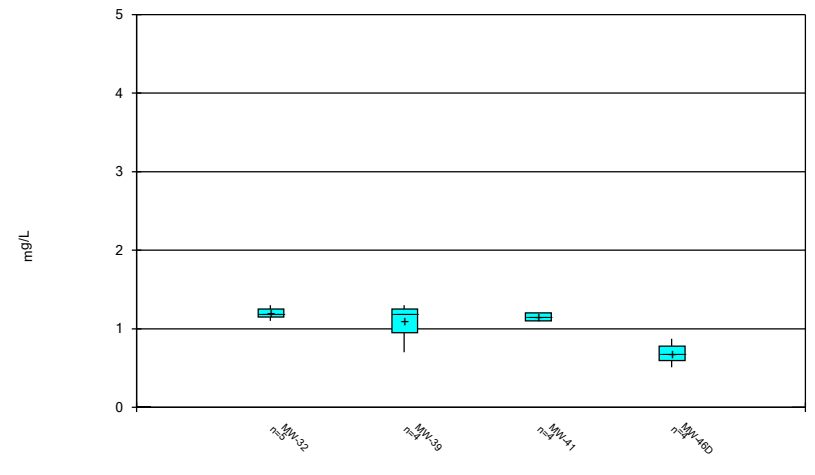
Constituent: Boron Analysis Run 10/14/2021 2:18 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



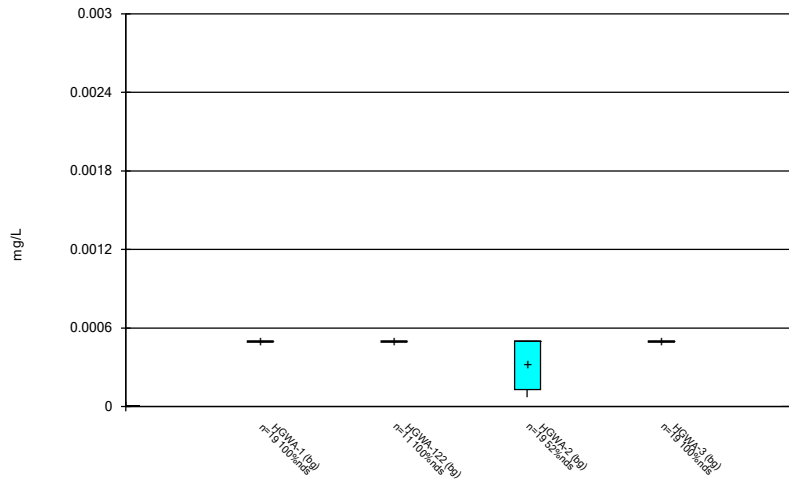
Constituent: Boron Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



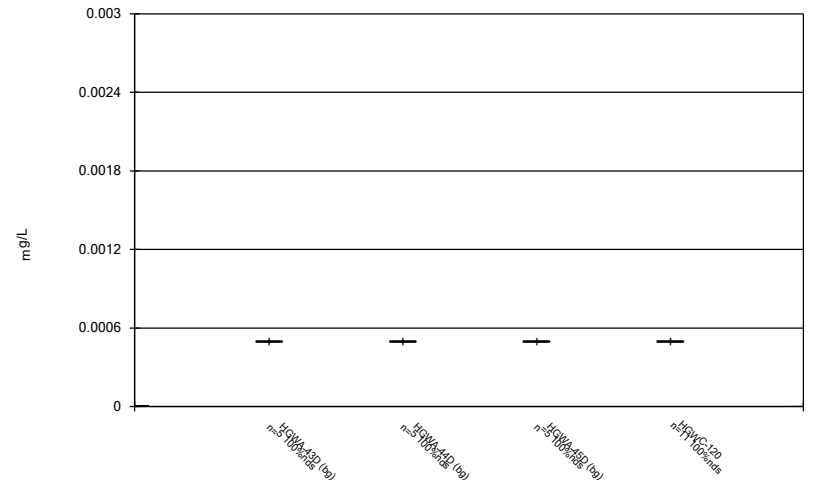
Constituent: Boron Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



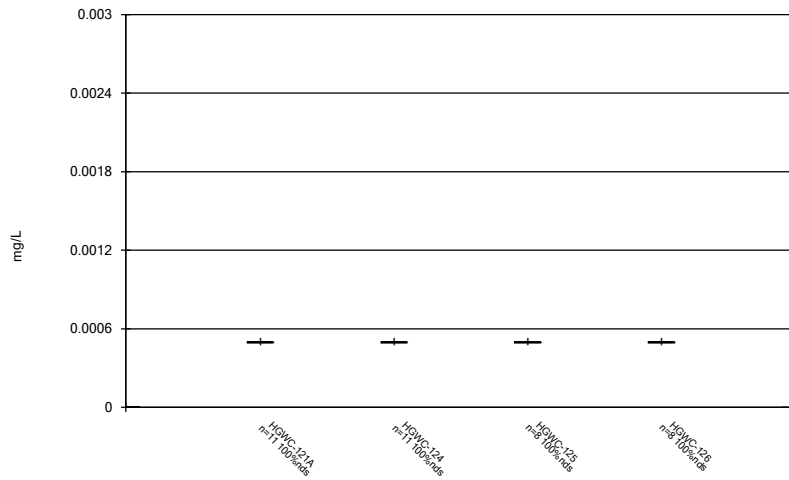
Constituent: Cadmium Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



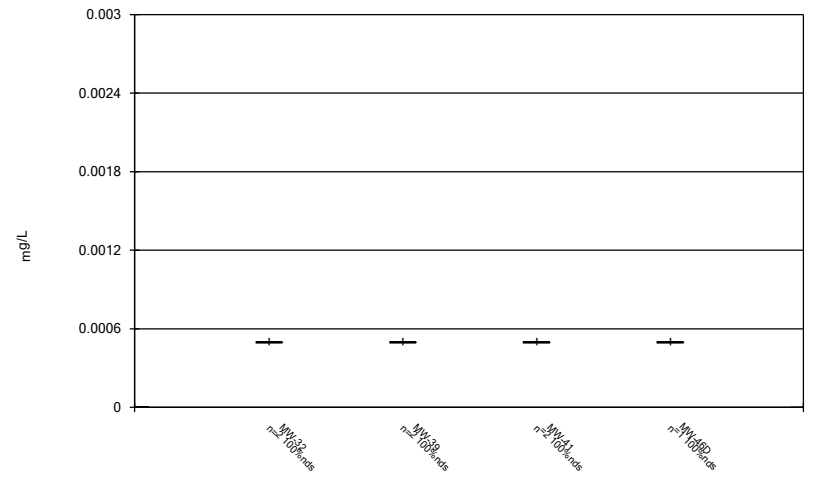
Constituent: Cadmium Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



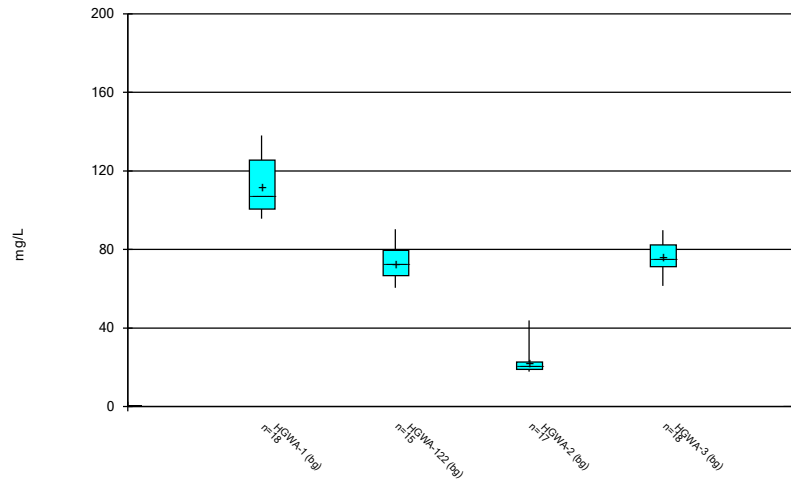
Constituent: Cadmium Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



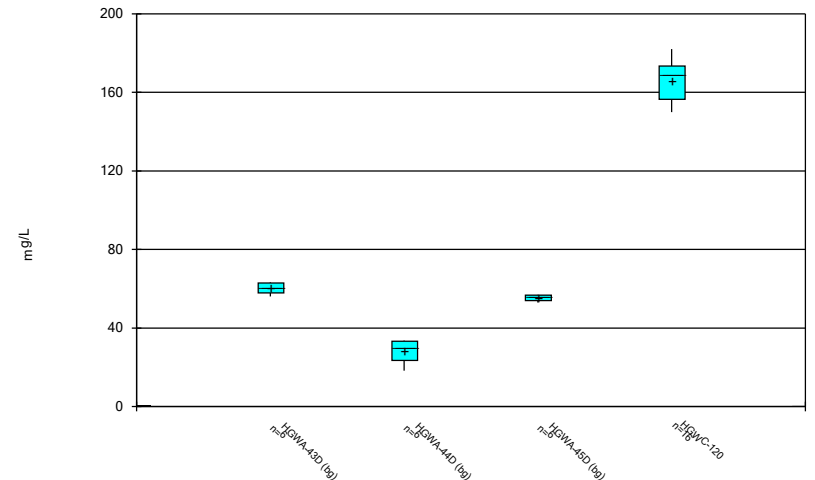
Constituent: Cadmium Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



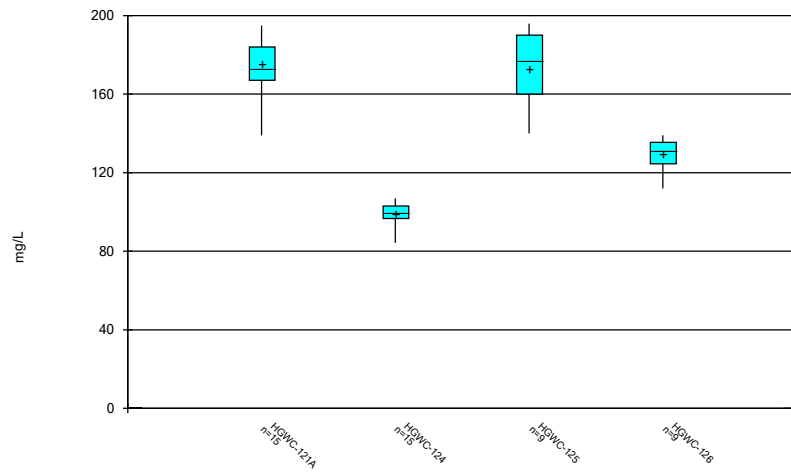
Constituent: Calcium Analysis Run 10/14/2021 2:19 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



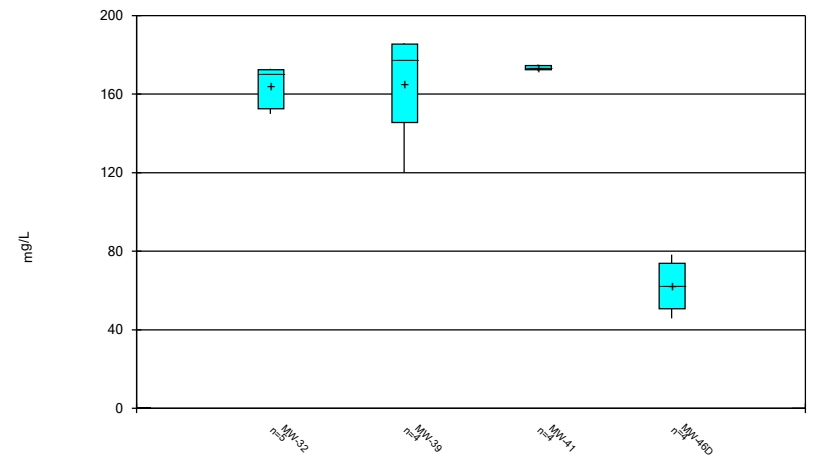
Constituent: Calcium Analysis Run 10/14/2021 2:19 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



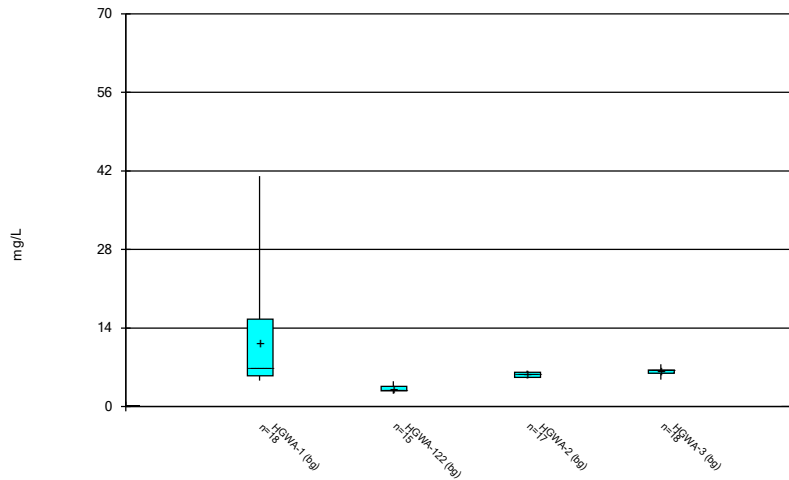
Constituent: Calcium Analysis Run 10/14/2021 2:19 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



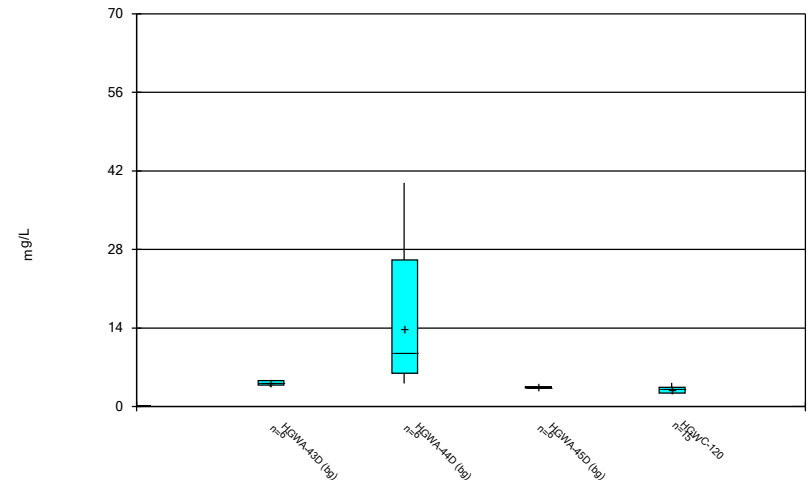
Constituent: Calcium Analysis Run 10/14/2021 2:19 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



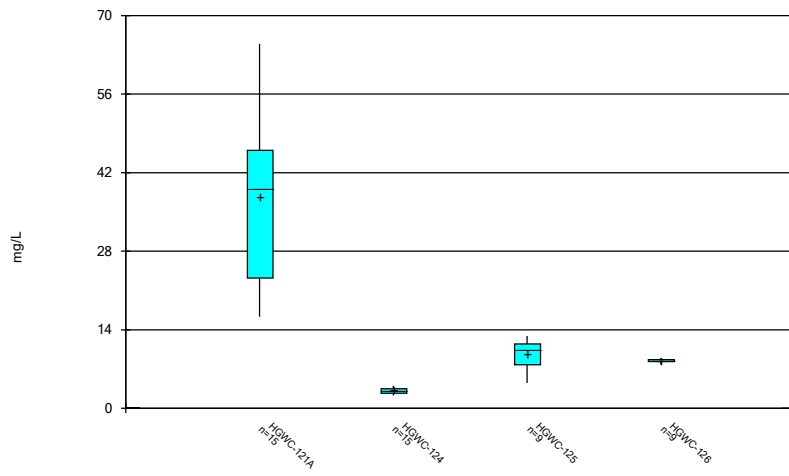
Constituent: Chloride Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



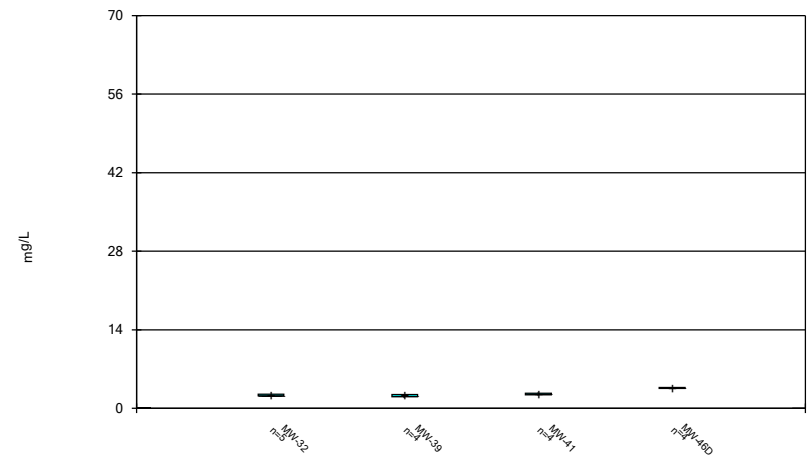
Constituent: Chloride Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



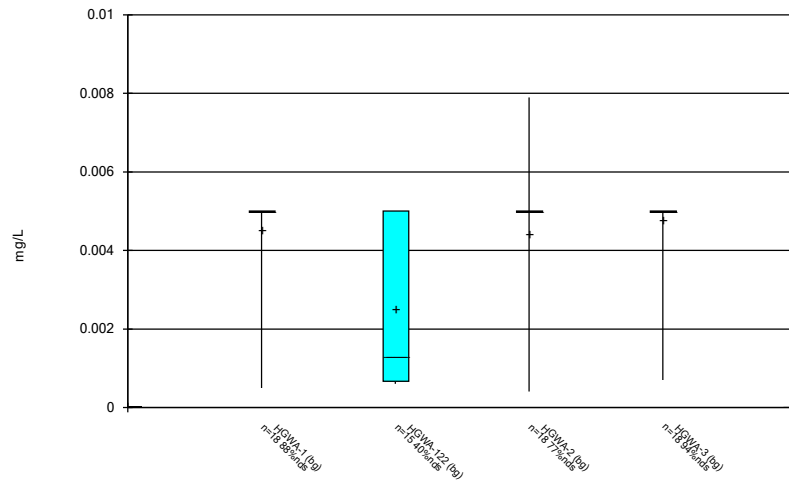
Constituent: Chloride Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



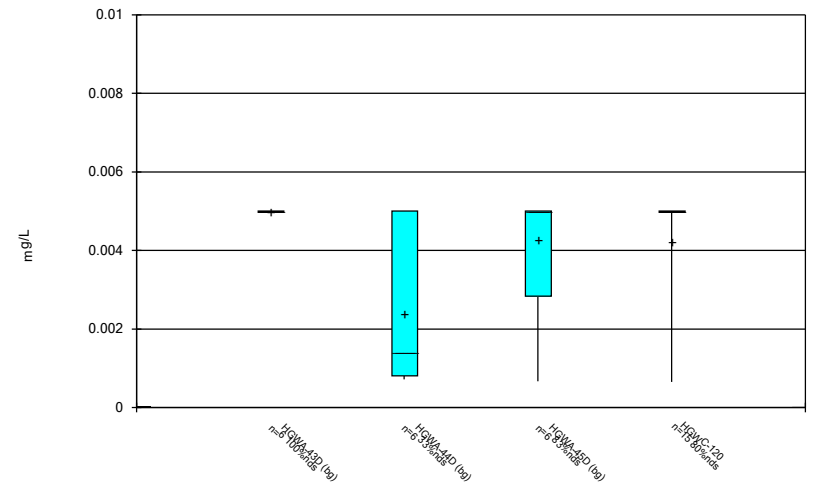
Constituent: Chloride Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



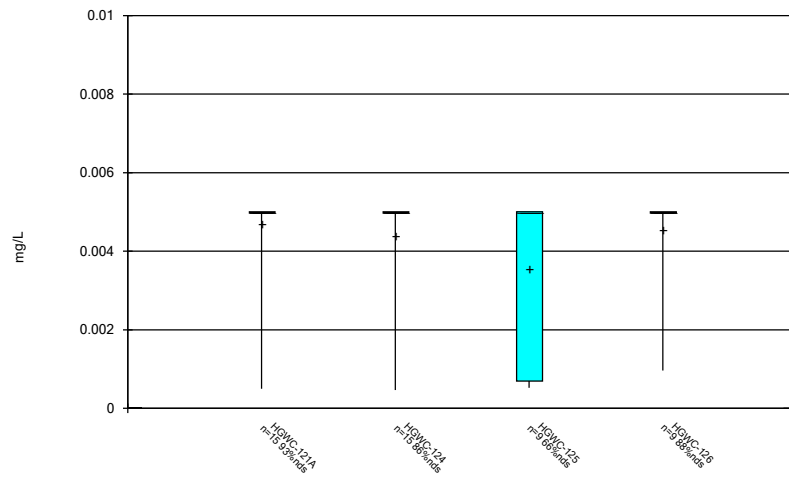
Constituent: Chromium Analysis Run 10/14/2021 2:19 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



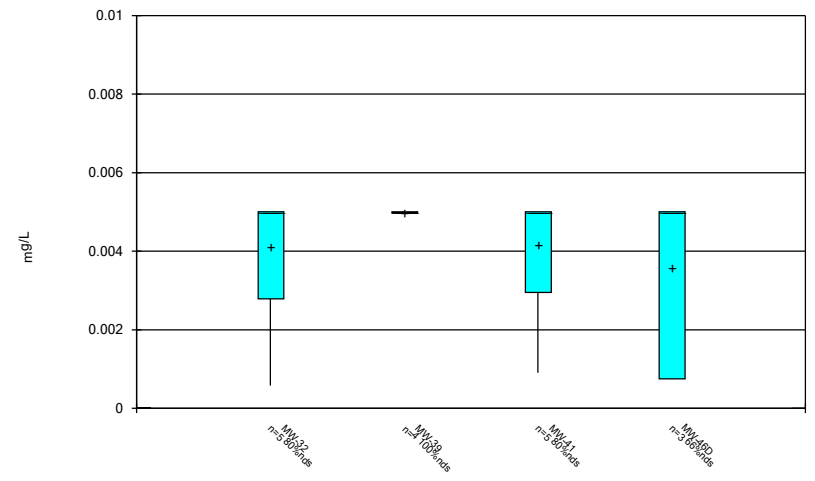
Constituent: Chromium Analysis Run 10/14/2021 2:19 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



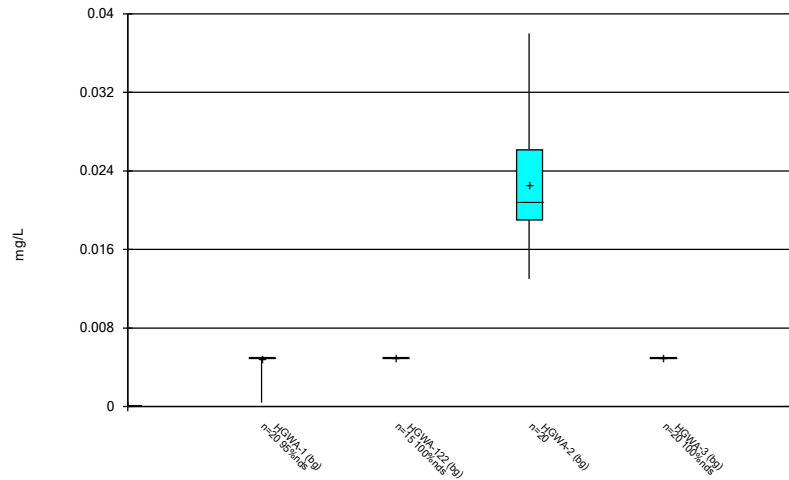
Constituent: Chromium Analysis Run 10/14/2021 2:19 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



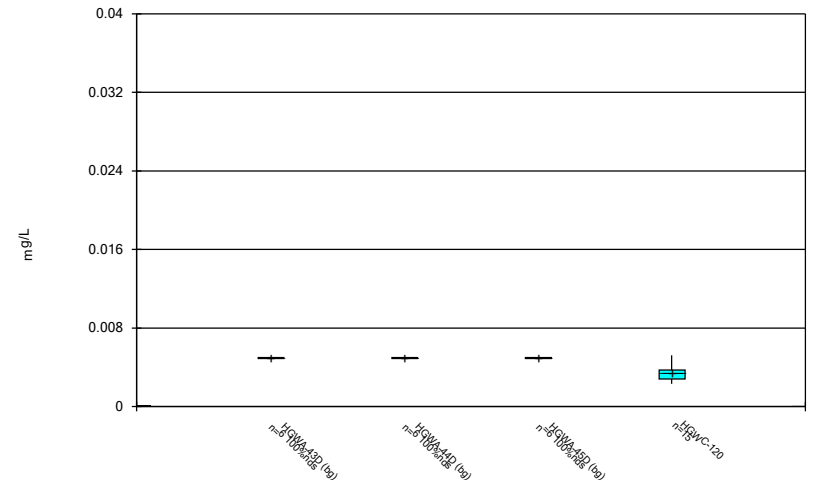
Constituent: Chromium Analysis Run 10/14/2021 2:19 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



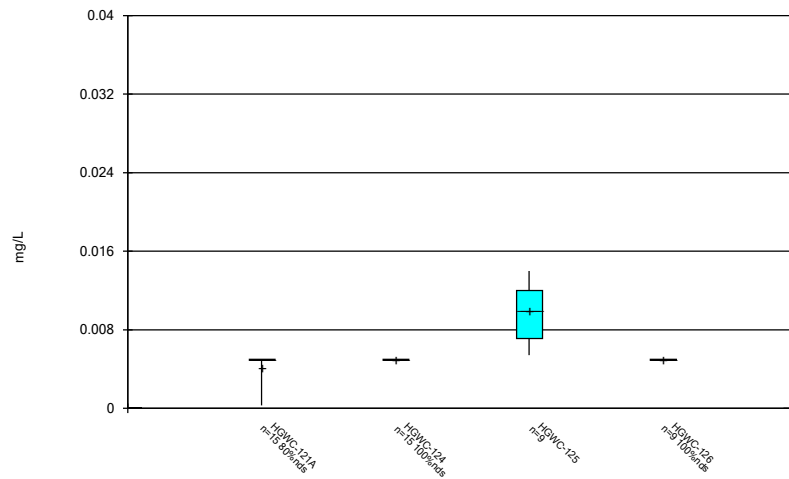
Constituent: Cobalt Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



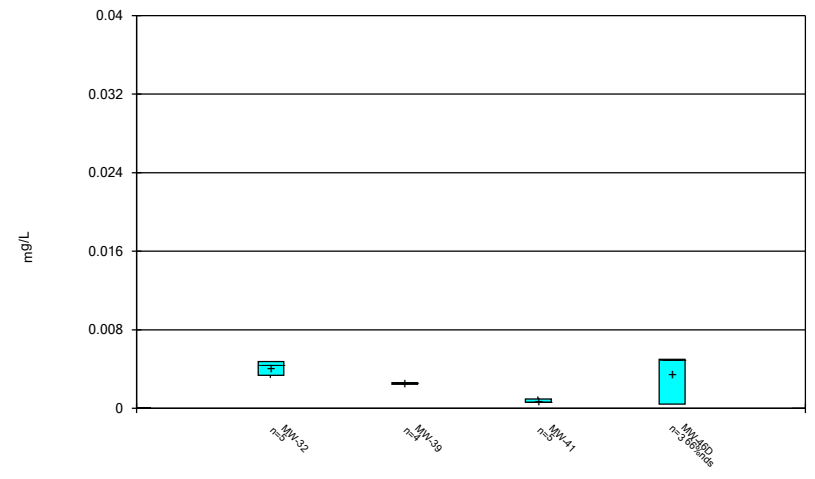
Constituent: Cobalt Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



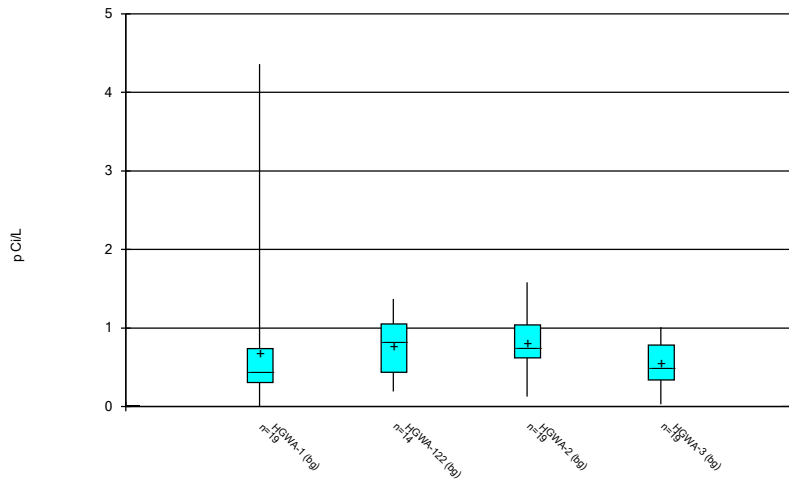
Constituent: Cobalt Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



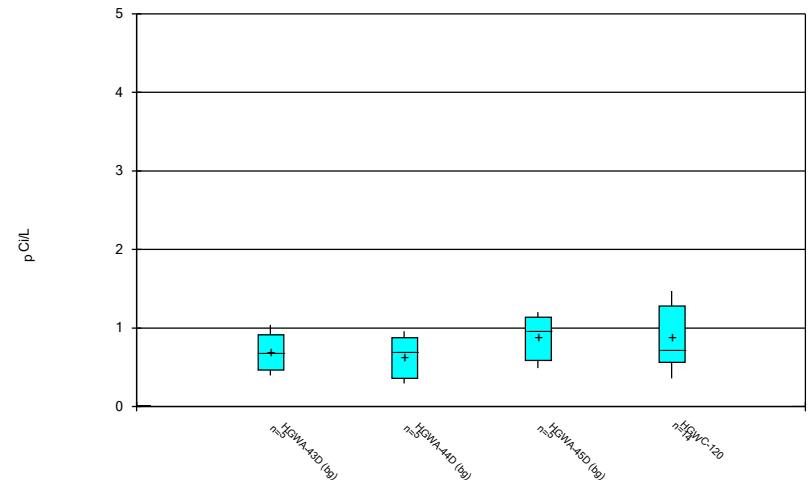
Constituent: Cobalt Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



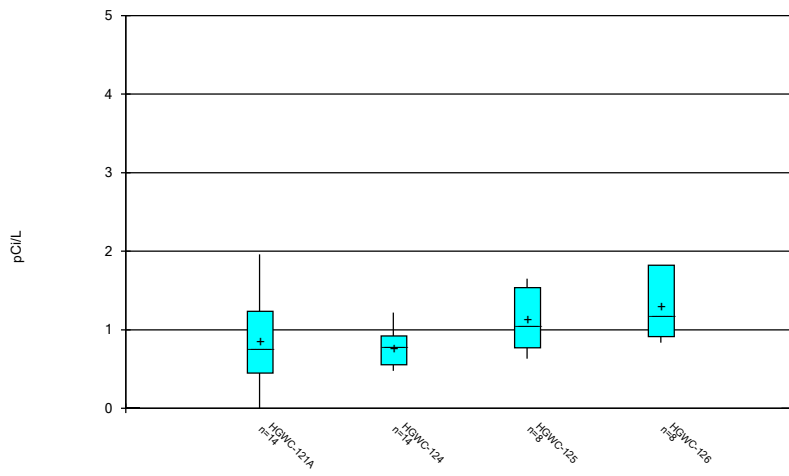
Constituent: Combined Radium 226 + 228 Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



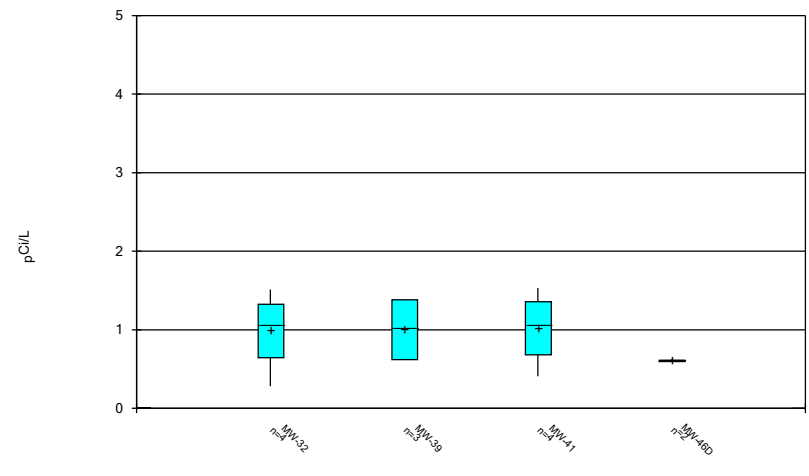
Constituent: Combined Radium 226 + 228 Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

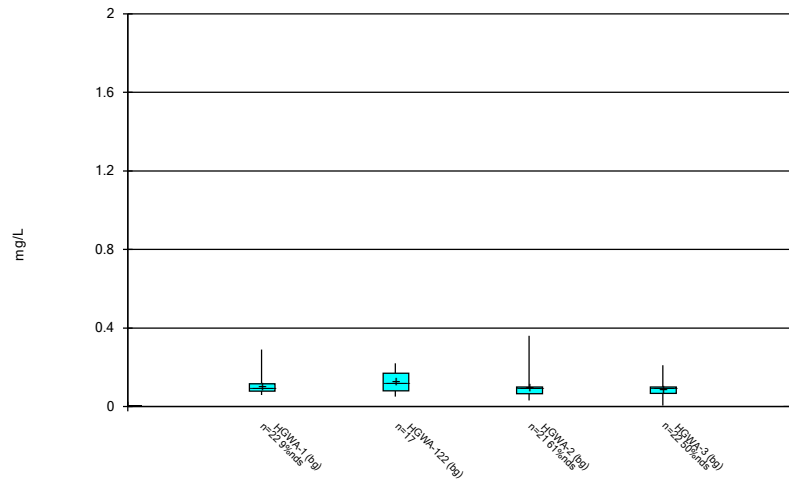
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

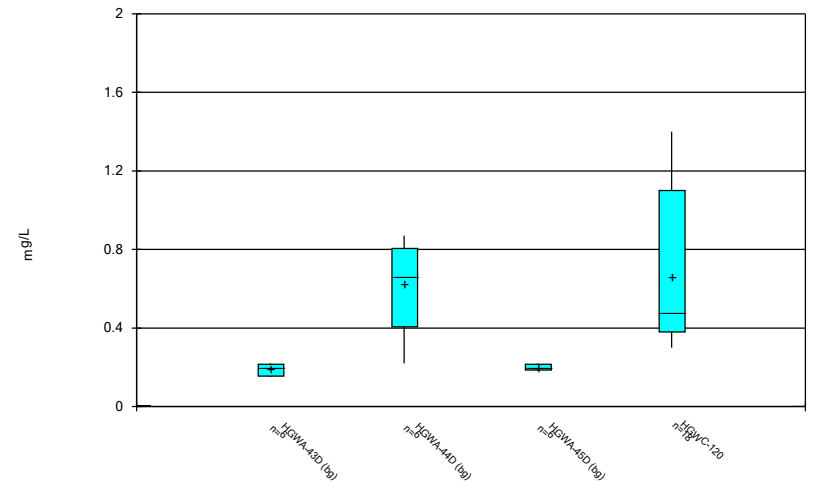


Box & Whiskers Plot



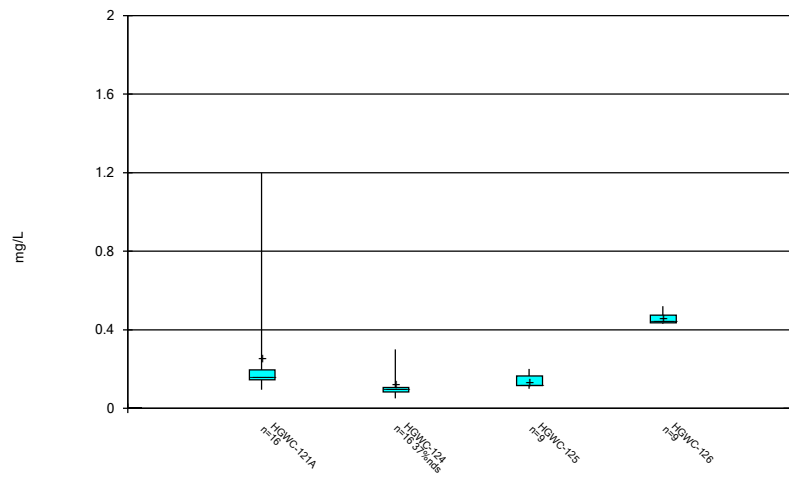
Constituent: Fluoride Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



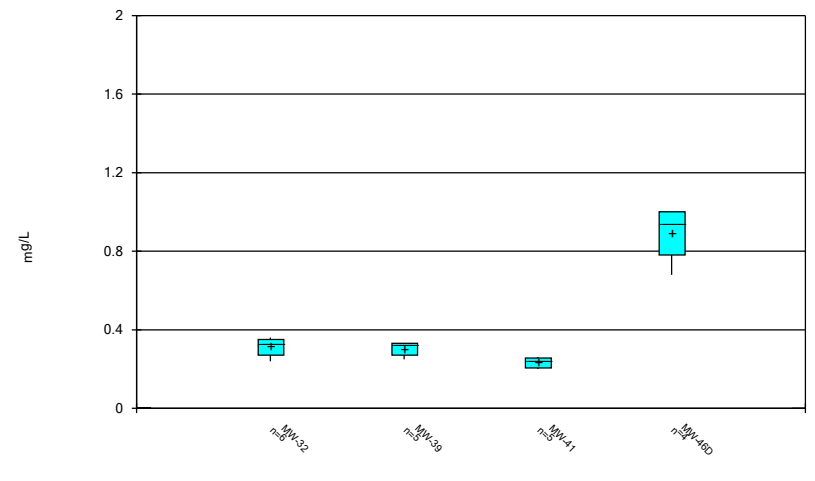
Constituent: Fluoride Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



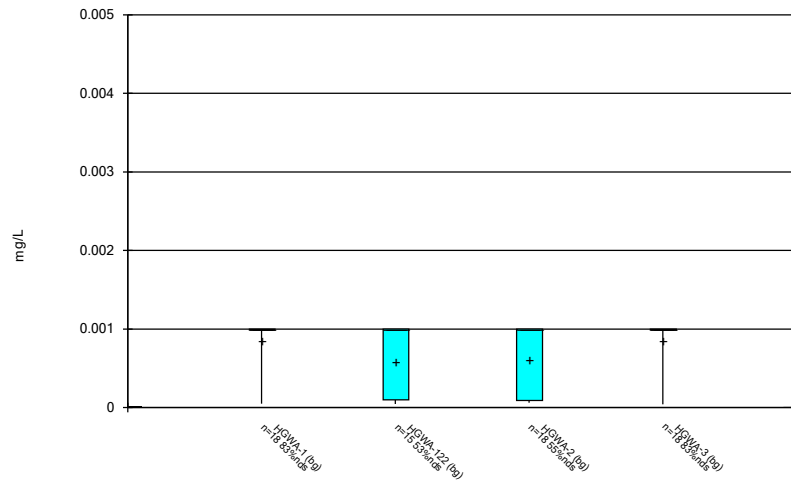
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



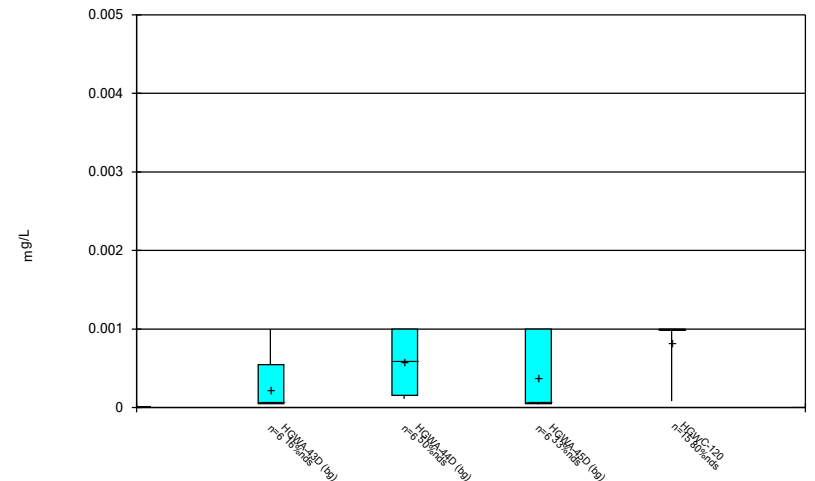
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



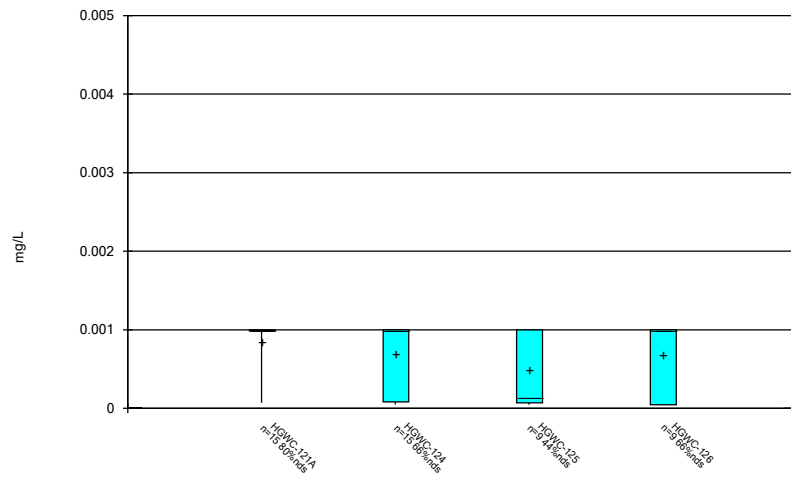
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



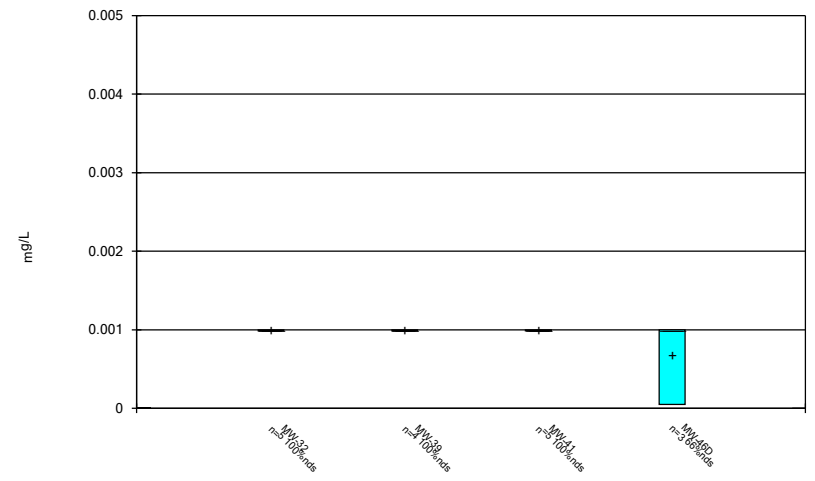
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



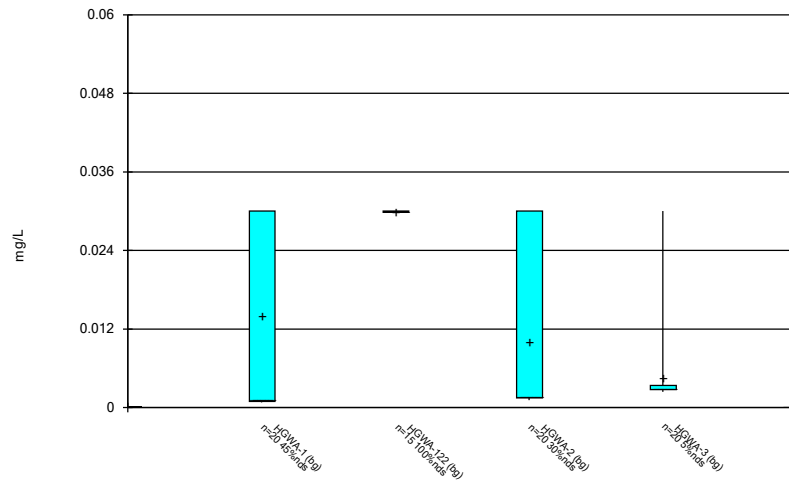
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



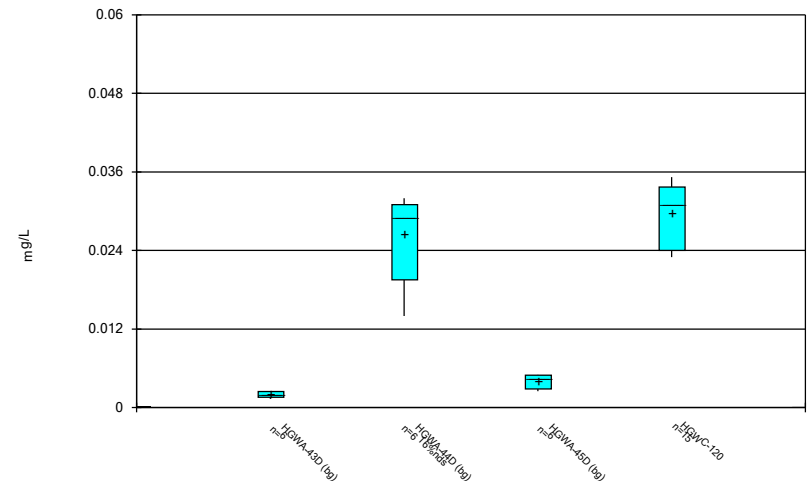
Constituent: Lead Analysis Run 10/14/2021 2:19 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



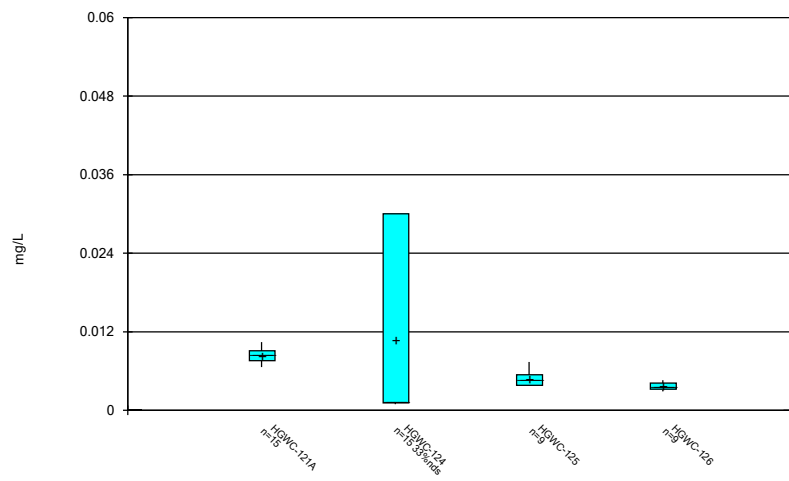
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



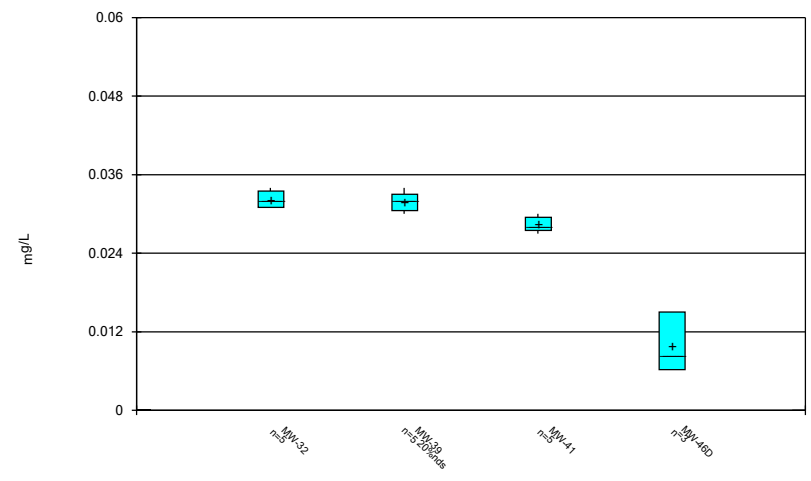
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



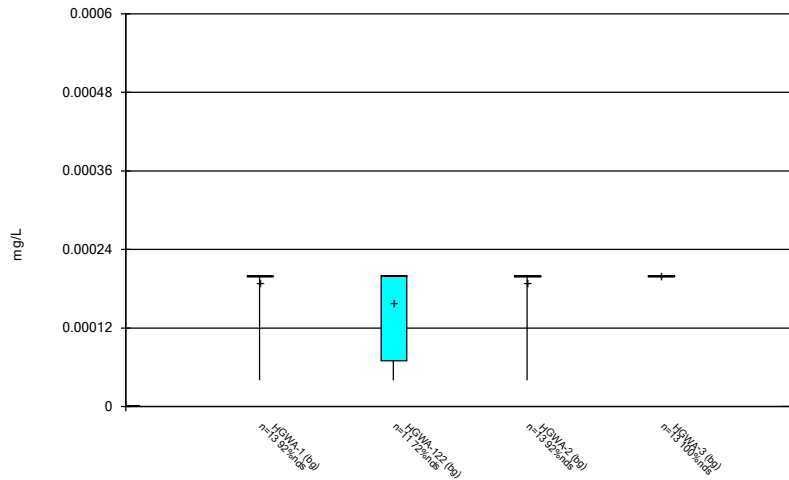
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



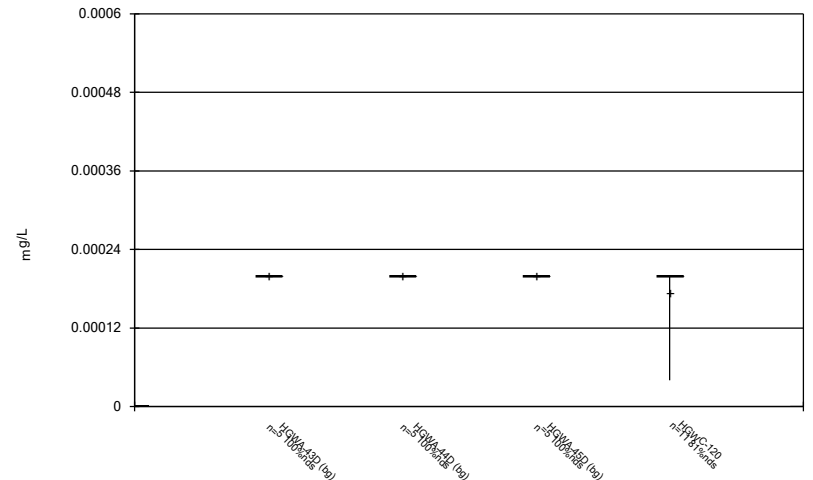
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



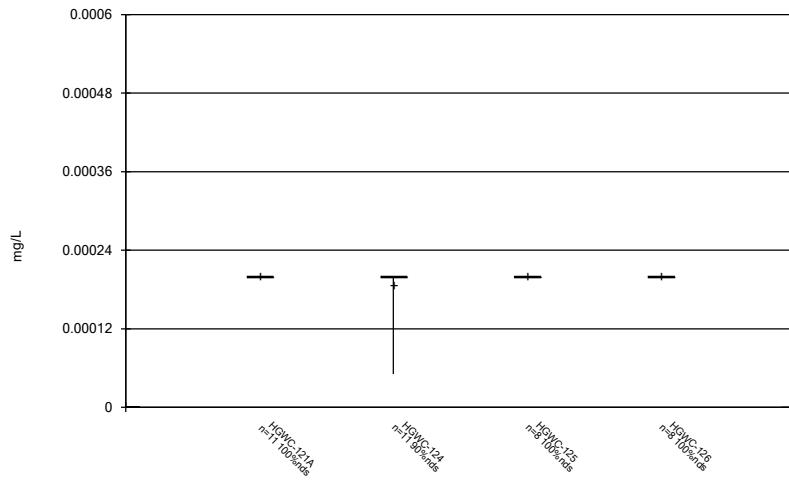
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



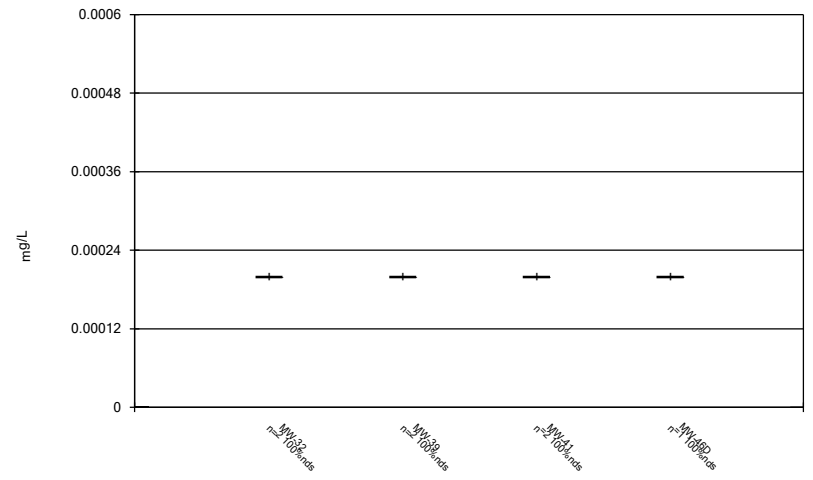
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



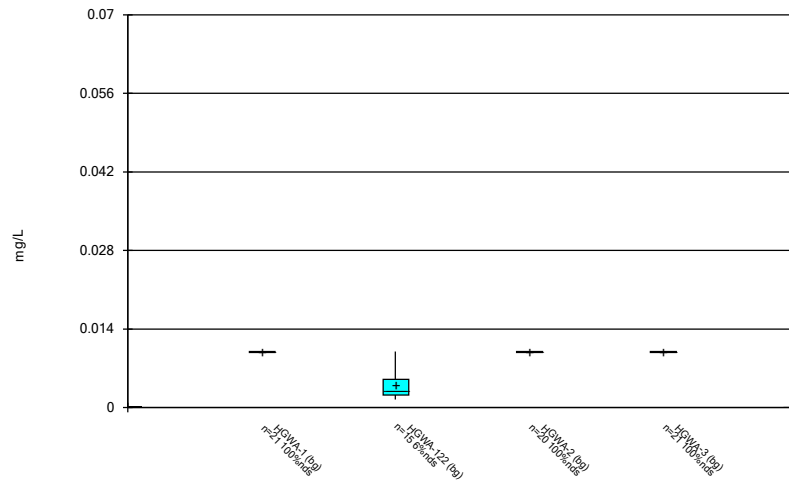
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



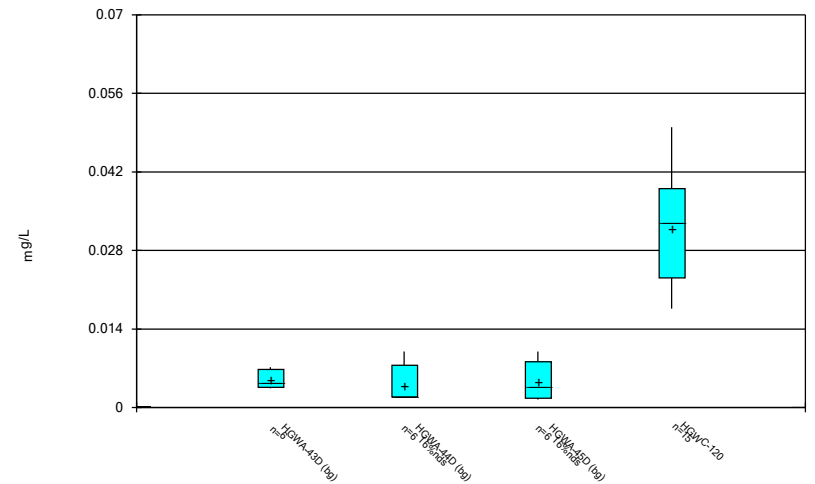
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



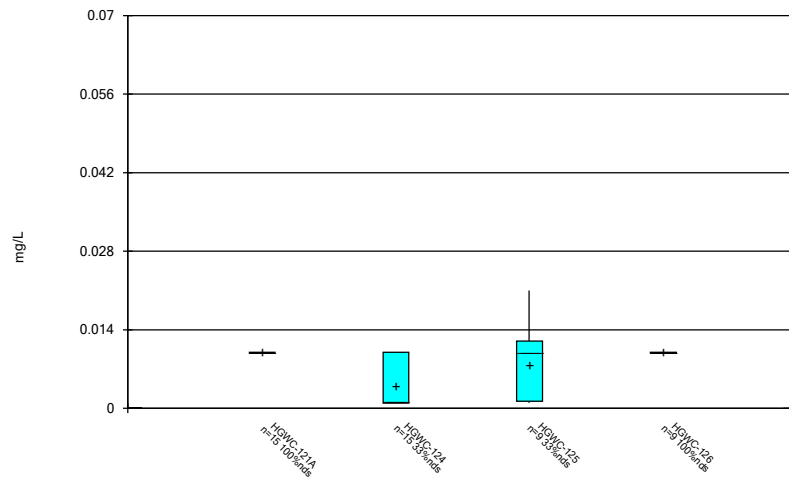
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



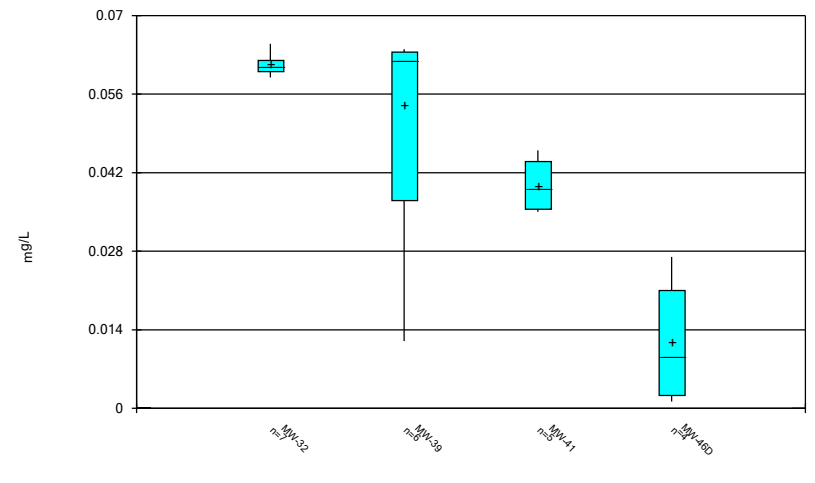
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



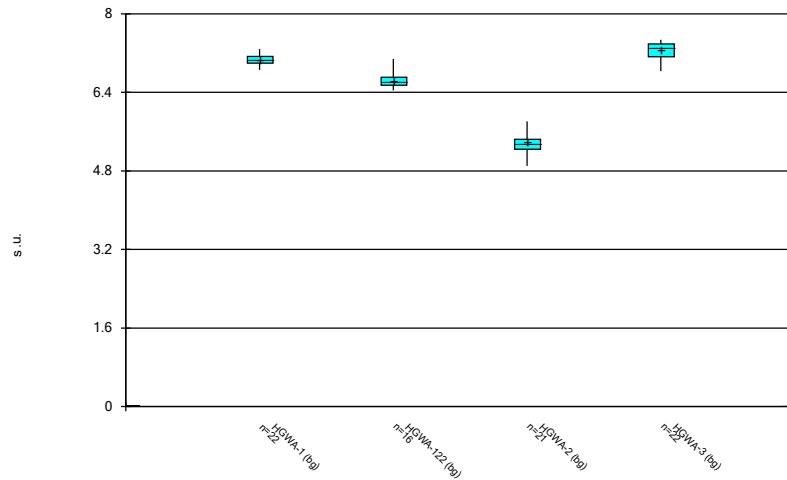
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



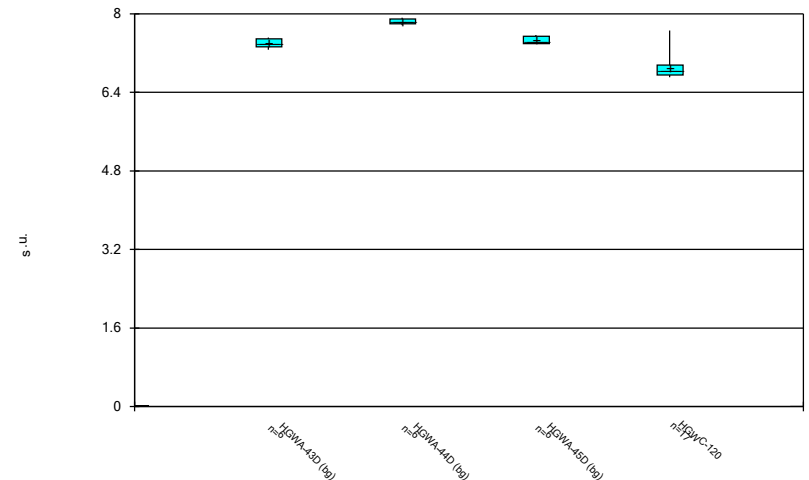
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



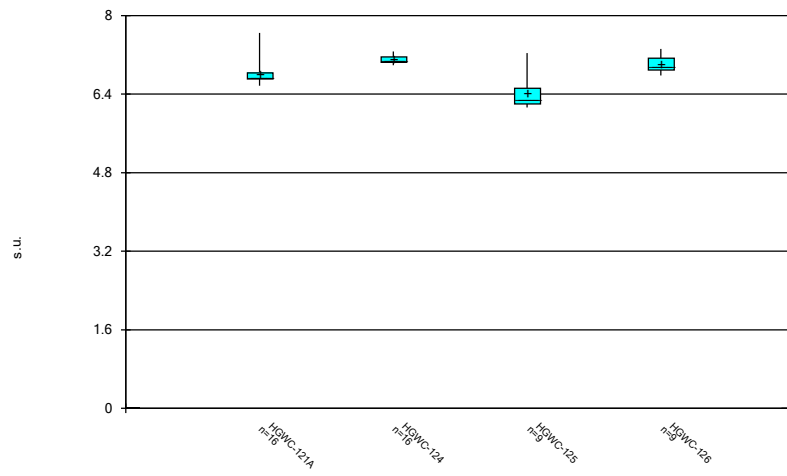
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



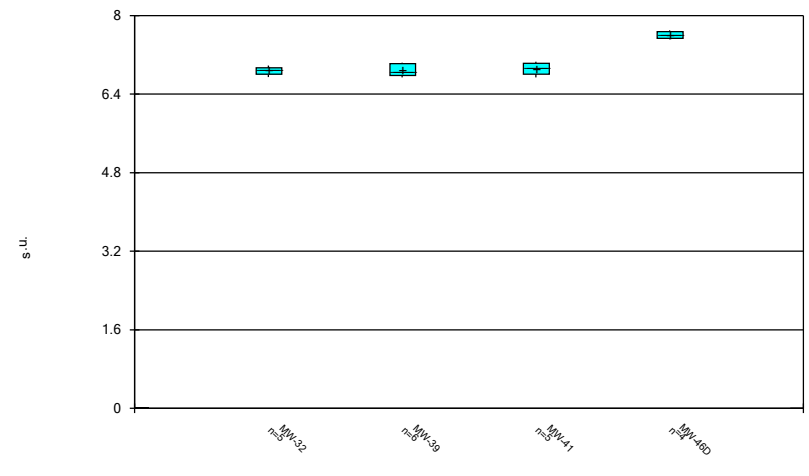
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



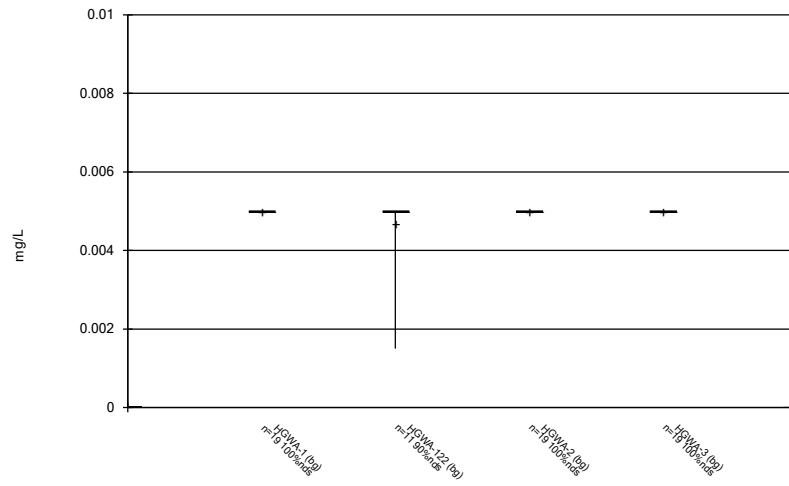
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



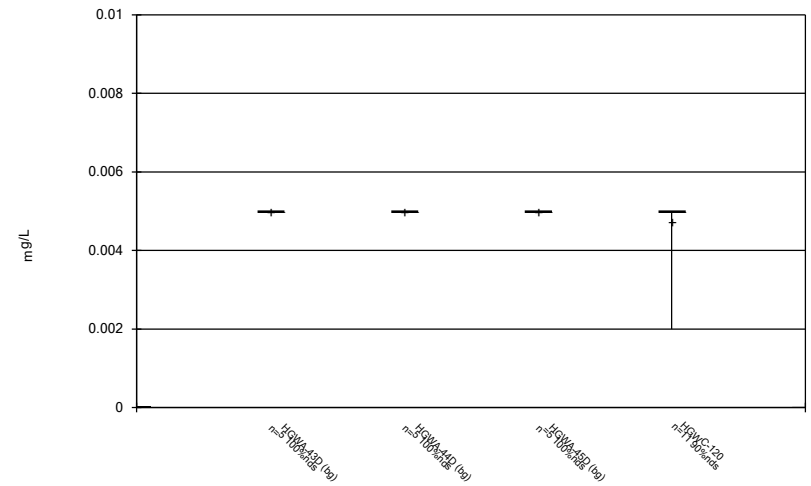
Constituent: pH Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



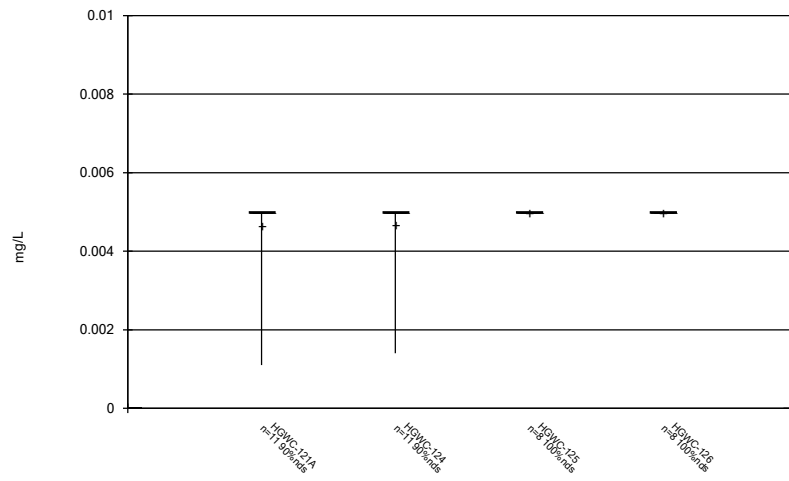
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



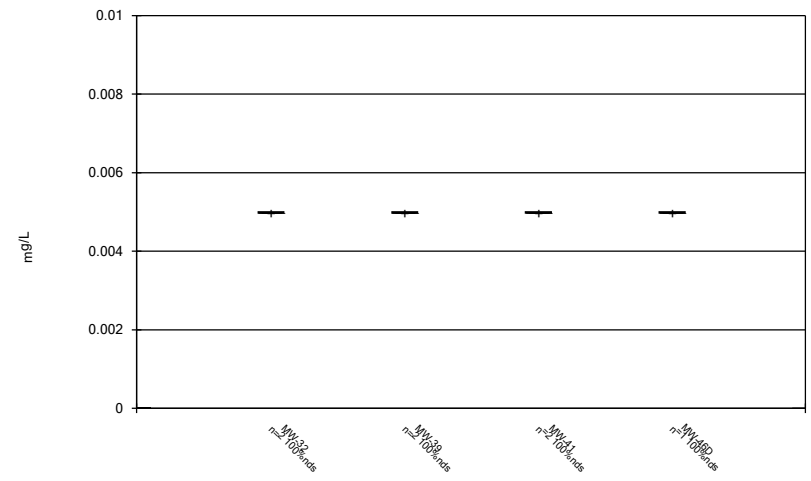
Constituent: Selenium Analysis Run 10/14/2021 2:19 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



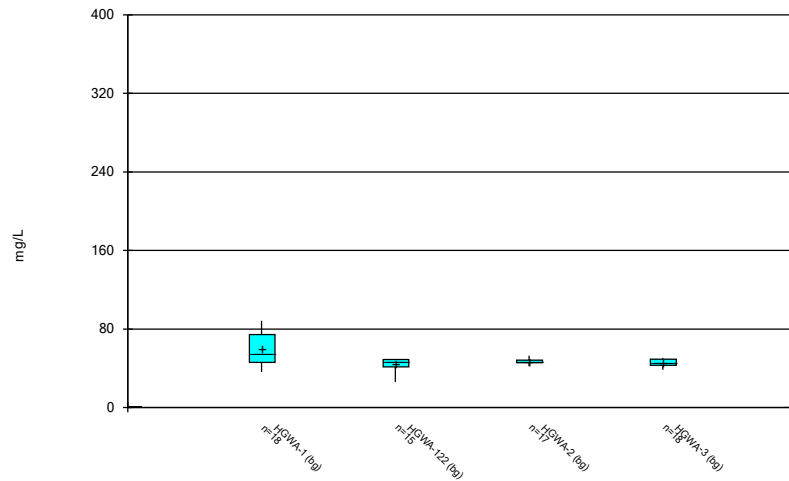
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



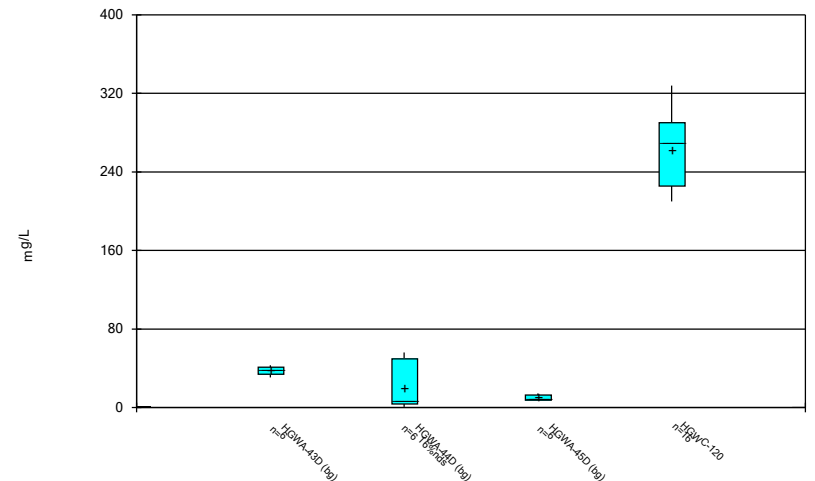
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



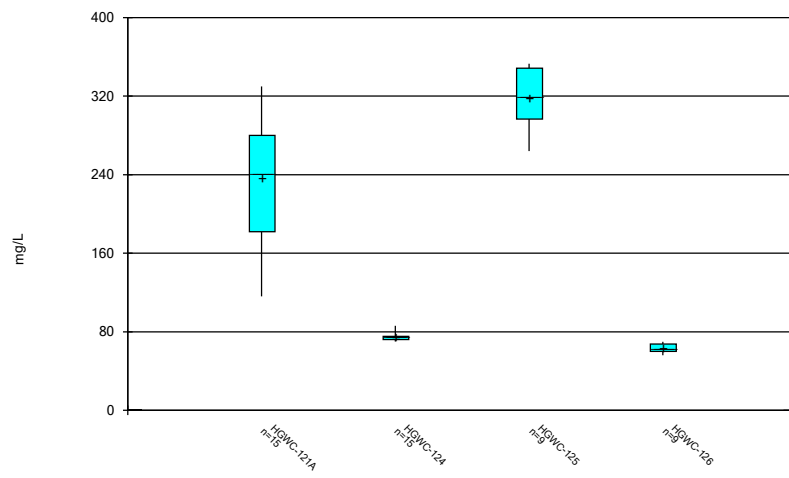
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



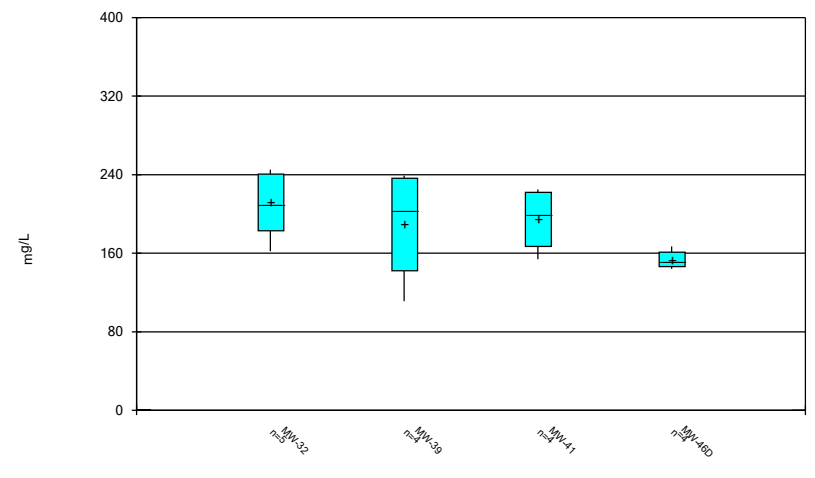
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



Constituent: Sulfate Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

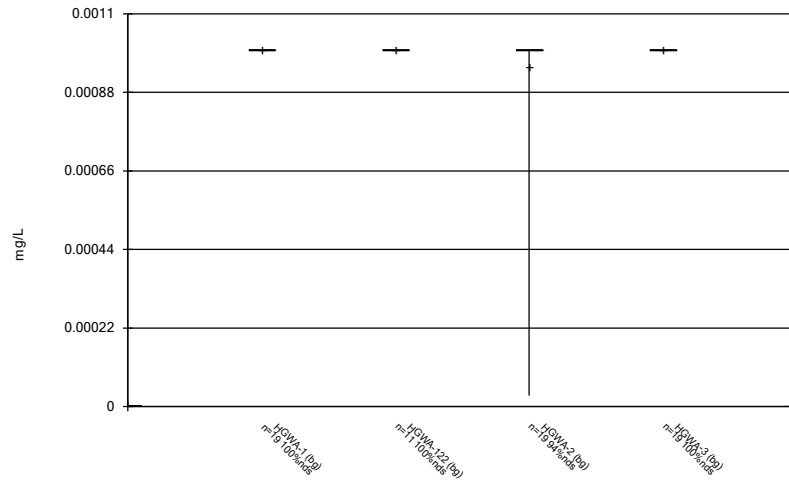
### Box & Whiskers Plot



Constituent: Sulfate Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

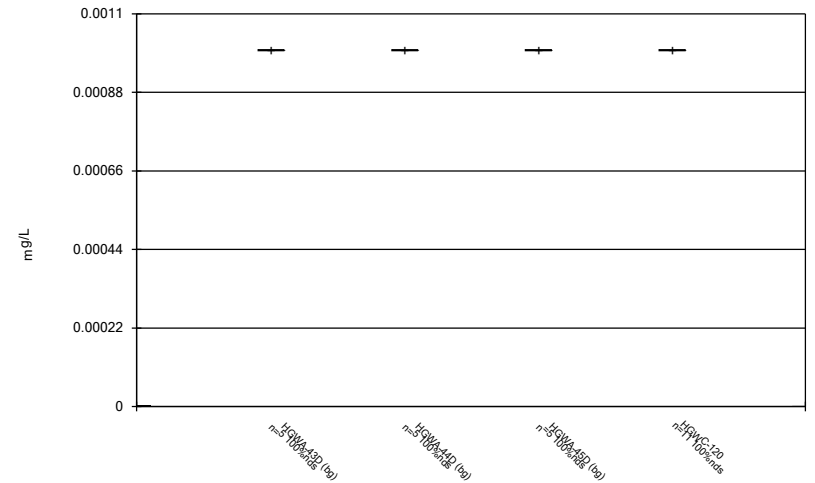


Box & Whiskers Plot



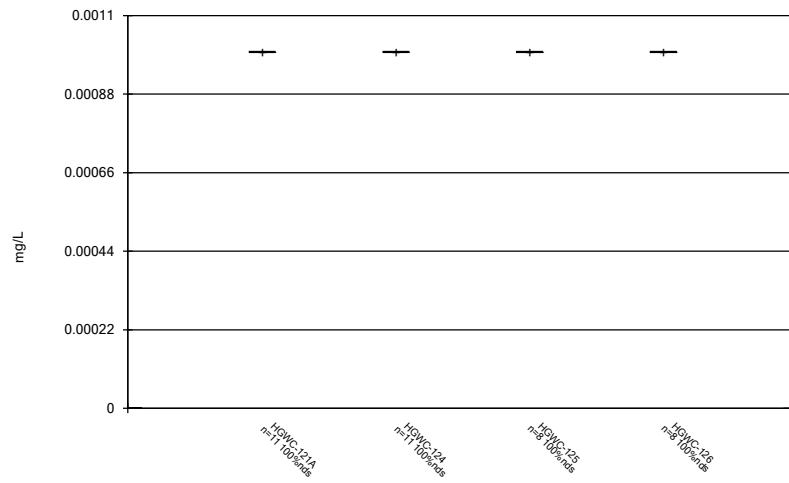
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



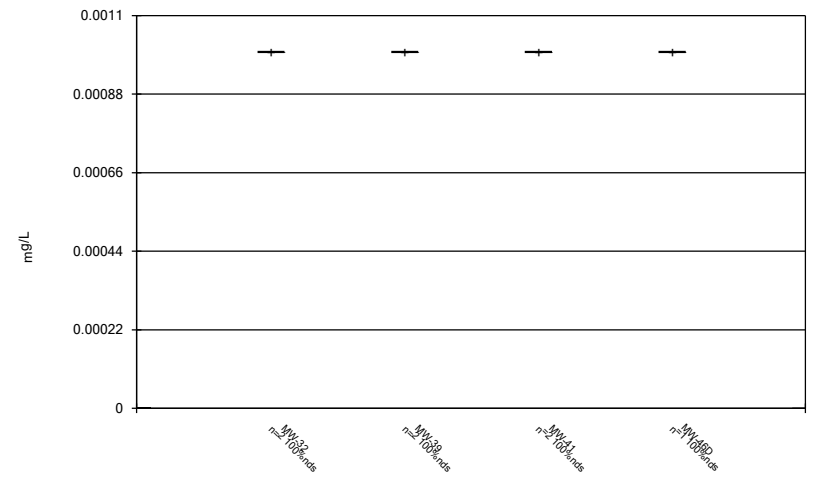
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



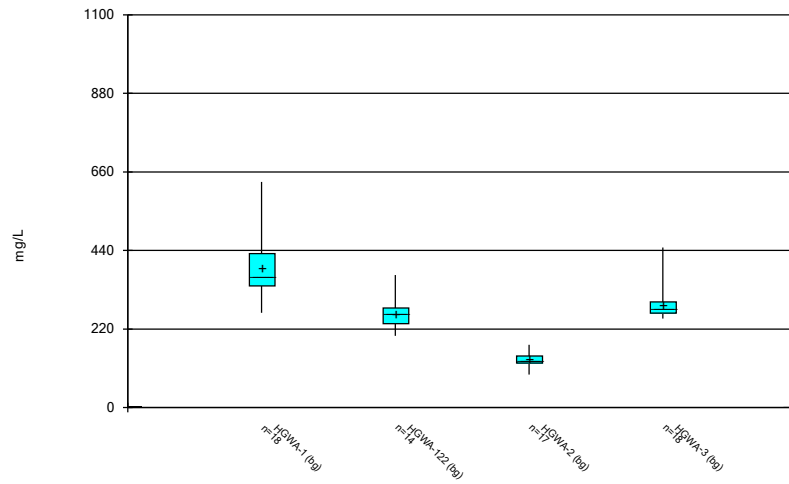
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



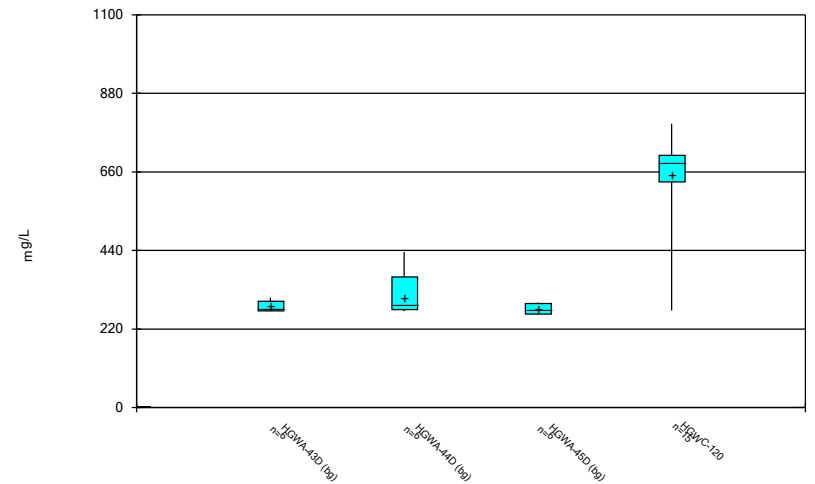
Constituent: Thallium Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



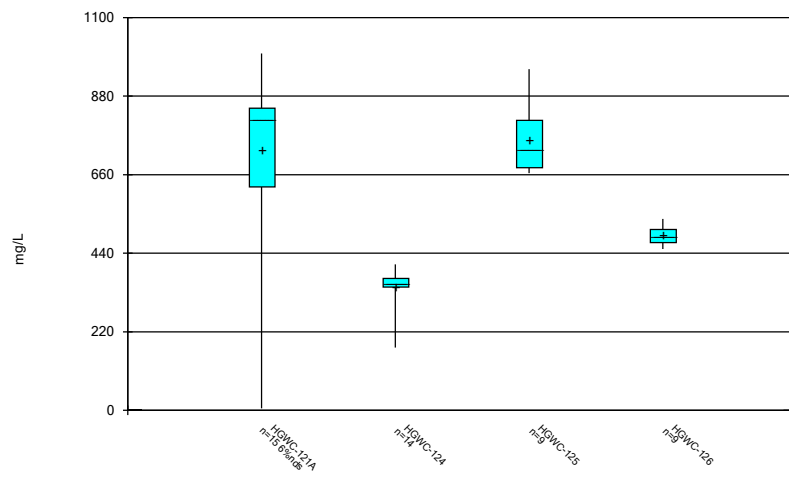
Constituent: Total Dissolved Solids Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



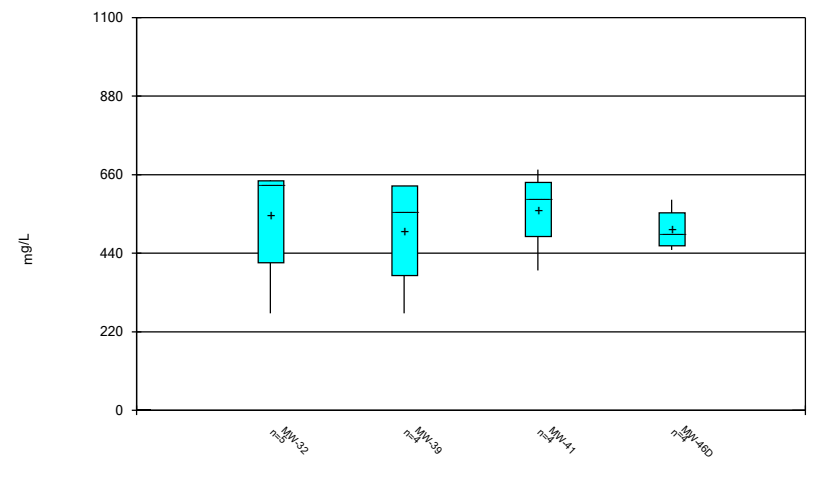
Constituent: Total Dissolved Solids Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 10/14/2021 2:19 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

FIGURE C.

# Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/26/2021, 10:06 AM

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HGWA-122 (Total Dissolved Solids)

4/2/2019

814 (o)

FIGURE D.

# Interwell Prediction Limit Summary - Significant Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 10/18/2021, 1:02 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	0.39	n/a	8/16/2021	1.1	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-121A	0.39	n/a	8/16/2021	2	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-124	0.39	n/a	8/16/2021	0.44	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-125	0.39	n/a	8/19/2021	1.5	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-120	138	n/a	8/16/2021	171	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-121A	138	n/a	8/16/2021	162	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-125	138	n/a	8/19/2021	196	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-126	138	n/a	8/19/2021	139	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-120	88.2	n/a	8/16/2021	211	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-121A	88.2	n/a	8/16/2021	158	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-125	88.2	n/a	8/19/2021	264	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-125	632	n/a	8/19/2021	732	Yes	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2

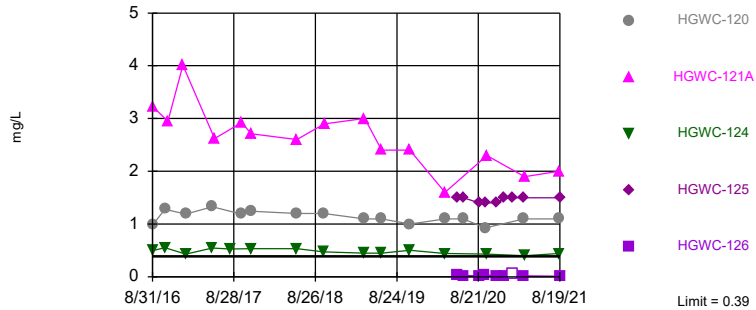
# Interwell Prediction Limit Summary - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 10/18/2021, 1:02 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	0.39	n/a	8/16/2021	1.1	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-121A	0.39	n/a	8/16/2021	2	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-124	0.39	n/a	8/16/2021	0.44	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-125	0.39	n/a	8/19/2021	1.5	Yes	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-126	0.39	n/a	8/19/2021	0.011J	No	86	n/a	n/a	4.651	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-120	138	n/a	8/16/2021	171	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-121A	138	n/a	8/16/2021	162	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-124	138	n/a	8/16/2021	106	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-125	138	n/a	8/19/2021	196	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-126	138	n/a	8/19/2021	139	Yes	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-120	41.1	n/a	8/16/2021	2.4	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-121A	41.1	n/a	8/16/2021	18	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-124	41.1	n/a	8/16/2021	2.6	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-125	41.1	n/a	8/19/2021	4.5	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-126	41.1	n/a	8/19/2021	7.8	No	86	n/a	n/a	0	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-120	0.87	n/a	8/16/2021	0.39	No	100	n/a	n/a	26	n/a	n/a	0.0001934	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-121A	0.87	n/a	8/16/2021	0.15	No	100	n/a	n/a	26	n/a	n/a	0.0001934	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-124	0.87	n/a	8/16/2021	0.05ND	No	100	n/a	n/a	26	n/a	n/a	0.0001934	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-125	0.87	n/a	8/19/2021	0.17	No	100	n/a	n/a	26	n/a	n/a	0.0001934	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-126	0.87	n/a	8/19/2021	0.43	No	100	n/a	n/a	26	n/a	n/a	0.0001934	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-120	7.92	4.9	8/16/2021	6.92	No	99	n/a	n/a	0	n/a	n/a	0.0003956	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-121A	7.92	4.9	8/16/2021	6.74	No	99	n/a	n/a	0	n/a	n/a	0.0003956	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-124	7.92	4.9	8/16/2021	7.09	No	99	n/a	n/a	0	n/a	n/a	0.0003956	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-125	7.92	4.9	8/19/2021	7.24	No	99	n/a	n/a	0	n/a	n/a	0.0003956	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-126	7.92	4.9	8/19/2021	7.32	No	99	n/a	n/a	0	n/a	n/a	0.0003956	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-120	88.2	n/a	8/16/2021	211	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-121A	88.2	n/a	8/16/2021	158	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-124	88.2	n/a	8/16/2021	74	No	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-125	88.2	n/a	8/19/2021	264	Yes	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-126	88.2	n/a	8/19/2021	64.4	No	86	n/a	n/a	1.163	n/a	n/a	0.0002623	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-120	632	n/a	8/16/2021	632	No	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-121A	632	n/a	8/16/2021	626	No	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-124	632	n/a	8/16/2021	352	No	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-125	632	n/a	8/19/2021	732	Yes	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-126	632	n/a	8/19/2021	488	No	85	n/a	n/a	0	n/a	n/a	0.0002684	NP Inter (normality) 1 of 2

Exceeds Limit: HGWC-120, HGWC-121A,  
HGWC-124, HGWC-125

Prediction Limit  
Interwell Non-parametric

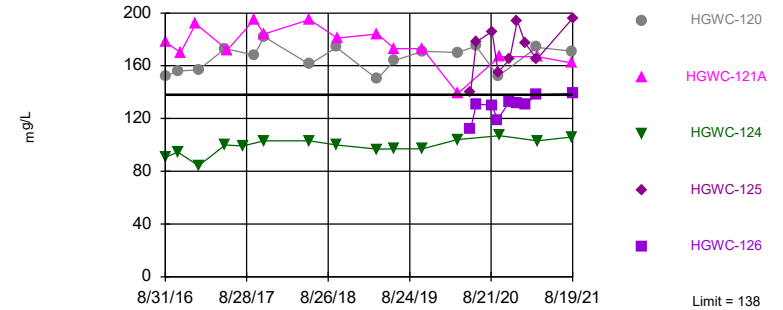


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 86 background values. 4.651% NDs. Annual per-constituent alpha = 0.00262. Individual comparison alpha = 0.0002623 (1 of 2). Comparing 5 points to limit.

Constituent: Boron Analysis Run 10/18/2021 12:58 PM View: All  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Exceeds Limit: HGWC-120, HGWC-121A,  
HGWC-125, HGWC-126

Prediction Limit  
Interwell Non-parametric

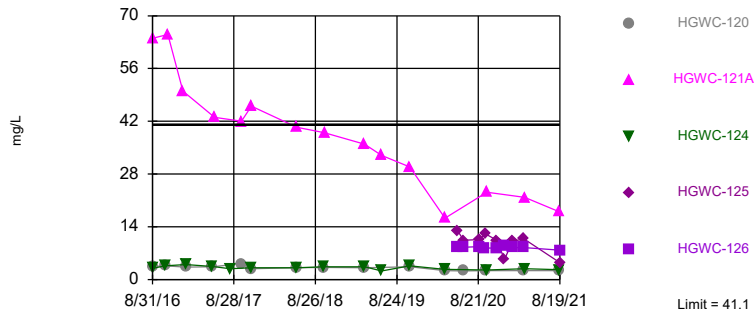


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 86 background values. Annual per-constituent alpha = 0.00262. Individual comparison alpha = 0.0002623 (1 of 2). Comparing 5 points to limit.

Constituent: Calcium Analysis Run 10/18/2021 12:58 PM View: All  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Within Limit

Prediction Limit  
Interwell Non-parametric

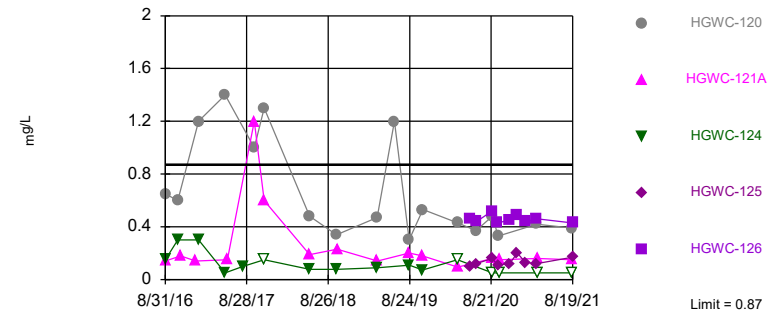


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 86 background values. Annual per-constituent alpha = 0.00262. Individual comparison alpha = 0.0002623 (1 of 2). Comparing 5 points to limit.

Constituent: Chloride Analysis Run 10/18/2021 12:58 PM View: All  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Within Limit

Prediction Limit  
Interwell Non-parametric



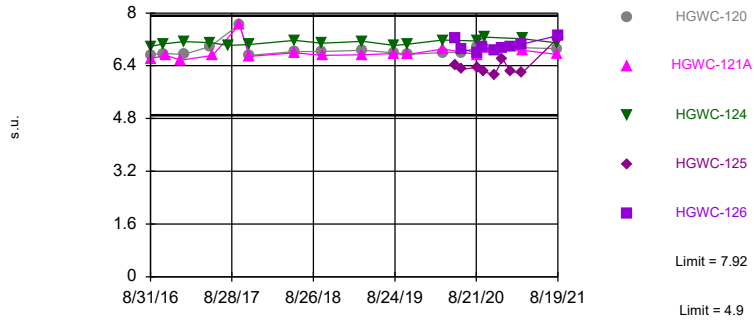
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 100 background values. 26% NDs. Annual per-constituent alpha = 0.001932. Individual comparison alpha = 0.0001934 (1 of 2). Comparing 5 points to limit.

Constituent: Fluoride Analysis Run 10/18/2021 12:58 PM View: All  
Plant Hammond Client: Southern Company Data: Hammond AP-3



Within Limits

Prediction Limit  
Interwell Non-parametric

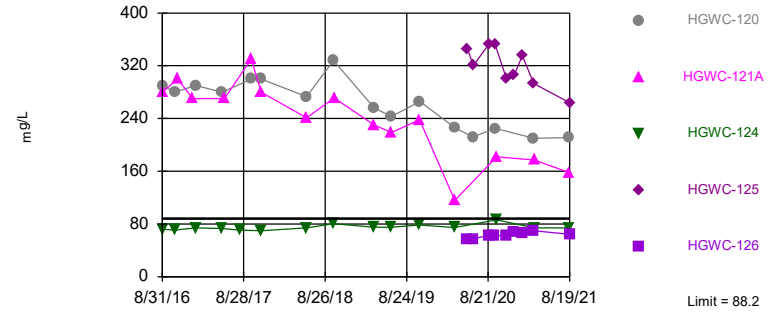


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 99 background values. Annual per-constituent alpha = 0.003952. Individual comparison alpha = 0.0003956 (1 of 2). Comparing 5 points to limit.

Constituent: pH Analysis Run 10/18/2021 12:58 PM View: All  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Exceeds Limit: HGWC-120, HGWC-121A, HGWC-125

Prediction Limit  
Interwell Non-parametric



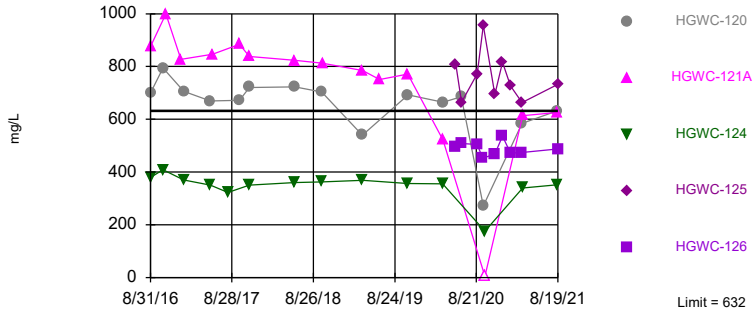
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 86 background values. 1.163% NDs. Annual per-constituent alpha = 0.00262. Individual comparison alpha = 0.0002623 (1 of 2). Comparing 5 points to limit.

Constituent: Sulfate Analysis Run 10/18/2021 12:58 PM View: All  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

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 Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. Annual per-constituent alpha = 0.002681. Individual comparison alpha = 0.0002684 (1 of 2). Comparing 5 points to limit.

Constituent: Total Dissolved Solids Analysis Run 10/18/2021 12:58 PM View: All  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/18/2021 1:02 PM View: All

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-121A	HGWC-120	HGWC-124	HGWC-126	HGWC-125
5/19/2016	0.0214 (J)	<0.1	0.0321 (J)						
7/11/2016	0.0142 (J)		0.0337 (J)						
7/12/2016		0.0074 (J)							
8/30/2016	0.0074 (J)	<0.1	0.0173 (J)	0.277					
8/31/2016					3.23	0.981	0.494		
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					2.92	1.19			
10/3/2017	0.0198 (J)	0.0097 (J)	0.0386 (J)						
11/15/2017				0.322	2.71	1.24	0.531		
6/4/2018	0.02 (J)	0.017 (J)	0.036 (J)						
6/5/2018				0.24	2.6	1.2	0.53		
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					3		0.45		
6/17/2019					2.4	1.1			
6/18/2019				0.25			0.45		
9/23/2019	0.021 (J)	0.0081 (J)	0.04 (J)						
10/21/2019				0.25	2.4		0.5		
10/22/2019						1			
3/24/2020				0.1			0.44		
3/25/2020	0.025 (J)	0.0096 (J)	0.039 (J)		1.6	1.1			
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					2.3		0.43		
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

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/18/2021 1:02 PM View: All  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-121A	HGWC-120	HGWC-124	HGWC-126	HGWC-125
1/19/2021									
1/20/2021								<0.1	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					1.9		0.4		
8/11/2021	0.02 (J)								
8/12/2021		<0.04	0.044						
8/13/2021				0.19					
8/16/2021					2	1.1	0.44		
8/19/2021								0.011 (J)	1.5

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/18/2021 1:02 PM View: All  
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 10/18/2021 1:02 PM View: All  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-45D (bg)
1/19/2021	<0.1	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			





# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/18/2021 1:02 PM View: All  
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 10/18/2021 1:02 PM View: All  
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			





# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/18/2021 1:02 PM View: All  
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 10/18/2021 1:02 PM View: All  
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			

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/18/2021 1:02 PM View: All

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
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					0.65	0.14 (J)	0.15 (J)		
10/19/2016	0.1 (J)	0.04 (J)	0.1 (J)						
10/20/2016				0.13 (J)					
10/26/2016					0.6		0.3		
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)	<0.3	0.06 (J)						
1/25/2017				0.22 (J)					
1/27/2017					1.2		0.3		
3/21/2017	0.13 (J)	<0.3	0.005 (J)						
5/22/2017	0.12 (J)	<0.3	0.05 (J)						
5/25/2017				0.12 (J)	1.4		0.05 (J)		
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)	<0.3	0.13 (J)						
11/15/2017				0.05 (J)	1.3	0.6	<0.3		
4/2/2018	<0.3	<0.3							
4/3/2018			<0.3						
6/4/2018	0.074 (J)	<0.3	<0.3						
6/5/2018				0.15 (J)	0.48	0.19 (J)	0.078 (J)		
10/1/2018	<0.3	<0.3	<0.3						
10/2/2018				0.22 (J)	0.34		0.078 (J)		
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)	0.3 (J)	0.2 (J)			
8/23/2019							0.11 (J)		
9/23/2019	0.078 (J)	<0.3	<0.3						
10/21/2019				0.15 (J)		0.18 (J)	0.073 (J)		
10/22/2019					0.53				
3/2/2020	0.076 (J)	<0.3	<0.3						
3/24/2020				0.085 (J)			<0.3		
3/25/2020	0.098 (J)	<0.3	<0.3		0.43	0.095 (J)			
5/22/2020								0.1 (J)	0.46
6/15/2020					0.37				
6/16/2020	0.071 (J)		<0.1				0.12	0.44	
8/24/2020				0.075 (J)					
8/25/2020		<0.1	<0.1				0.16	0.52	
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)					

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/18/2021 1:02 PM View: All  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-122 (bg)	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
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								0.2	0.49
1/19/2021									
1/20/2021								0.13	0.44
3/10/2021	0.079 (J)								
3/11/2021		0.1	<0.1	0.059 (J)					
3/12/2021					0.42			0.12	0.46
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					0.39	0.15	<0.1		
8/19/2021								0.17	0.43

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/18/2021 1:02 PM View: All

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 10/18/2021 1:02 PM View: All  
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			





# Prediction Limit

Constituent: pH (s.u.) Analysis Run 10/18/2021 1:02 PM View: All  
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 10/18/2021 1:02 PM View: All  
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			

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/18/2021 1:02 PM View: All

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-122 (bg)	HGWC-121A	HGWC-120	HGWC-124	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					280	290	72		
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					330	300			
10/3/2017	42	48	47						
11/15/2017				49	280	300	70		
6/4/2018	71.8	46.6	47.8						
6/5/2018				48.9	241	273	74		
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					230		75.2		
6/17/2019					219	243			
6/18/2019				44.5			75.3		
9/23/2019	70.2	43.9	47.2						
10/21/2019				45.6	238		78.5		
10/22/2019						266			
3/24/2020				25.9			74.6		
3/25/2020	85.9	50.5	46.3		116	226			
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					182		86.2		
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 10/18/2021 1:02 PM View: All  
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 10/18/2021 1:02 PM View: All  
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			

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/18/2021 1:02 PM View: AllI

Plant Hammond Client: Southern Company Data: Hammond AP-3

	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	421	143	267						
7/11/2016	363	125							
7/12/2016			249						
8/30/2016	330	168	254	280					
8/31/2016					700	379	876		
10/19/2016	380	176	357						
10/20/2016				265					
10/26/2016					795	409			
11/7/2016							1000		
12/6/2016	377	145	285						
1/13/2017							827		
1/24/2017	342	129	300						
1/25/2017				371					
1/27/2017					706	370			
3/21/2017	340	103	288						
5/22/2017	338	92	263						
5/25/2017				237	669	351			
6/3/2017							846		
8/11/2017				253		322			
10/2/2017					672		884		
10/3/2017	343	127	300						
11/15/2017				261	721	350	838		
6/4/2018	415	140	266						
6/5/2018				276	723	360	823		
10/1/2018	354	135	291						
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	129	268						
10/21/2019				296		357	771		
10/22/2019					693				
3/24/2020				278		355			
3/25/2020	496	138	284		665		521		
5/22/2020								496	809
6/15/2020					685				
6/16/2020	632		448				508	665	
8/25/2020							505	772	
9/15/2020	265	124	258	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							536	816	



# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/18/2021 1:02 PM View: All

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	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: Total Dissolved Solids (mg/L) Analysis Run 10/18/2021 1:02 PM View: All  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	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			

FIGURE E.

# Trend Test - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/18/2021, 1:07 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-122 (bg)	-0.02558	-60	-53	Yes	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-2 (bg)	0.002396	83	63	Yes	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-121A	-0.2431	-70	-53	Yes	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-124	-0.02071	-55	-53	Yes	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	2.813	71	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-122 (bg)	-1.769	-61	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	1.201	66	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-120	-17.87	-77	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-121A	-27.04	-73	-53	Yes	15	0	n/a	n/a	0.01	NP

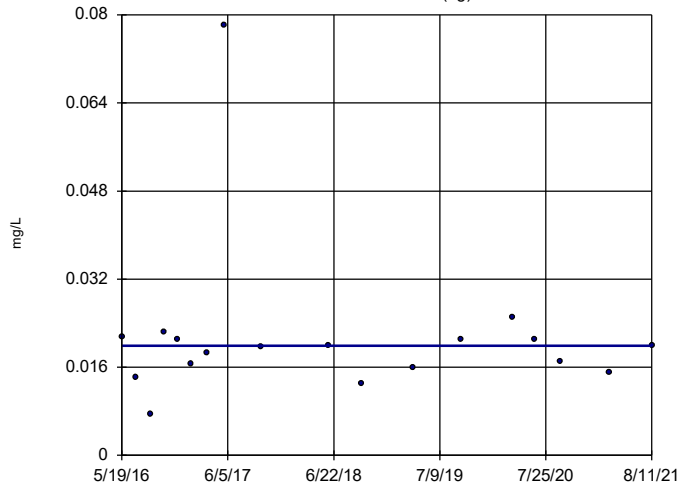
# Trend Test - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 10/18/2021, 1:07 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	0	-1	-68	No	18	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWA-122 (bg)</b>	<b>-0.02558</b>	<b>-60</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>0.002396</b>	<b>83</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWA-3 (bg)	0	-2	-68	No	18	16.67	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-43D (bg)	-0.02108	-9	-14	No	6	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-44D (bg)	0.2086	6	14	No	6	16.67	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-45D (bg)	0	1	14	No	6	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-120	-0.03782	-47	-58	No	16	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-121A</b>	<b>-0.2431</b>	<b>-70</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>HGWC-124</b>	<b>-0.02071</b>	<b>-55</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-125	0	6	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	3.476	57	68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-122 (bg)	-2.405	-19	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	0.3671	20	63	No	17	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>2.813</b>	<b>71</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWA-43D (bg)	-2.444	-1	-14	No	6	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-5.272	-5	-14	No	6	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-45D (bg)	-2.522	-5	-14	No	6	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-120	2.944	31	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-121A	-5.695	-43	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-125	31.47	13	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-126	13.94	23	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-1 (bg)	2.869	46	68	No	18	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-122 (bg)</b>	<b>-1.769</b>	<b>-61</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>1.201</b>	<b>66</b>	<b>63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWA-3 (bg)	1.327	60	68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-12.17	-13	-14	No	6	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-44D (bg)	4.171	1	14	No	6	16.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-45D (bg)	1.043	1	14	No	6	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWC-120</b>	<b>-17.87</b>	<b>-77</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>HGWC-121A</b>	<b>-27.04</b>	<b>-73</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWC-125	-53.23	-20	-25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	5.962	23	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-122 (bg)	-12.03	-27	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	-2.657	-23	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	0	-2	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	-5.84	-3	-14	No	6	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	83.43	9	14	No	6	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-45D (bg)	-5.309	-1	-14	No	6	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-125	-76.58	-6	-25	No	9	0	n/a	n/a	0.01	NP

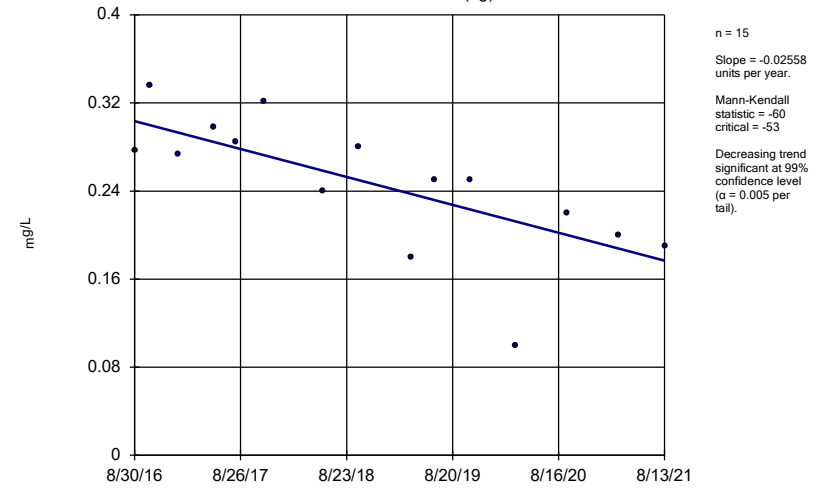


### Sen's Slope Estimator HGWA-1 (bg)



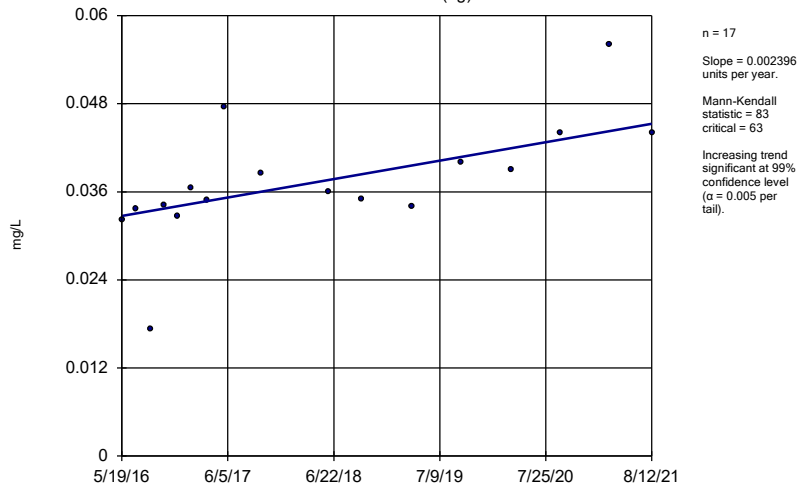
Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWA-122 (bg)



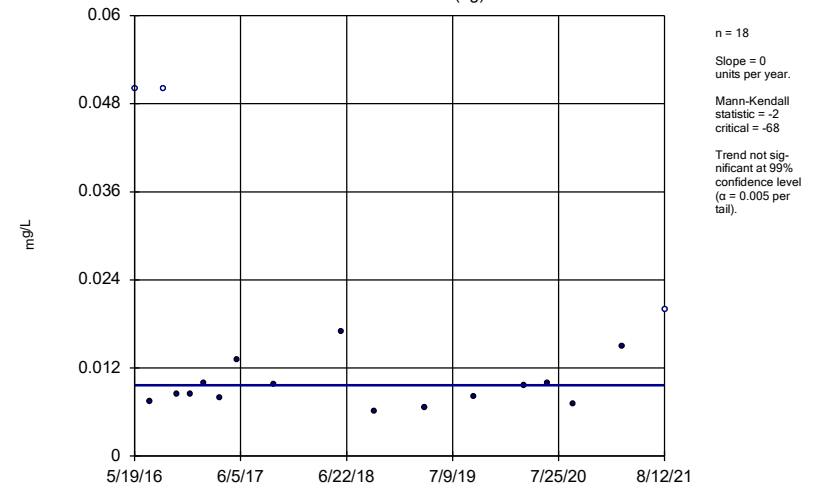
Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWA-2 (bg)



Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

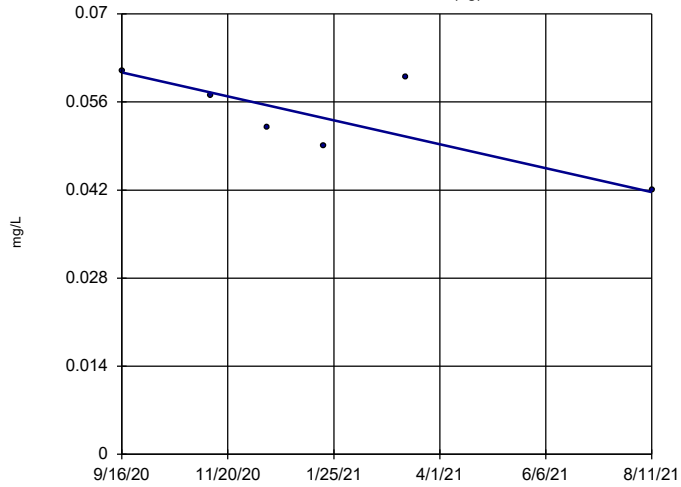
### Sen's Slope Estimator HGWA-3 (bg)



Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-43D (bg)

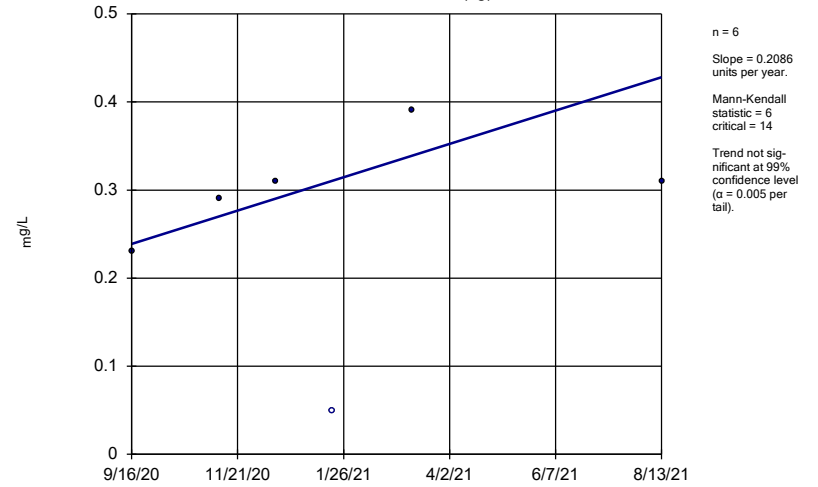


Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Hollow symbols indicate censored values.

### Sen's Slope Estimator

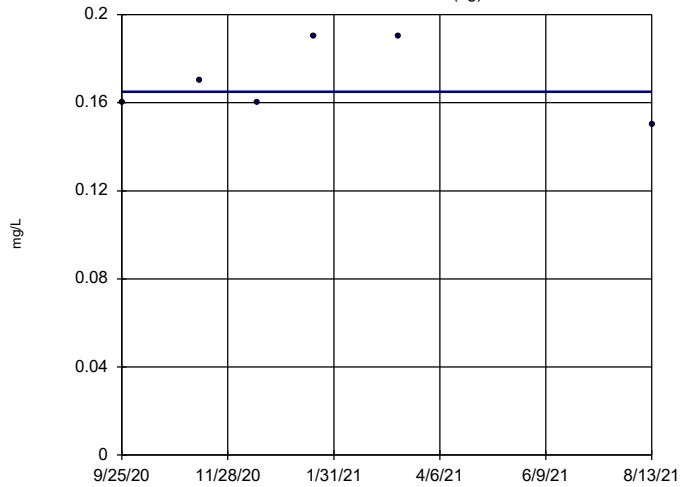
HGWA-44D (bg)



Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

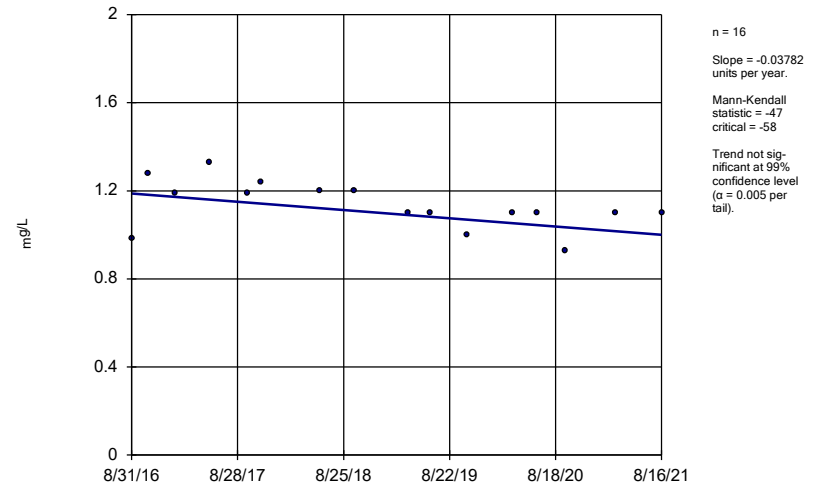
HGWA-45D (bg)



Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

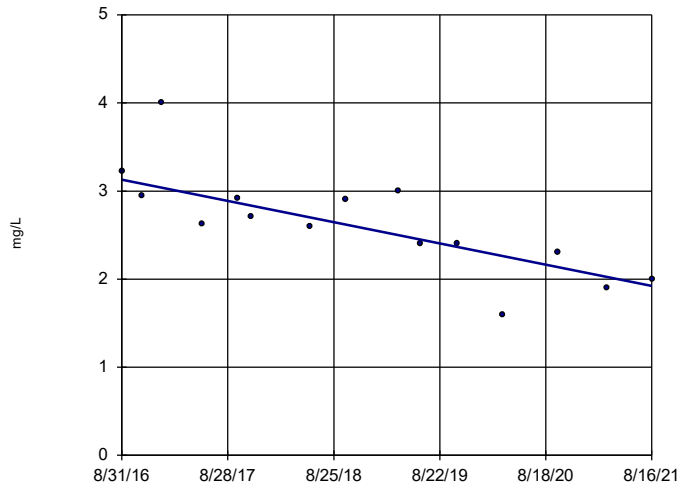
### Sen's Slope Estimator

HGWC-120



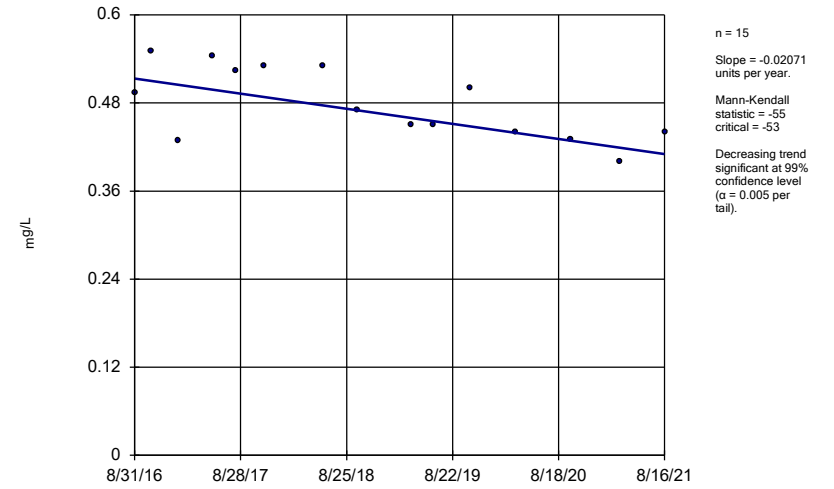
Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWC-121A



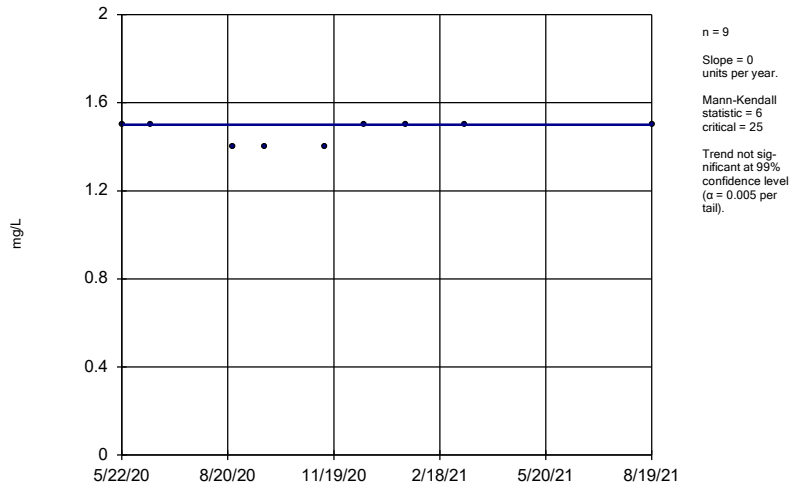
Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWC-124



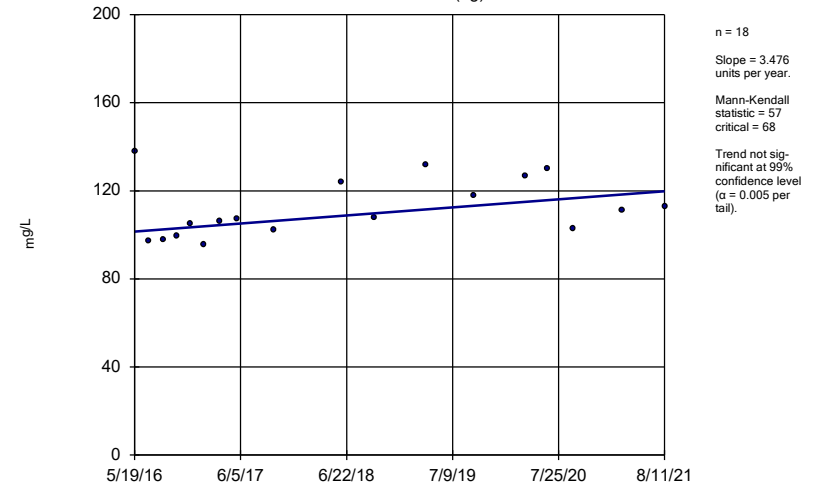
Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWC-125



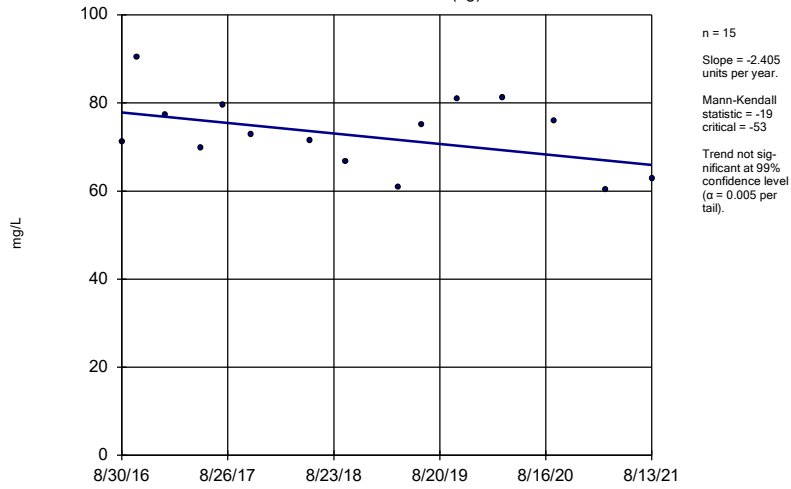
Constituent: Boron Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWA-1 (bg)



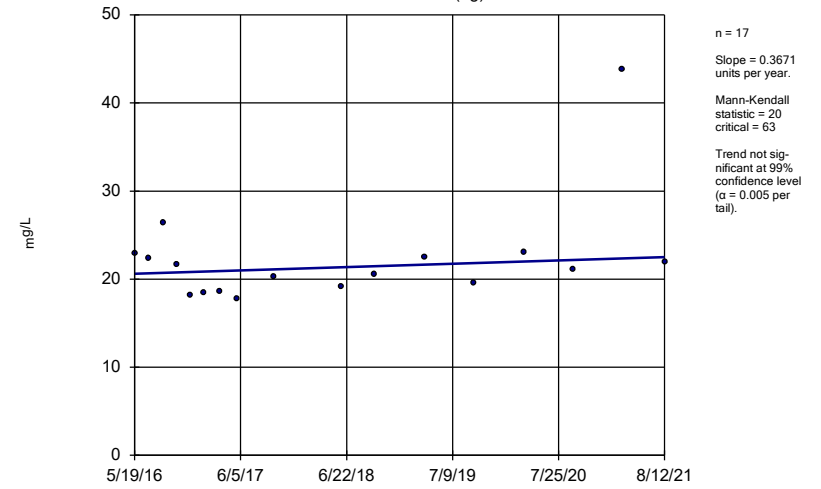
Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWA-122 (bg)



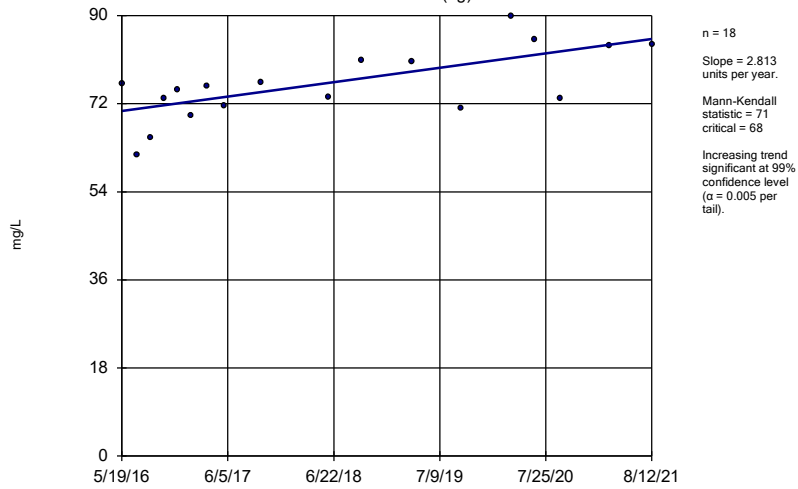
Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWA-2 (bg)



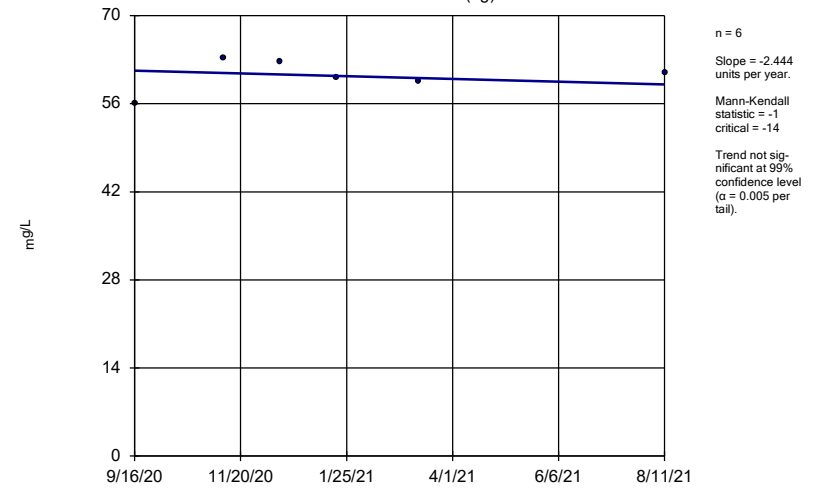
Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWA-3 (bg)



Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

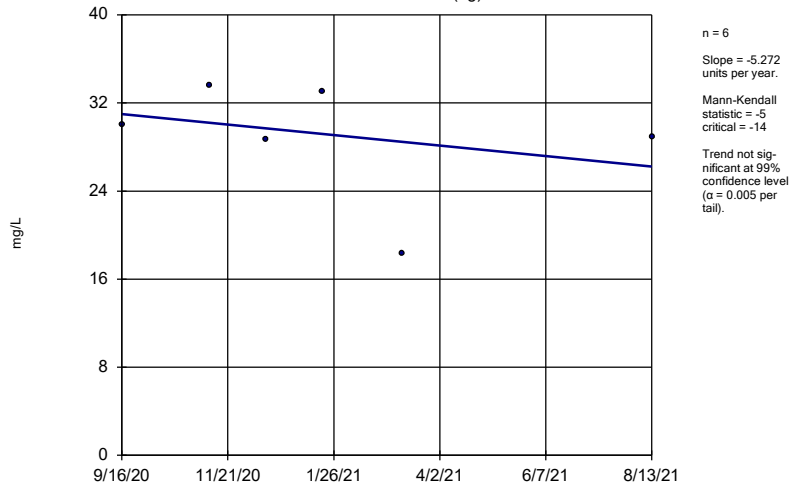
### Sen's Slope Estimator HGWA-43D (bg)



Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

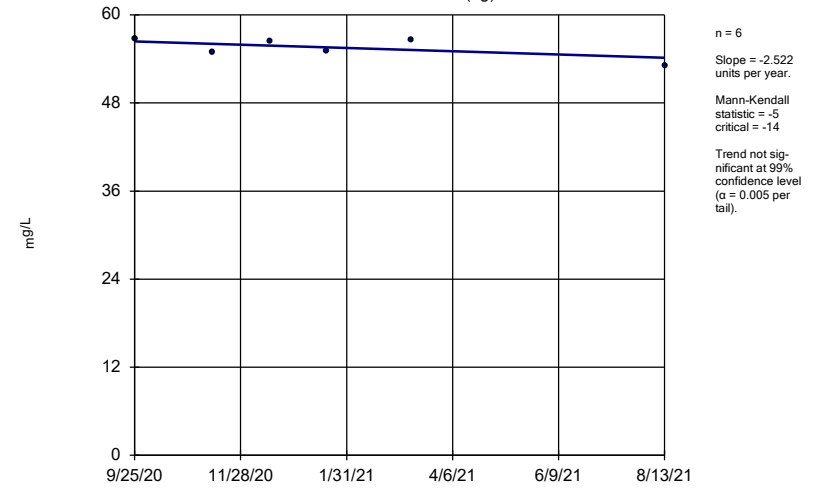
HGWA-44D (bg)



Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

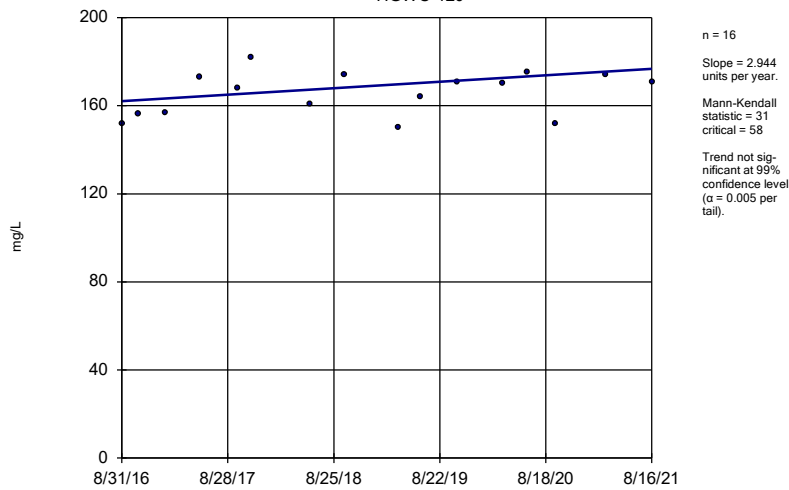
HGWA-45D (bg)



Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

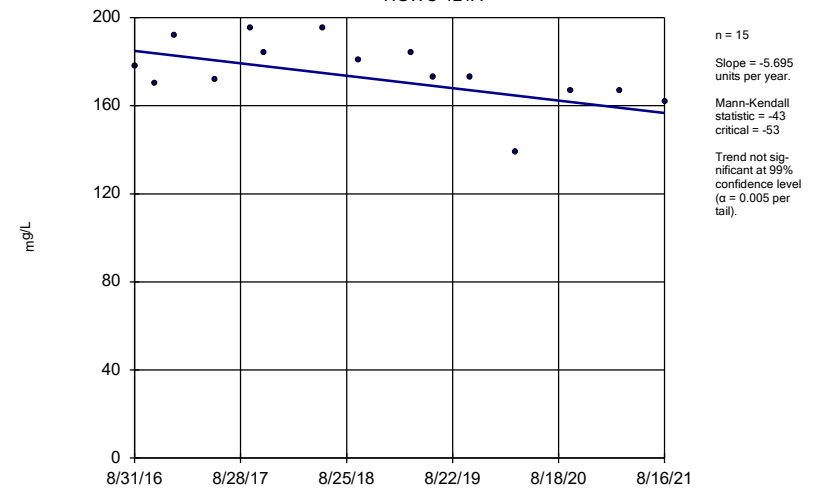
HGWC-120



Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

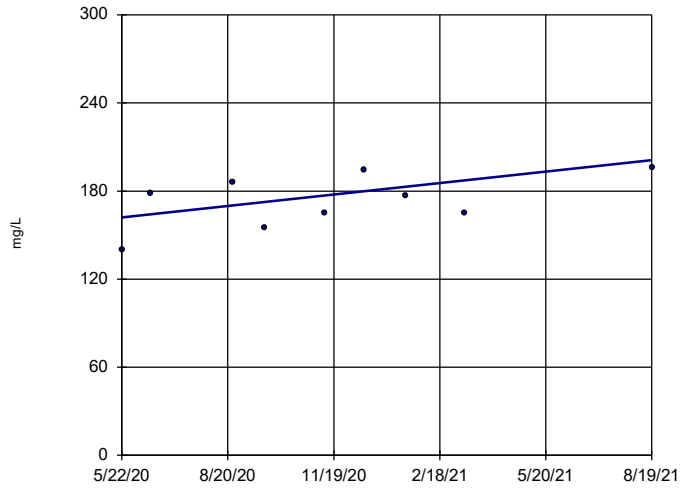
HGWC-121A



Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWC-125

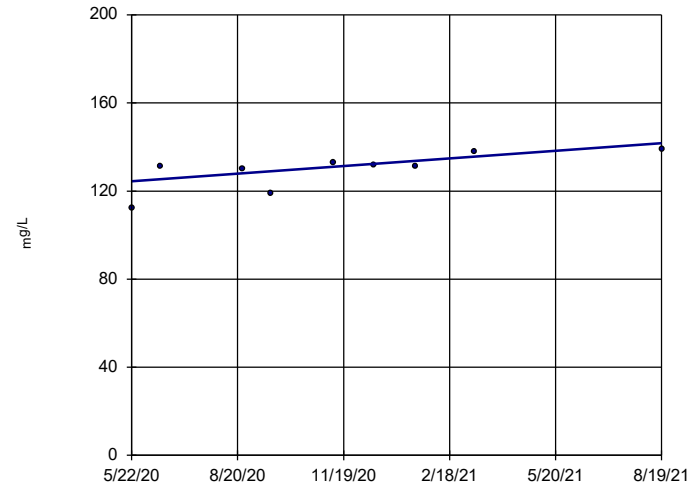


n = 9  
 Slope = 31.47  
 units per year.  
 Mann-Kendall  
 statistic = 13  
 critical = 25  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWC-126

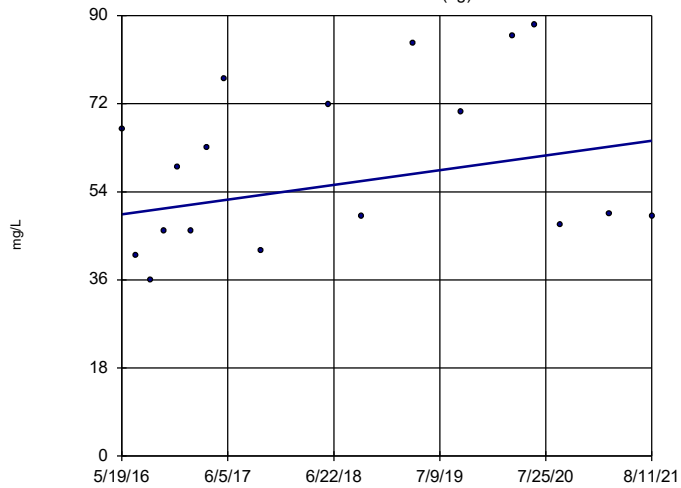


n = 9  
 Slope = 13.94  
 units per year.  
 Mann-Kendall  
 statistic = 23  
 critical = 25  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-1 (bg)

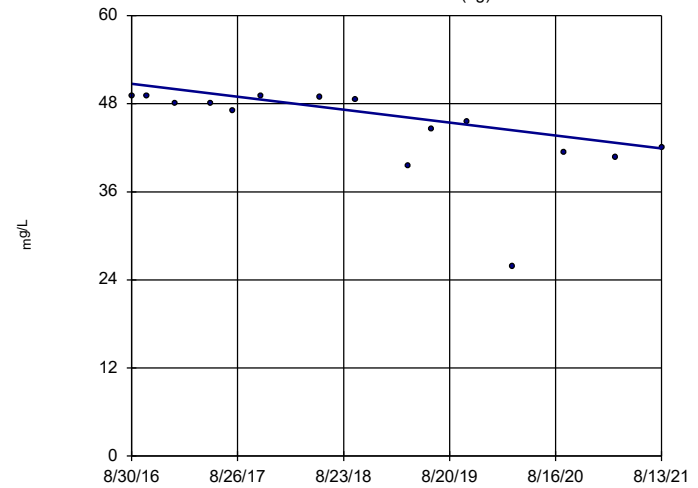


n = 18  
 Slope = 2.869  
 units per year.  
 Mann-Kendall  
 statistic = 46  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

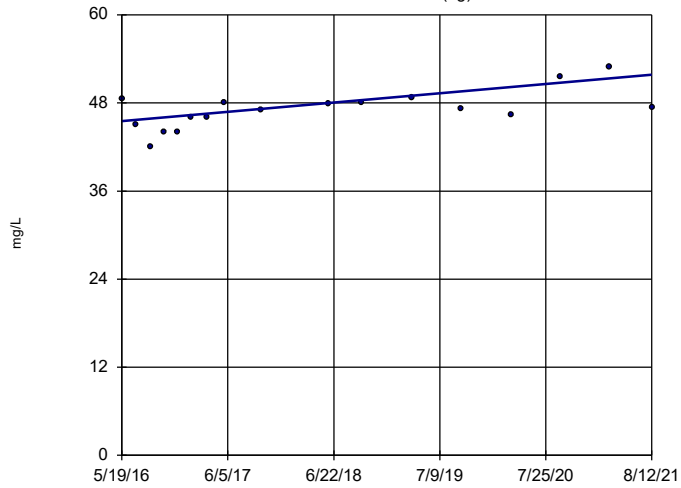
HGWA-122 (bg)



n = 15  
 Slope = -1.769  
 units per year.  
 Mann-Kendall  
 statistic = -61  
 critical = -53  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

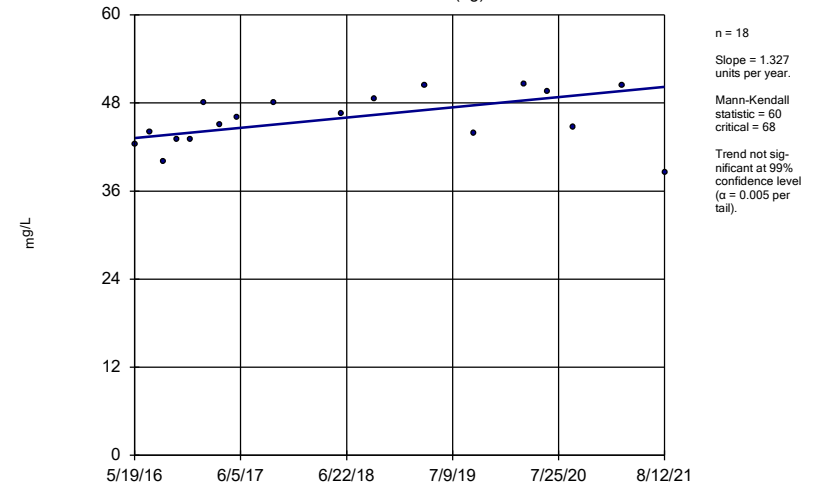
Constituent: Sulfate Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Sen's Slope Estimator  
HGWA-2 (bg)



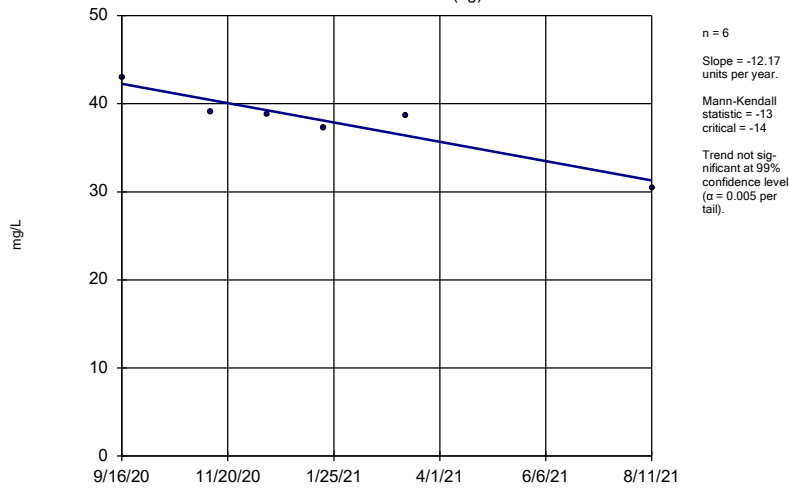
Constituent: Sulfate Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sen's Slope Estimator  
HGWA-3 (bg)



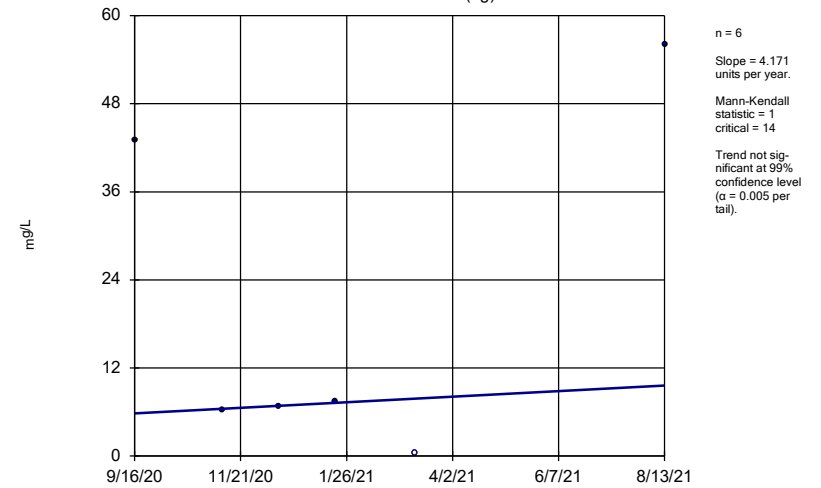
Constituent: Sulfate Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sen's Slope Estimator  
HGWA-43D (bg)



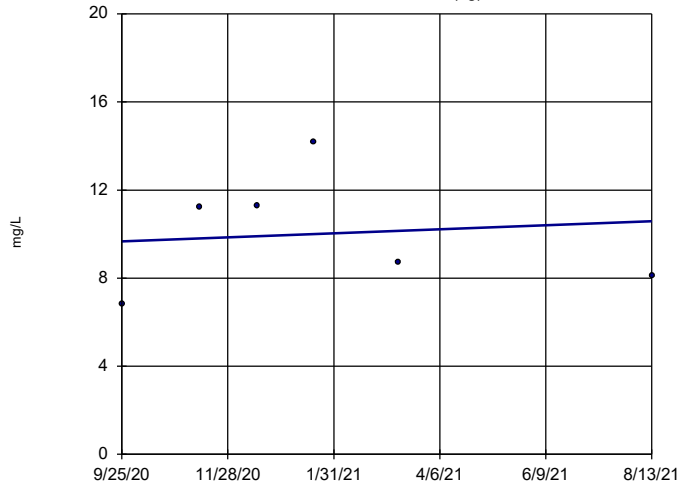
Constituent: Sulfate Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sen's Slope Estimator  
HGWA-44D (bg)



Constituent: Sulfate Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

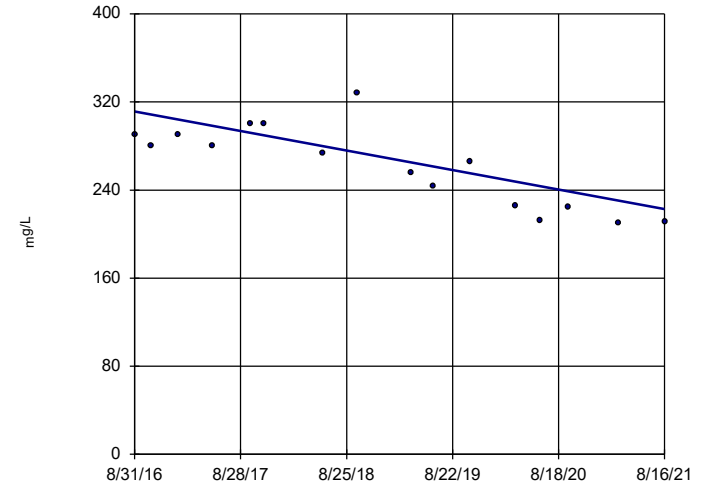
Sen's Slope Estimator  
HGWA-45D (bg)



n = 6  
 Slope = 1.043  
 units per year.  
 Mann-Kendall  
 statistic = 1  
 critical = 14  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

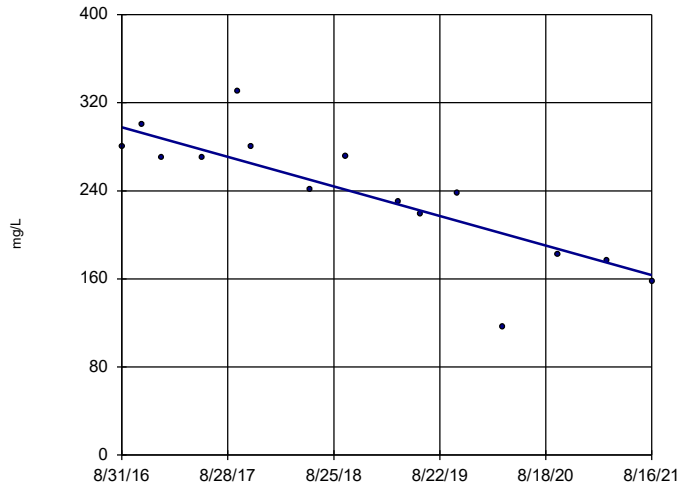
Sen's Slope Estimator  
HGWC-120



n = 16  
 Slope = -17.87  
 units per year.  
 Mann-Kendall  
 statistic = -77  
 critical = -58  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

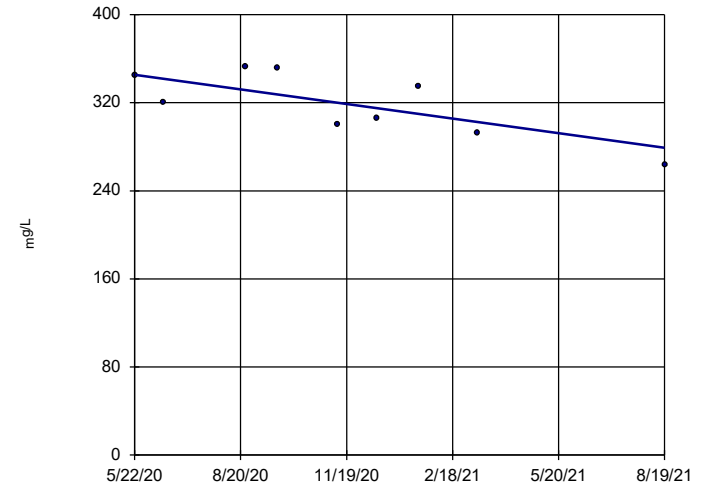
Sen's Slope Estimator  
HGWC-121A



n = 15  
 Slope = -27.04  
 units per year.  
 Mann-Kendall  
 statistic = -73  
 critical = -53  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

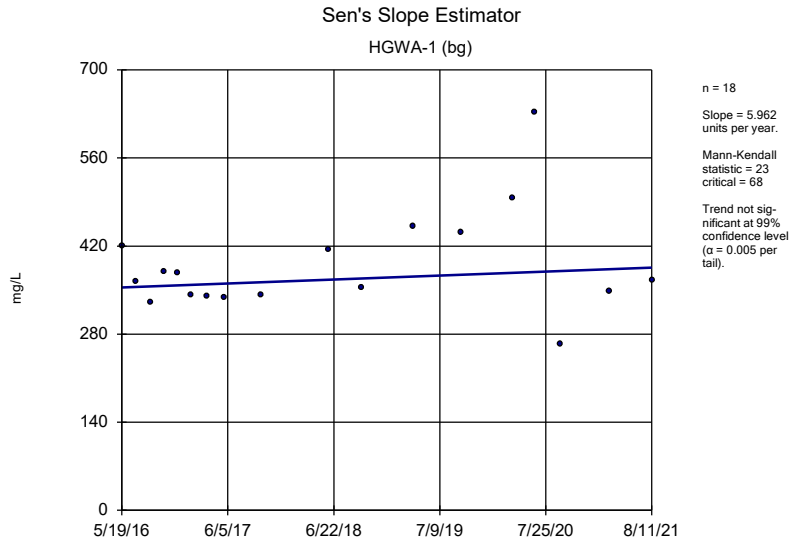
Sen's Slope Estimator  
HGWC-125



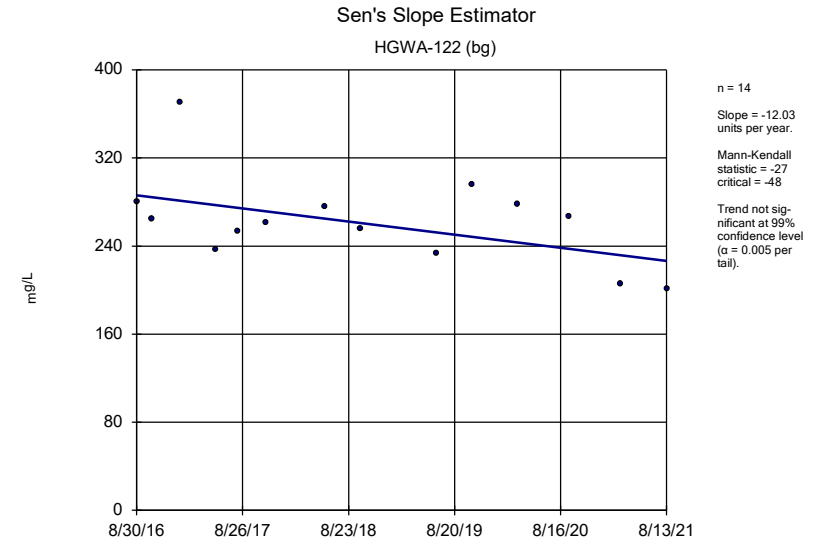
n = 9  
 Slope = -53.23  
 units per year.  
 Mann-Kendall  
 statistic = -20  
 critical = -25  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

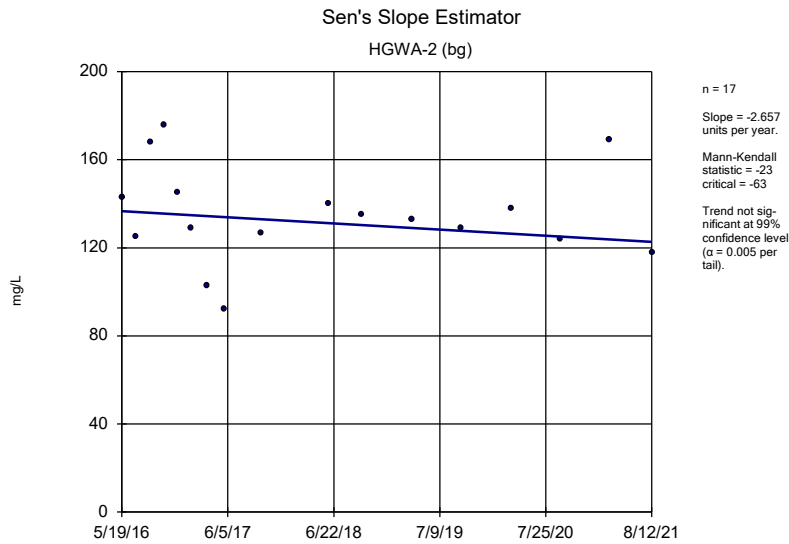




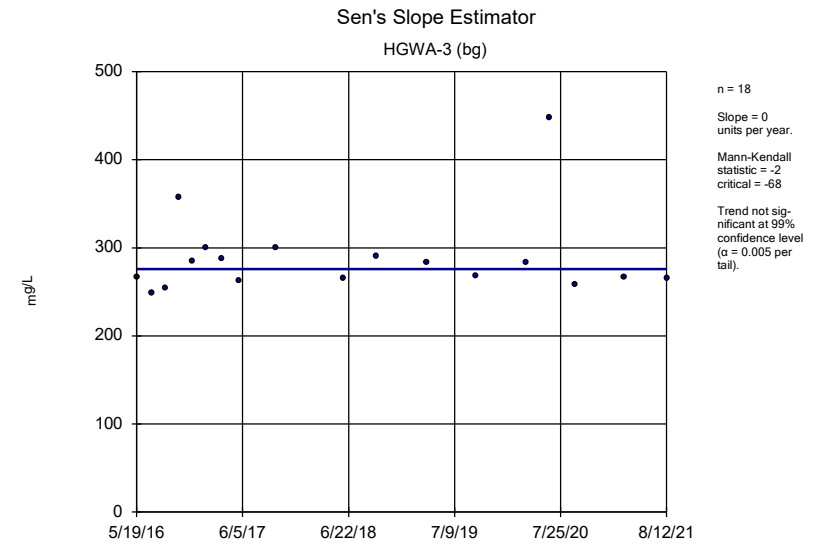
Constituent: Total Dissolved Solids Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3



Constituent: Total Dissolved Solids Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3



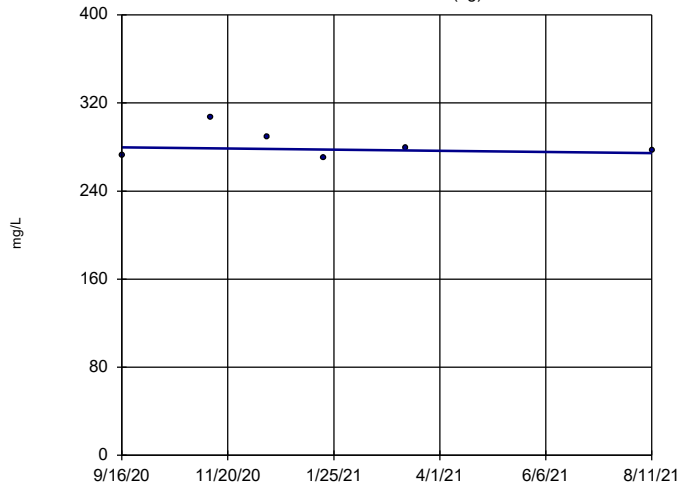
Constituent: Total Dissolved Solids Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3



Constituent: Total Dissolved Solids Analysis Run 10/18/2021 1:06 PM View: Trend  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-43D (bg)

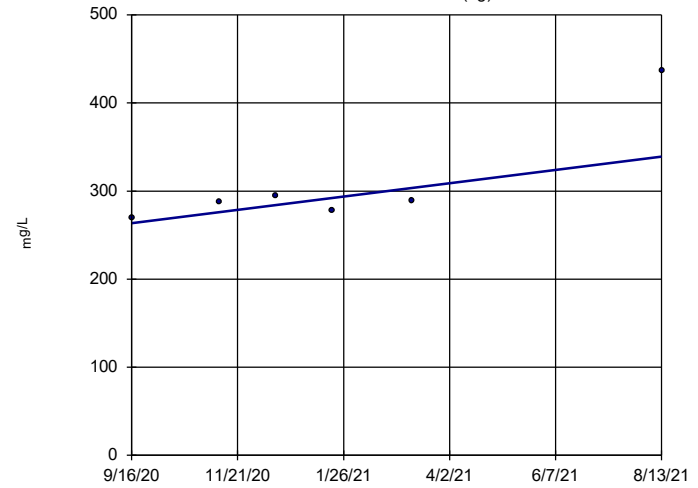


n = 6  
 Slope = -5.84  
 units per year.  
 Mann-Kendall  
 statistic = -3  
 critical = -14  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-44D (bg)

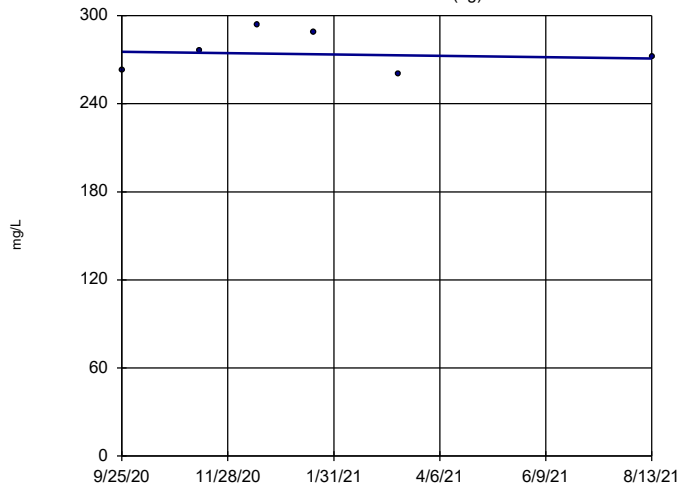


n = 6  
 Slope = 83.43  
 units per year.  
 Mann-Kendall  
 statistic = 9  
 critical = 14  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-45D (bg)

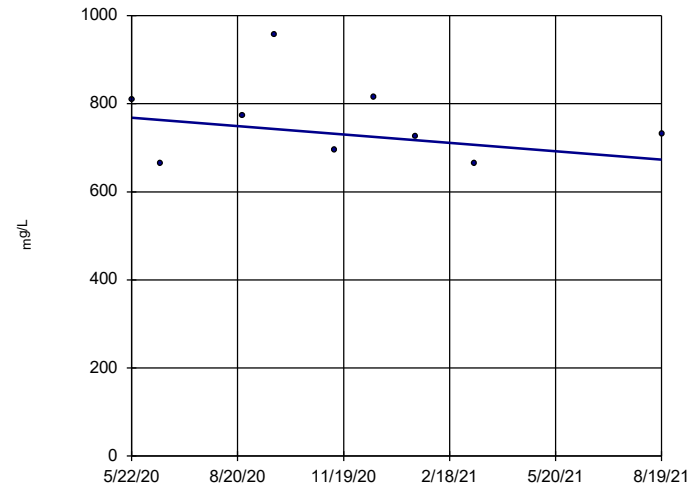


n = 6  
 Slope = -5.309  
 units per year.  
 Mann-Kendall  
 statistic = -1  
 critical = -14  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWC-125



n = 9  
 Slope = -76.58  
 units per year.  
 Mann-Kendall  
 statistic = -6  
 critical = -25  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/18/2021 1:06 PM View: Trend  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

FIGURE F.

# Upper Tolerance Limits

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 10/18/2021, 1:14 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	85	84.71	n/a	0.01278	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	83	71.08	n/a	0.01416	NP Inter(normal...)
Barium (mg/L)	n/a	0.54	n/a	n/a	n/a	93	1.075	n/a	0.008478	NP Inter(normal...)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	85	82.35	n/a	0.01278	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	83	89.16	n/a	0.01416	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0079	n/a	n/a	n/a	87	75.86	n/a	0.01153	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.038	n/a	n/a	n/a	93	77.42	n/a	0.008478	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	4.36	n/a	n/a	n/a	86	0	n/a	0.01214	NP Inter(normal...)
Fluoride (mg/L)	n/a	0.87	n/a	n/a	n/a	100	26	n/a	0.005921	NP Inter(normal...)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	87	62.07	n/a	0.01153	NP Inter(normal...)
Lithium (mg/L)	n/a	0.032	n/a	n/a	n/a	93	34.41	n/a	0.008478	NP Inter(normal...)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	65	92.31	n/a	0.03565	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	95	68.42	n/a	0.007651	NP Inter(normal...)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	83	98.8	n/a	0.01416	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	83	98.8	n/a	0.01416	NP Inter(NDs)

FIGURE G.

<b>PLANT HAMMOND AP-3 GWPS (Federal)</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>Federal GWPS</b>
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		0.54	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		4.36	5
Fluoride, Total (mg/L)	4		0.87	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.032	0.04
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

*\*GWPS = Groundwater Protection Standard*

FIGURE H.

<b>PLANT HAMMOND AP-3 GWPS (State)</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>State GWPS</b>
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		0.54	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		4.36	5
Fluoride, Total (mg/L)	4		0.87	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.001
Lithium, Total (mg/L)	n/a	0.04	0.032	0.032
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.01
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

*\*GWPS = Groundwater Protection Standard*



FIGURE I.

# Federal Confidence Interval Summary Table - All Results (No Significant)

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 12/14/2021, 3:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	HGWC-120	0.003	0.0018	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-125	0.003	0.00047	0.006	No	9	77.78	No	0.002	NP (NDs)
Antimony (mg/L)	HGWC-126	0.003	0.0004	0.006	No	9	77.78	No	0.002	NP (NDs)
Antimony (mg/L)	MW-32	0.003	0.00035	0.006	No	4	75	No	0.0625	NP (NDs)
Arsenic (mg/L)	HGWC-120	0.005	0.001	0.01	No	11	63.64	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-121A	0.005	0.0014	0.01	No	11	72.73	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-124	0.005	0.005	0.01	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-125	0.005	0.00081	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	HGWC-126	0.005	0.00071	0.01	No	8	75	No	0.004	NP (NDs)
Barium (mg/L)	HGWC-120	0.05172	0.04601	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-121A	0.0824	0.06527	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-124	0.07319	0.06712	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-125	0.04698	0.04169	2	No	9	0	No	0.01	Param.
Barium (mg/L)	HGWC-126	0.2608	0.2237	2	No	9	0	No	0.01	Param.
Barium (mg/L)	MW-32	0.06217	0.05023	2	No	5	0	No	0.01	Param.
Barium (mg/L)	MW-39	0.06085	0.05715	2	No	4	0	No	0.01	Param.
Barium (mg/L)	MW-41	0.07551	0.05969	2	No	5	0	No	0.01	Param.
Chromium (mg/L)	HGWC-120	0.005	0.0015	0.1	No	15	80	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-121A	0.005	0.0005	0.1	No	15	93.33	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-124	0.005	0.00051	0.1	No	15	86.67	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-125	0.005	0.00052	0.1	No	9	66.67	No	0.002	NP (NDs)
Chromium (mg/L)	HGWC-126	0.005	0.00096	0.1	No	9	88.89	No	0.002	NP (NDs)
Chromium (mg/L)	MW-32	0.005	0.00058	0.1	No	5	80	No	0.031	NP (NDs)
Chromium (mg/L)	MW-41	0.005	0.0009	0.1	No	5	80	No	0.031	NP (NDs)
Cobalt (mg/L)	HGWC-120	0.003889	0.002898	0.038	No	15	0	No	0.01	Param.
Cobalt (mg/L)	HGWC-121A	0.005	0.0005	0.038	No	15	80	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-125	0.01279	0.007031	0.038	No	9	0	No	0.01	Param.
Cobalt (mg/L)	MW-32	0.005359	0.002881	0.038	No	5	0	No	0.01	Param.
Cobalt (mg/L)	MW-39	0.002742	0.002308	0.038	No	4	0	No	0.01	Param.
Cobalt (mg/L)	MW-41	0.0012	0.00057	0.038	No	5	0	No	0.031	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-120	1.138	0.614	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-121A	1.221	0.4747	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-124	0.9359	0.6159	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-125	1.553	0.6976	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-126	1.82	0.837	5	No	8	0	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-32	2.155	-0.1841	5	No	4	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-41	2.085	-0.05149	5	No	4	0	No	0.01	Param.
Fluoride (mg/L)	HGWC-120	1.2	0.37	4	No	18	0	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-121A	0.23	0.14	4	No	16	0	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-124	0.15	0.05	4	No	16	37.5	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-125	0.1683	0.105	4	No	9	0	No	0.01	Param.
Fluoride (mg/L)	HGWC-126	0.4862	0.4294	4	No	9	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-32	0.3747	0.2586	4	No	6	0	No	0.01	Param.
Fluoride (mg/L)	MW-39	0.3616	0.2464	4	No	5	0	No	0.01	Param.
Fluoride (mg/L)	MW-41	0.2754	0.1886	4	No	5	0	No	0.01	Param.
Fluoride (mg/L)	MW-46D	1.233	0.5472	4	No	4	0	No	0.01	Param.
Lead (mg/L)	HGWC-120	0.001	0.0002	0.015	No	15	80	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-121A	0.001	0.00036	0.015	No	15	80	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-124	0.001	0.000075	0.015	No	15	66.67	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-125	0.001	0.000044	0.015	No	9	44.44	No	0.002	NP (normality)
Lead (mg/L)	HGWC-126	0.001	0.000042	0.015	No	9	66.67	No	0.002	NP (NDs)
Lithium (mg/L)	HGWC-120	0.03325	0.0277	0.04	No	15	0	x^5	0.01	Param.
Lithium (mg/L)	HGWC-121A	0.009124	0.007729	0.04	No	15	0	No	0.01	Param.
Lithium (mg/L)	HGWC-124	0.015	0.001	0.04	No	15	33.33	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-125	0.005915	0.003691	0.04	No	9	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	HGWC-126	0.004244	0.003133	0.04	No	9	0	No	0.01	Param.
Lithium (mg/L)	MW-32	0.03438	0.03002	0.04	No	5	0	No	0.01	Param.
Lithium (mg/L)	MW-39	0.03385	0.02872	0.04	No	5	20	x^4	0.01	Param.
Lithium (mg/L)	MW-41	0.03031	0.02649	0.04	No	5	0	No	0.01	Param.
Mercury (mg/L)	HGWC-120	0.0002	0.00007	0.002	No	11	81.82	No	0.006	NP (NDs)
Mercury (mg/L)	HGWC-124	0.0002	0.0002	0.002	No	11	90.91	No	0.006	NP (NDs)
Molybdenum (mg/L)	HGWC-120	0.03817	0.02554	0.1	No	15	0	No	0.01	Param.
Molybdenum (mg/L)	HGWC-124	0.005	0.00091	0.1	No	15	33.33	No	0.01	NP (normality)
Molybdenum (mg/L)	HGWC-125	0.00835	0.0005302	0.1	No	9	33.33	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	MW-32	0.06369	0.05917	0.1	No	7	0	No	0.01	Param.
Molybdenum (mg/L)	MW-39	0.064	0.012	0.1	No	6	0	No	0.0155	NP (normality)
Molybdenum (mg/L)	MW-41	0.04715	0.03205	0.1	No	5	0	No	0.01	Param.
Molybdenum (mg/L)	MW-46D	0.03867	-0.01542	0.1	No	4	0	No	0.01	Param.

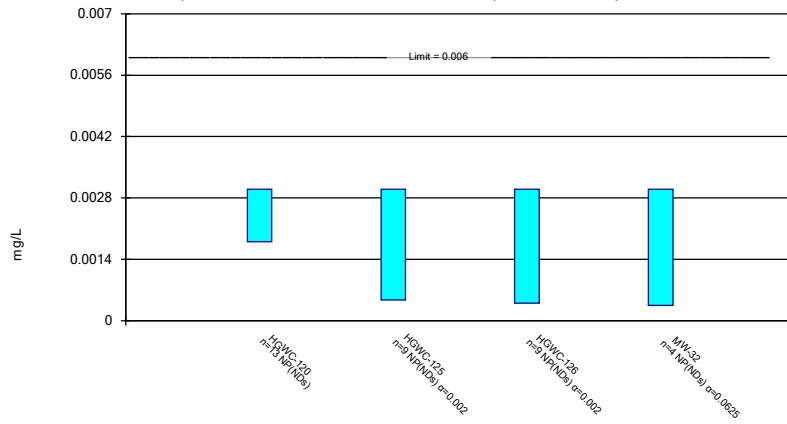
# Federal Confidence Interval Summary Table - All Results (No Significant) Page 2

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 12/14/2021, 3:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Selenium (mg/L)	HGWC-120	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	HGWC-121A	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	HGWC-124	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)

### Non-Parametric Confidence Interval

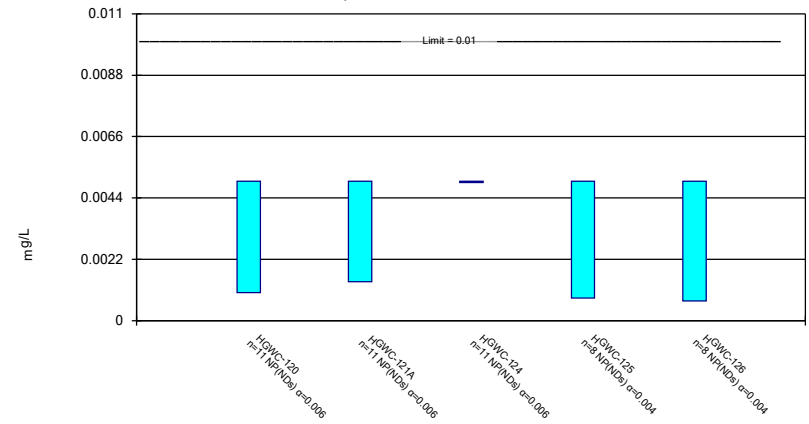
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Antimony Analysis Run 12/14/2021 3:36 PM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

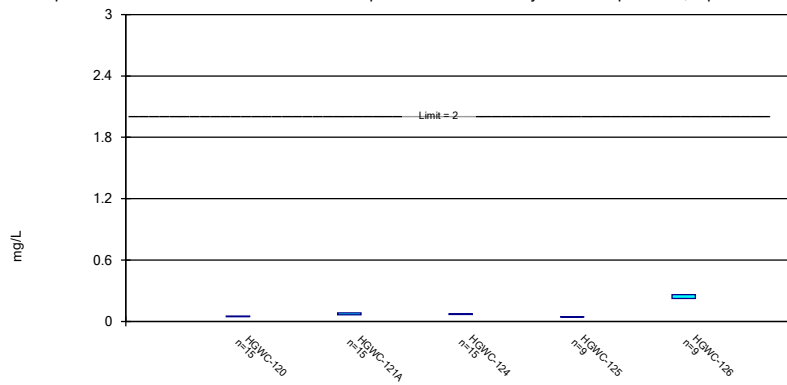
Compliance Limit is not exceeded.



Constituent: Arsenic Analysis Run 12/14/2021 3:36 PM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

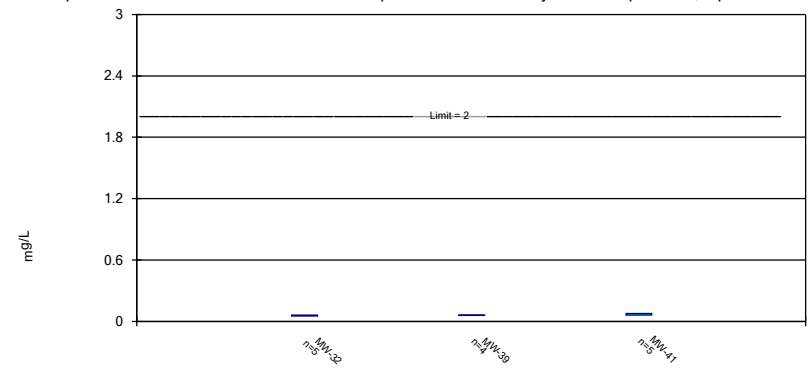
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/14/2021 3:36 PM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

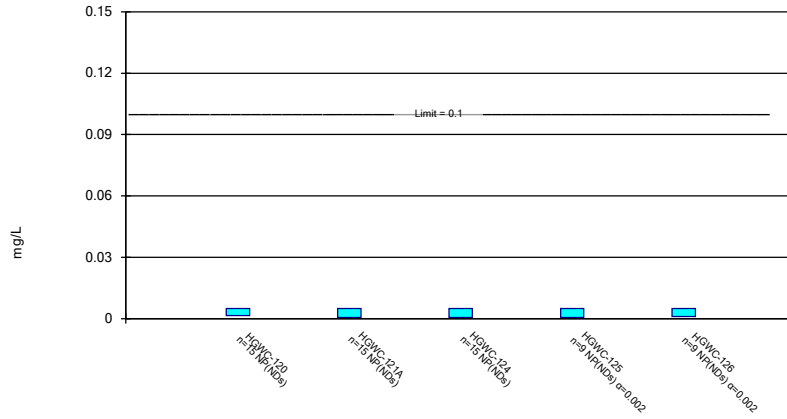
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/14/2021 3:36 PM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

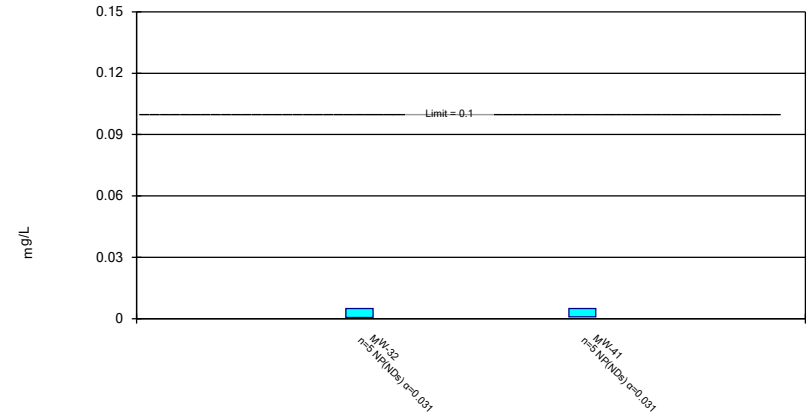
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

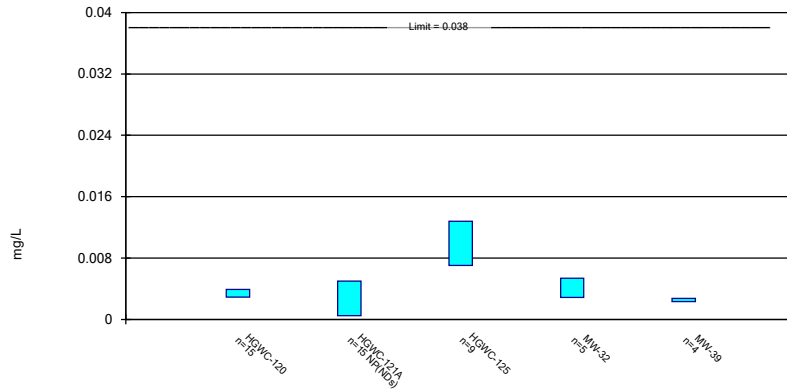
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

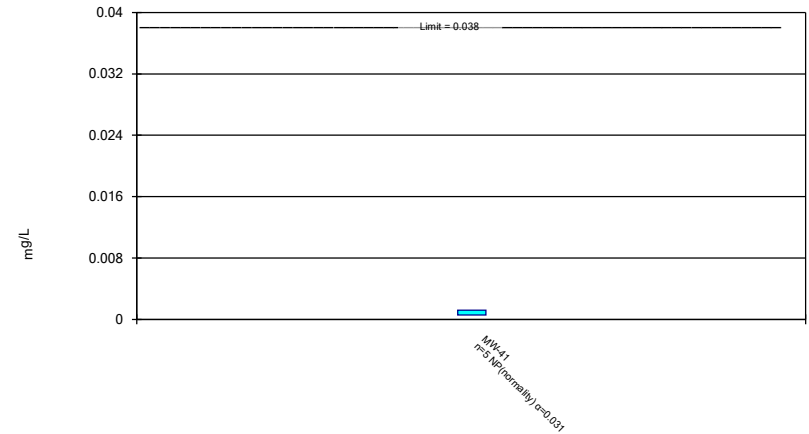
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

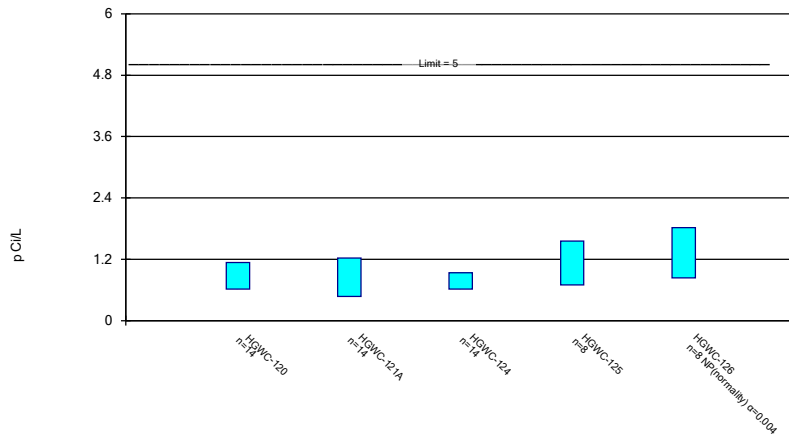
Compliance Limit is not exceeded.



Constituent: Cobalt Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

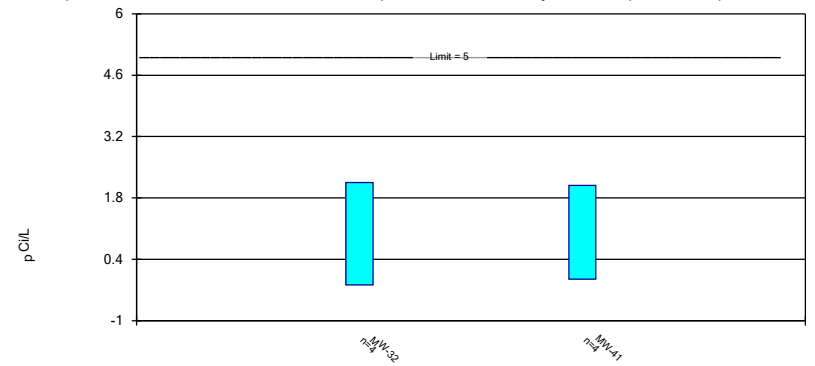
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

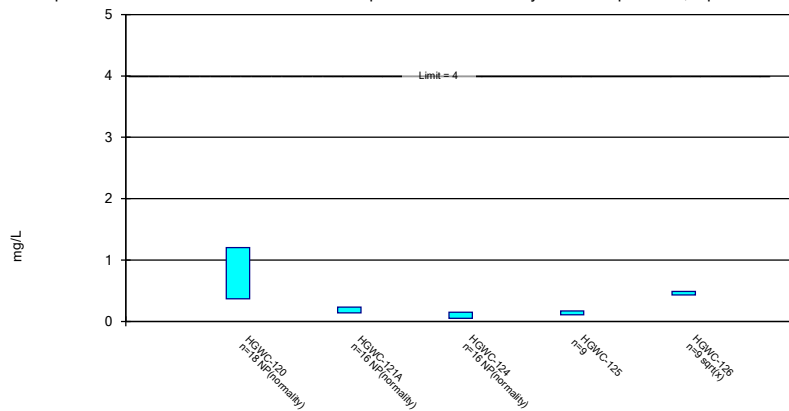
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

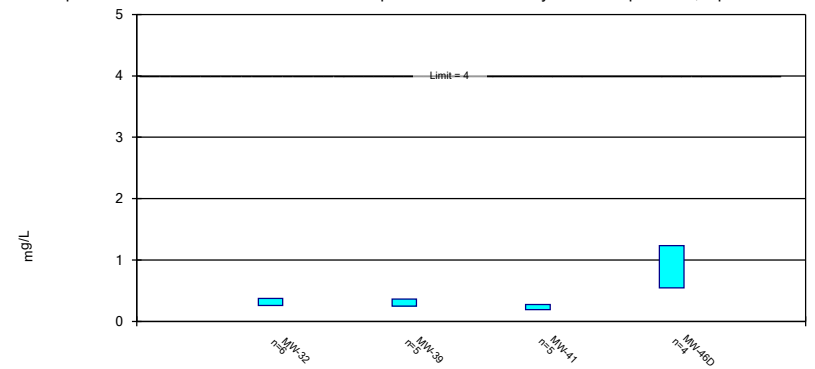
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

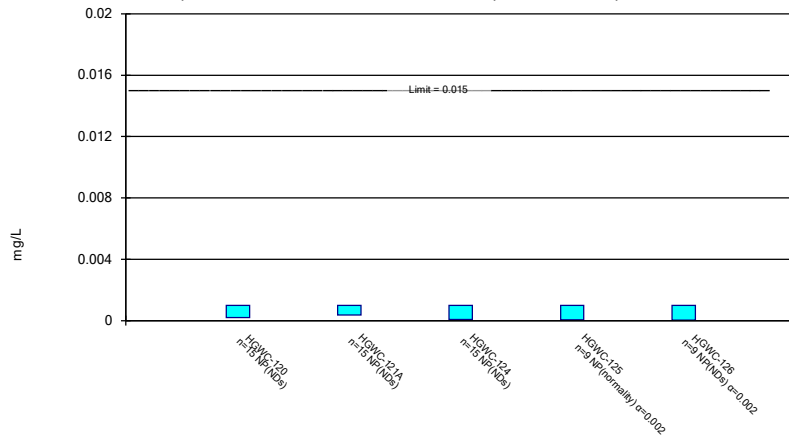
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

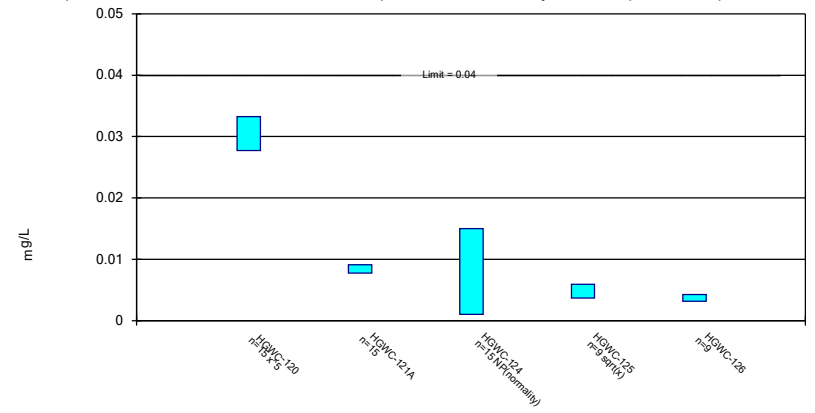
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

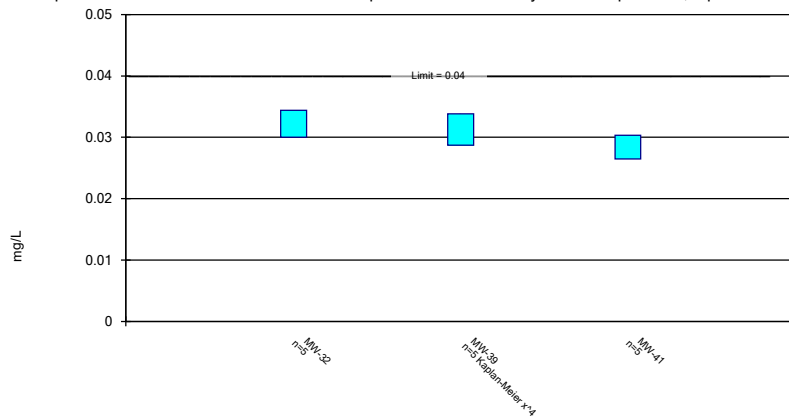
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

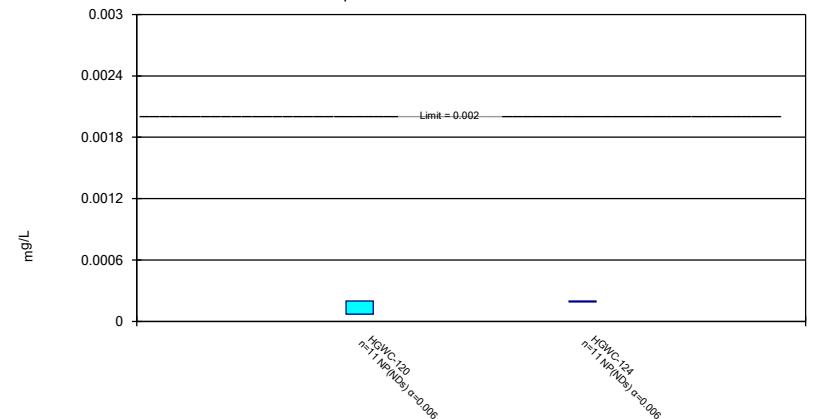
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

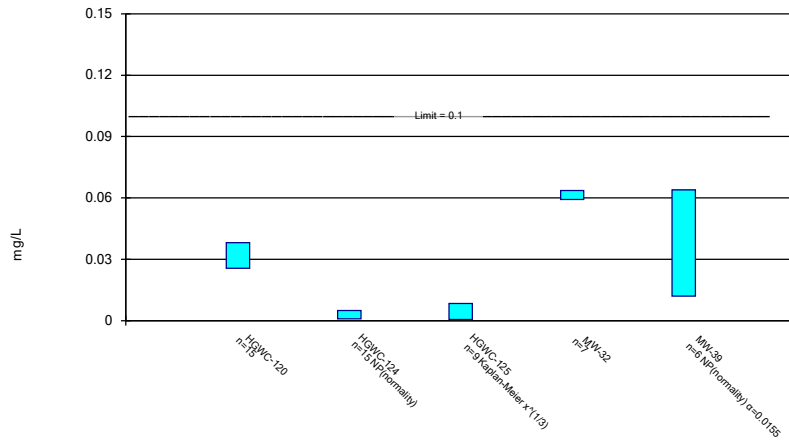
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

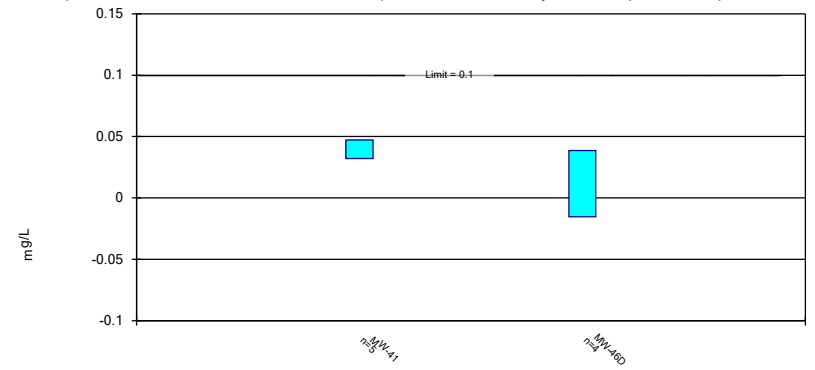
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

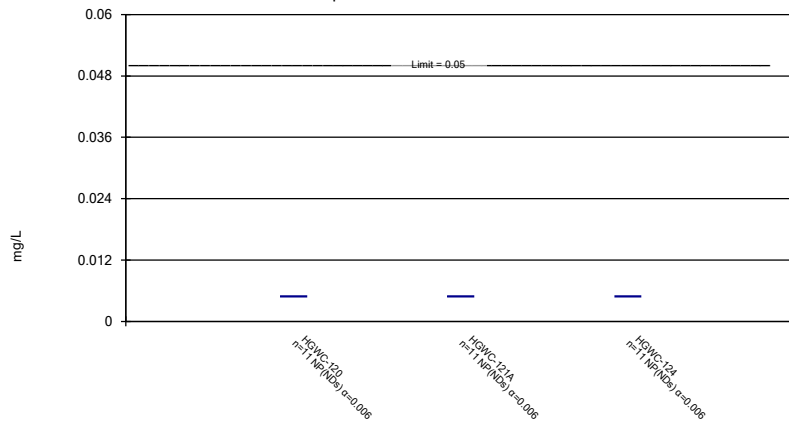
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 12/14/2021 3:36 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3



FIGURE J.

# State Confidence Interval Summary Table - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 12/14/2021, 3:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Molybdenum (mg/L)	HGWC-120	0.03817	0.02554	0.01	Yes	15	0	No	0.01	Param.
Molybdenum (mg/L)	MW-32	0.06369	0.05917	0.01	Yes	7	0	No	0.01	Param.
Molybdenum (mg/L)	MW-39	0.064	0.012	0.01	Yes	6	0	No	0.0155	NP (normality)
Molybdenum (mg/L)	MW-41	0.04715	0.03205	0.01	Yes	5	0	No	0.01	Param.

# State Confidence Interval Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 12/14/2021, 3:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	HGWC-120	0.003	0.0018	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-125	0.003	0.00047	0.006	No	9	77.78	No	0.002	NP (NDs)
Antimony (mg/L)	HGWC-126	0.003	0.0004	0.006	No	9	77.78	No	0.002	NP (NDs)
Antimony (mg/L)	MW-32	0.003	0.00035	0.006	No	4	75	No	0.0625	NP (NDs)
Arsenic (mg/L)	HGWC-120	0.005	0.001	0.01	No	11	63.64	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-121A	0.005	0.0014	0.01	No	11	72.73	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-124	0.005	0.005	0.01	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	HGWC-125	0.005	0.00081	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	HGWC-126	0.005	0.00071	0.01	No	8	75	No	0.004	NP (NDs)
Barium (mg/L)	HGWC-120	0.05172	0.04601	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-121A	0.0824	0.06527	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-124	0.07319	0.06712	2	No	15	0	No	0.01	Param.
Barium (mg/L)	HGWC-125	0.04698	0.04169	2	No	9	0	No	0.01	Param.
Barium (mg/L)	HGWC-126	0.2608	0.2237	2	No	9	0	No	0.01	Param.
Barium (mg/L)	MW-32	0.06217	0.05023	2	No	5	0	No	0.01	Param.
Barium (mg/L)	MW-39	0.06085	0.05715	2	No	4	0	No	0.01	Param.
Barium (mg/L)	MW-41	0.07551	0.05969	2	No	5	0	No	0.01	Param.
Chromium (mg/L)	HGWC-120	0.005	0.0015	0.1	No	15	80	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-121A	0.005	0.0005	0.1	No	15	93.33	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-124	0.005	0.00051	0.1	No	15	86.67	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-125	0.005	0.00052	0.1	No	9	66.67	No	0.002	NP (NDs)
Chromium (mg/L)	HGWC-126	0.005	0.00096	0.1	No	9	88.89	No	0.002	NP (NDs)
Chromium (mg/L)	MW-32	0.005	0.00058	0.1	No	5	80	No	0.031	NP (NDs)
Chromium (mg/L)	MW-41	0.005	0.0009	0.1	No	5	80	No	0.031	NP (NDs)
Cobalt (mg/L)	HGWC-120	0.003889	0.002898	0.038	No	15	0	No	0.01	Param.
Cobalt (mg/L)	HGWC-121A	0.005	0.0005	0.038	No	15	80	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-125	0.01279	0.007031	0.038	No	9	0	No	0.01	Param.
Cobalt (mg/L)	MW-32	0.005359	0.002881	0.038	No	5	0	No	0.01	Param.
Cobalt (mg/L)	MW-39	0.002742	0.002308	0.038	No	4	0	No	0.01	Param.
Cobalt (mg/L)	MW-41	0.0012	0.00057	0.038	No	5	0	No	0.031	NP (normality)
Combined Radium 226 + 228 (pCi/L)	HGWC-120	1.138	0.614	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-121A	1.221	0.4747	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-124	0.9359	0.6159	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-125	1.553	0.6976	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-126	1.82	0.837	5	No	8	0	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-32	2.155	-0.1841	5	No	4	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-41	2.085	-0.05149	5	No	4	0	No	0.01	Param.
Fluoride (mg/L)	HGWC-120	1.2	0.37	4	No	18	0	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-121A	0.23	0.14	4	No	16	0	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-124	0.15	0.05	4	No	16	37.5	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-125	0.1683	0.105	4	No	9	0	No	0.01	Param.
Fluoride (mg/L)	HGWC-126	0.4862	0.4294	4	No	9	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	MW-32	0.3747	0.2586	4	No	6	0	No	0.01	Param.
Fluoride (mg/L)	MW-39	0.3616	0.2464	4	No	5	0	No	0.01	Param.
Fluoride (mg/L)	MW-41	0.2754	0.1886	4	No	5	0	No	0.01	Param.
Fluoride (mg/L)	MW-46D	1.233	0.5472	4	No	4	0	No	0.01	Param.
Lead (mg/L)	HGWC-120	0.001	0.0002	0.001	No	15	80	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-121A	0.001	0.00036	0.001	No	15	80	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-124	0.001	0.000075	0.001	No	15	66.67	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-125	0.001	0.000044	0.001	No	9	44.44	No	0.002	NP (normality)
Lead (mg/L)	HGWC-126	0.001	0.000042	0.001	No	9	66.67	No	0.002	NP (NDs)
Lithium (mg/L)	HGWC-120	0.03325	0.0277	0.032	No	15	0	x^5	0.01	Param.
Lithium (mg/L)	HGWC-121A	0.009124	0.007729	0.032	No	15	0	No	0.01	Param.
Lithium (mg/L)	HGWC-124	0.015	0.001	0.032	No	15	33.33	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-125	0.005915	0.003691	0.032	No	9	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	HGWC-126	0.004244	0.003133	0.032	No	9	0	No	0.01	Param.
Lithium (mg/L)	MW-32	0.03438	0.03002	0.032	No	5	0	No	0.01	Param.
Lithium (mg/L)	MW-39	0.03385	0.02872	0.032	No	5	20	x^4	0.01	Param.
Lithium (mg/L)	MW-41	0.03031	0.02649	0.032	No	5	0	No	0.01	Param.
Mercury (mg/L)	HGWC-120	0.0002	0.00007	0.002	No	11	81.82	No	0.006	NP (NDs)
Mercury (mg/L)	HGWC-124	0.0002	0.0002	0.002	No	11	90.91	No	0.006	NP (NDs)
<b>Molybdenum (mg/L)</b>	<b>HGWC-120</b>	<b>0.03817</b>	<b>0.02554</b>	<b>0.01</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	HGWC-124	0.005	0.00091	0.01	No	15	33.33	No	0.01	NP (normality)
Molybdenum (mg/L)	HGWC-125	0.00835	0.0005302	0.01	No	9	33.33	x^(1/3)	0.01	Param.
<b>Molybdenum (mg/L)</b>	<b>MW-32</b>	<b>0.06369</b>	<b>0.05917</b>	<b>0.01</b>	<b>Yes</b>	<b>7</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Molybdenum (mg/L)</b>	<b>MW-39</b>	<b>0.064</b>	<b>0.012</b>	<b>0.01</b>	<b>Yes</b>	<b>6</b>	<b>0</b>	<b>No</b>	<b>0.0155</b>	<b>NP (normality)</b>
<b>Molybdenum (mg/L)</b>	<b>MW-41</b>	<b>0.04715</b>	<b>0.03205</b>	<b>0.01</b>	<b>Yes</b>	<b>5</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	MW-46D	0.03867	-0.01542	0.01	No	4	0	No	0.01	Param.

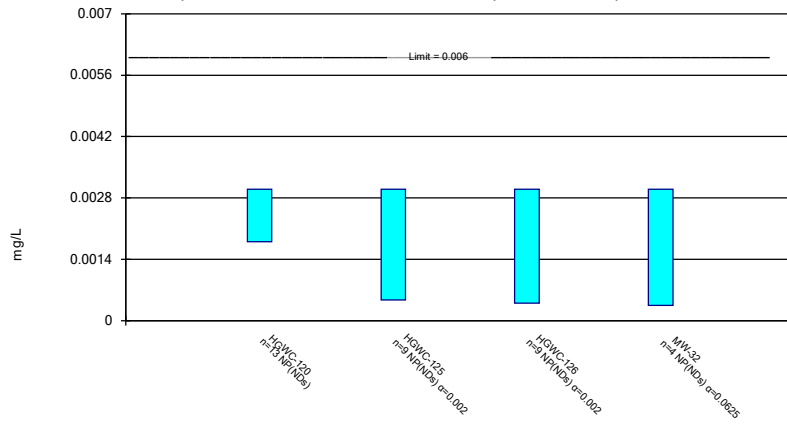
# State Confidence Interval Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 12/14/2021, 3:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Selenium (mg/L)	HGWC-120	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	HGWC-121A	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	HGWC-124	0.005	0.005	0.05	No	11	90.91	No	0.006	NP (NDs)

### Non-Parametric Confidence Interval

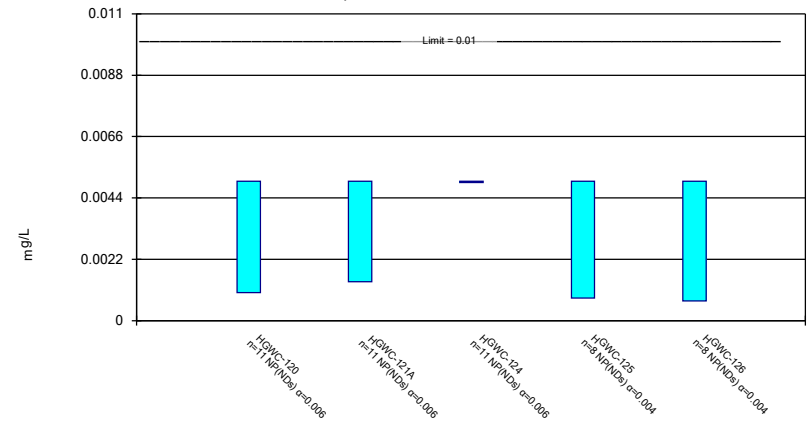
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Antimony Analysis Run 12/14/2021 3:30 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

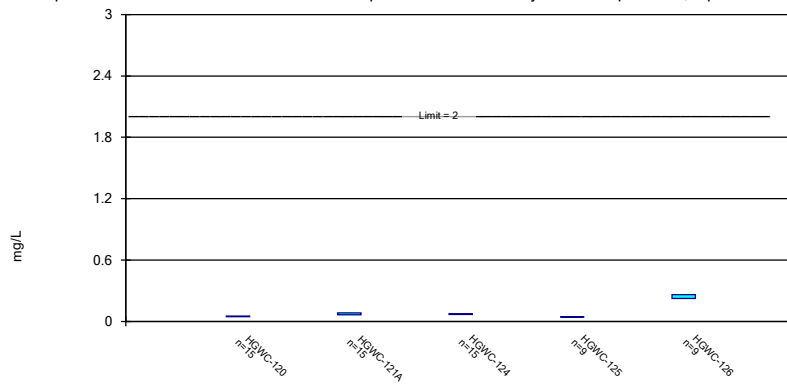
Compliance Limit is not exceeded.



Constituent: Arsenic Analysis Run 12/14/2021 3:30 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

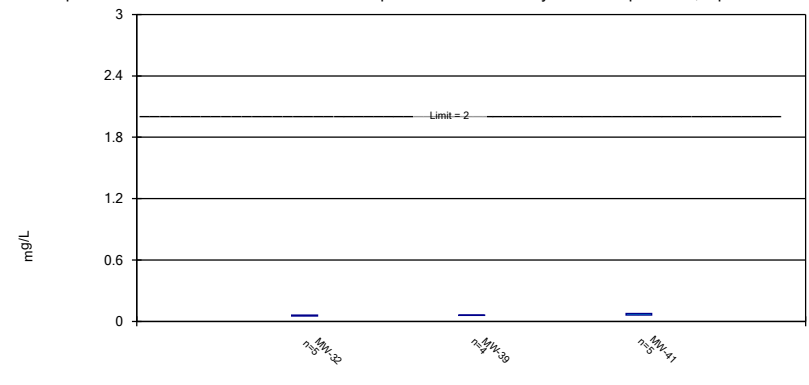
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/14/2021 3:30 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

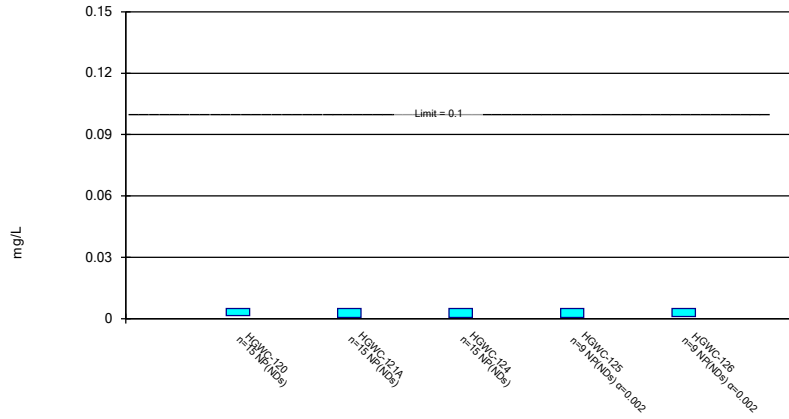
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/14/2021 3:30 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

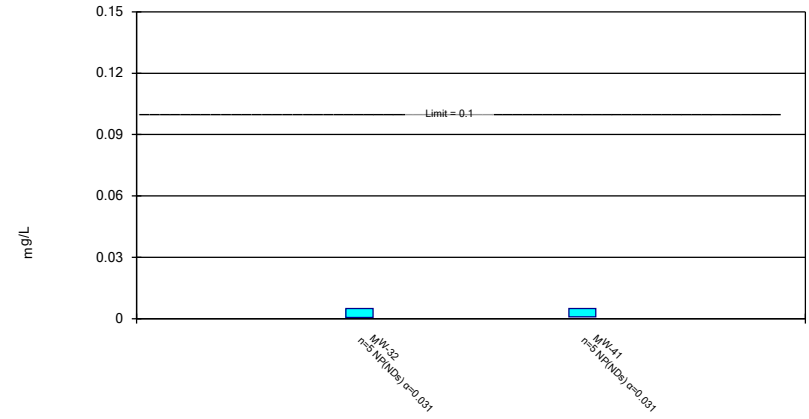
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

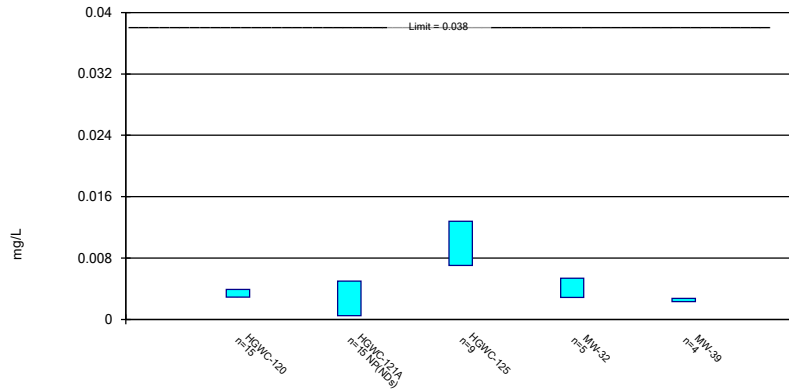
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

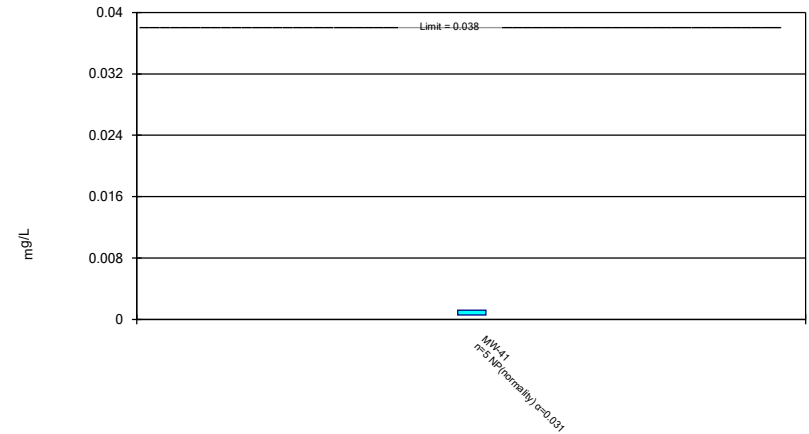
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

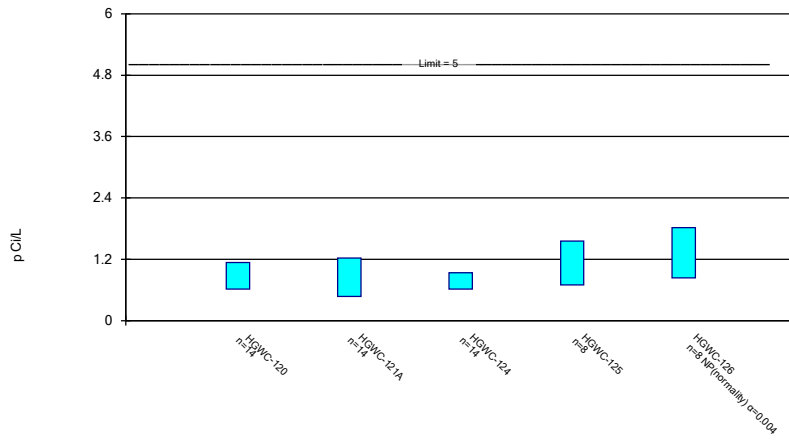
Compliance Limit is not exceeded.



Constituent: Cobalt Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

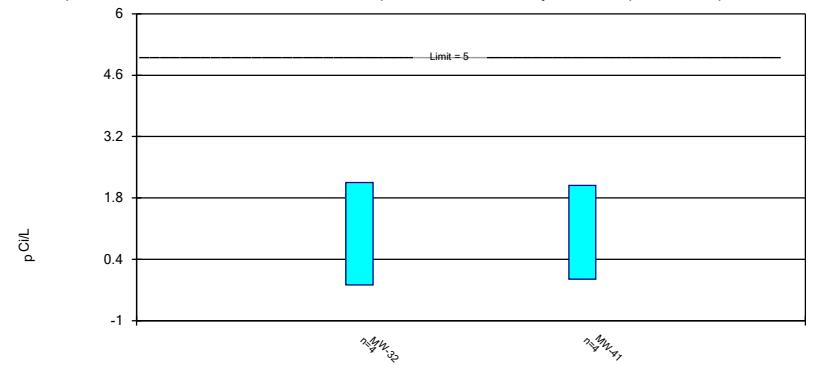
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

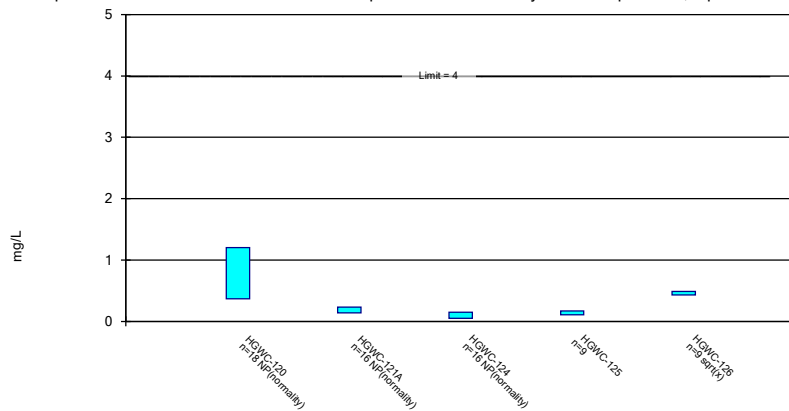
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

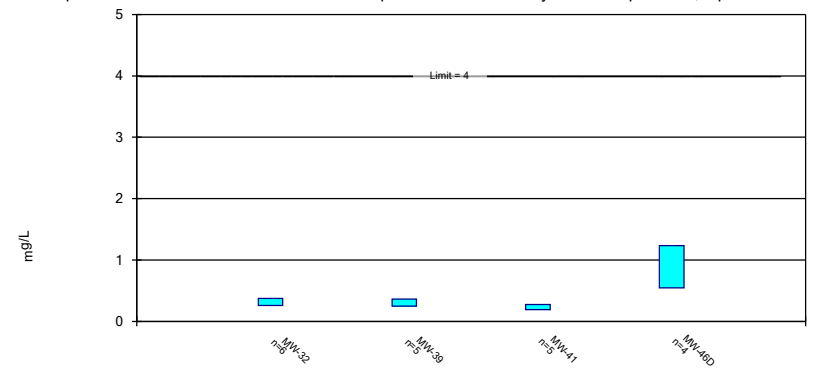
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

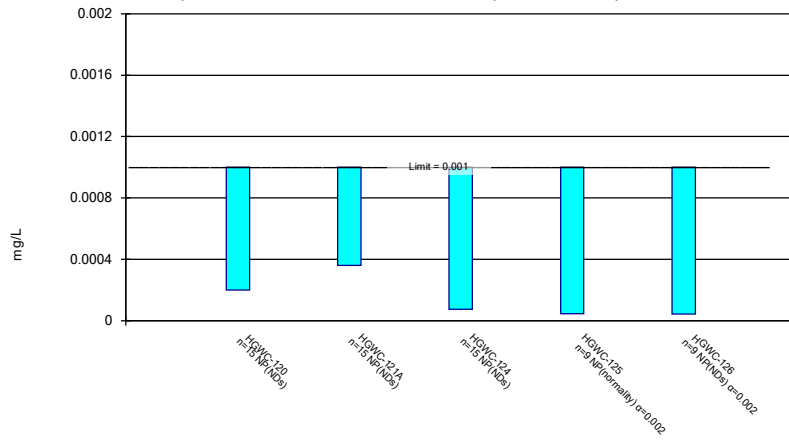
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

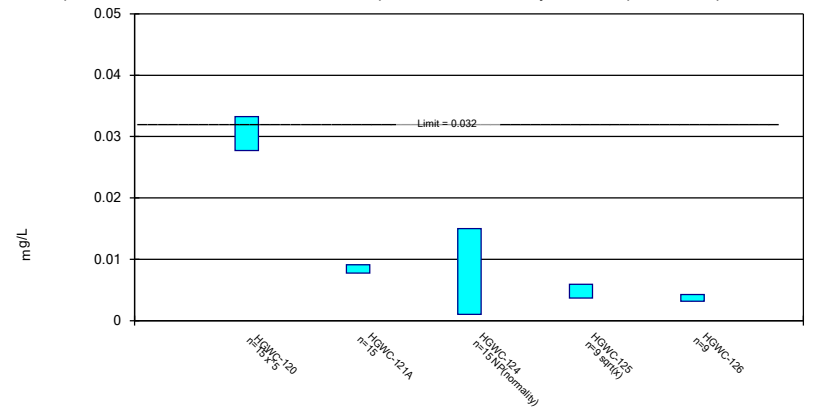
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 12/14/2021 3:31 PM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

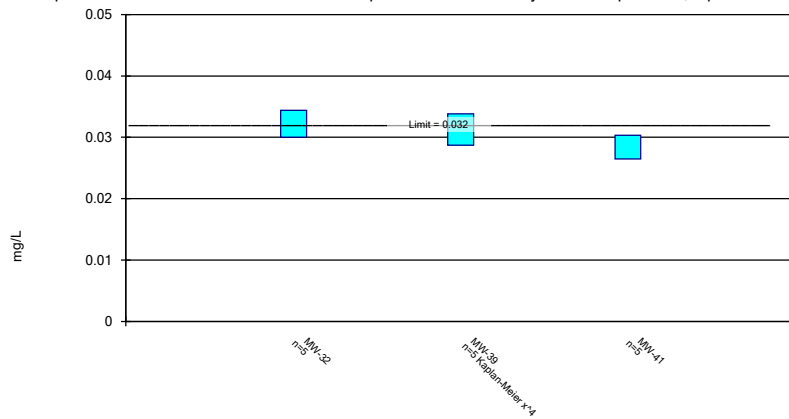
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/14/2021 3:31 PM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

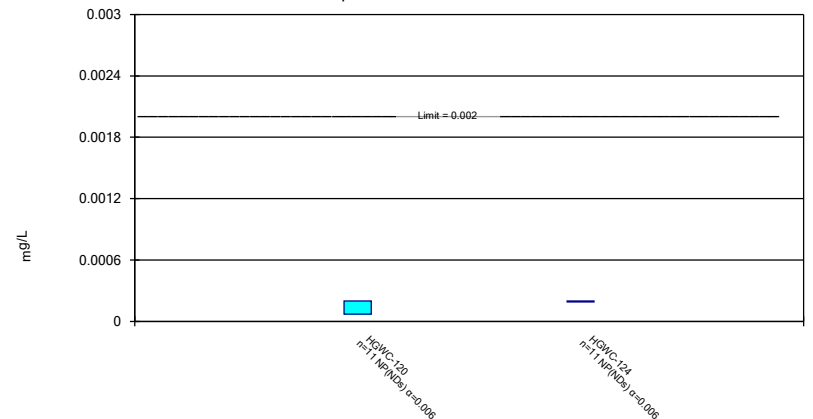
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/14/2021 3:31 PM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

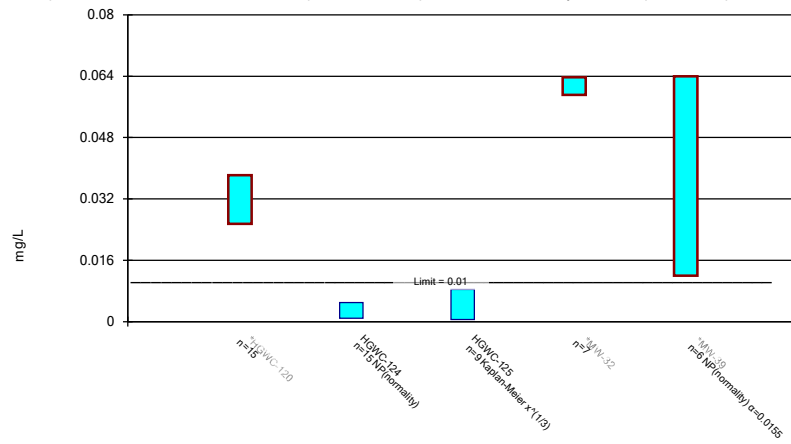


Constituent: Mercury Analysis Run 12/14/2021 3:31 PM  
Plant Hammond Client: Southern Company Data: Hammond AP-3



### Parametric and Non-Parametric (NP) Confidence Interval

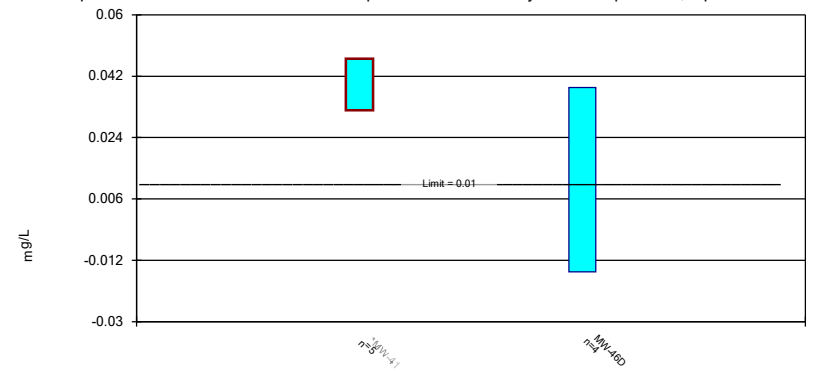
Compliance limit is exceeded.\* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

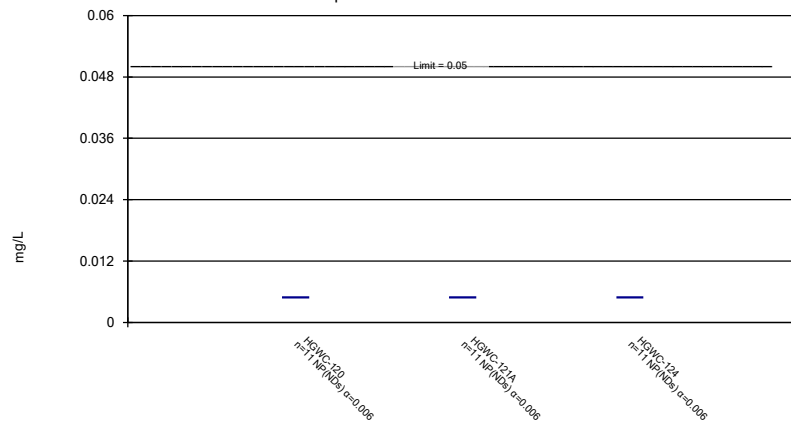
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 12/14/2021 3:31 PM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

FIGURE K.

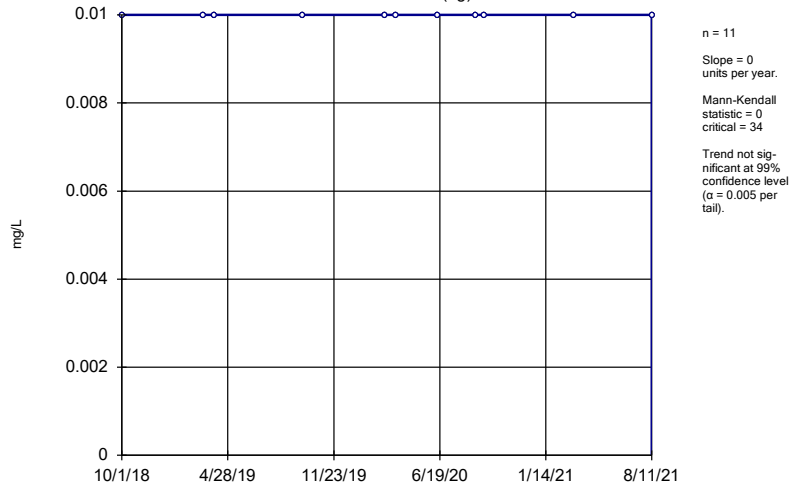
# Appendix IV Trend Tests - All Results (No Significant)

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 1/31/2022, 1:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Molybdenum (mg/L)	HGWA-1 (bg)	0	0	34	No	11	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-122 (bg)	-0.002326	-14	-21	No	8	12.5	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-2 (bg)	0	0	30	No	10	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-3 (bg)	0	0	34	No	11	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-43D (bg)	-0.001527	-6	-14	No	6	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-44D (bg)	0.001043	6	14	No	6	16.67	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWA-45D (bg)	0.006769	7	14	No	6	16.67	n/a	n/a	0.01	NP
Molybdenum (mg/L)	HGWC-120	-0.0006924	-2	-21	No	8	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-32	0.0006155	3	18	No	7	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-39	0.001127	6	14	No	6	0	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-41	0.006357	6	12	No	5	0	n/a	n/a	0.01	NP

### Sen's Slope Estimator

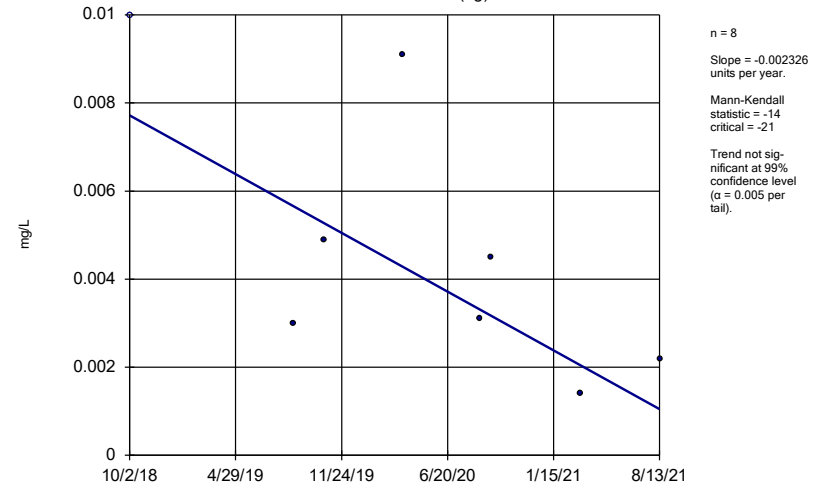
HGWA-1 (bg)



Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

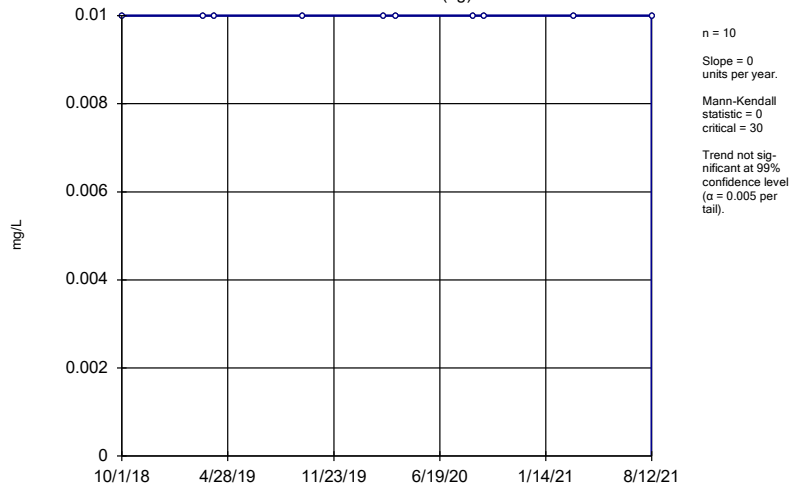
HGWA-122 (bg)



Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

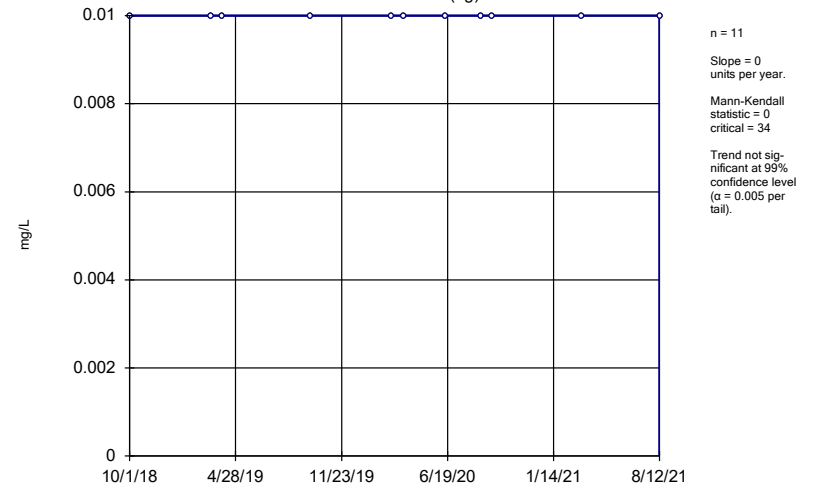
HGWA-2 (bg)



Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

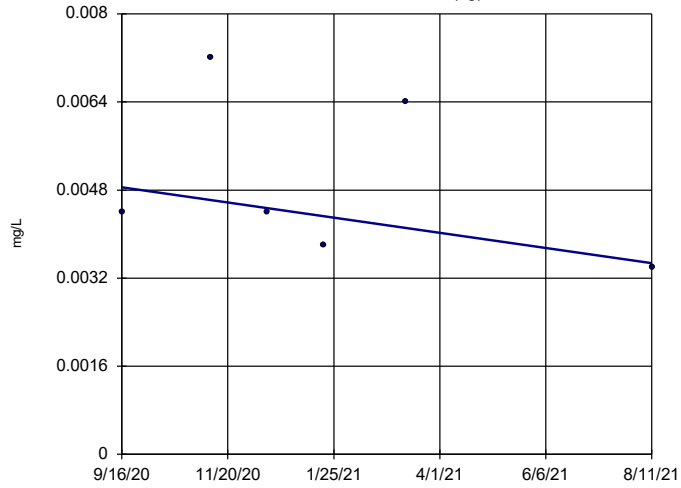
HGWA-3 (bg)



Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-43D (bg)



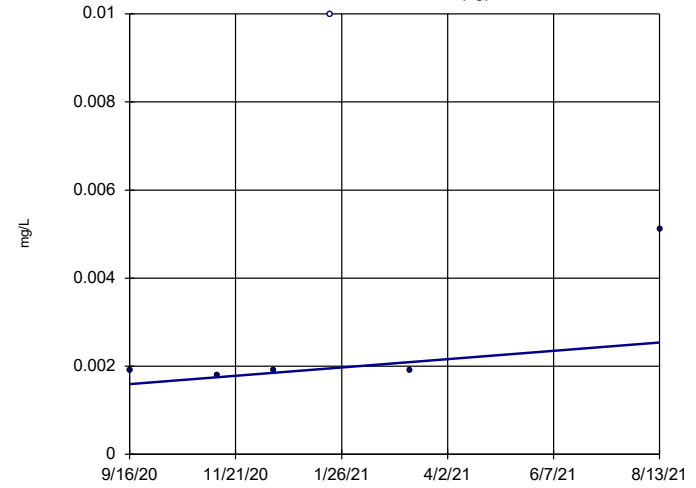
n = 6  
 Slope = -0.001527 units per year.  
 Mann-Kendall statistic = -6  
 critical = -14  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Hollow symbols indicate censored values.

### Sen's Slope Estimator

HGWA-44D (bg)

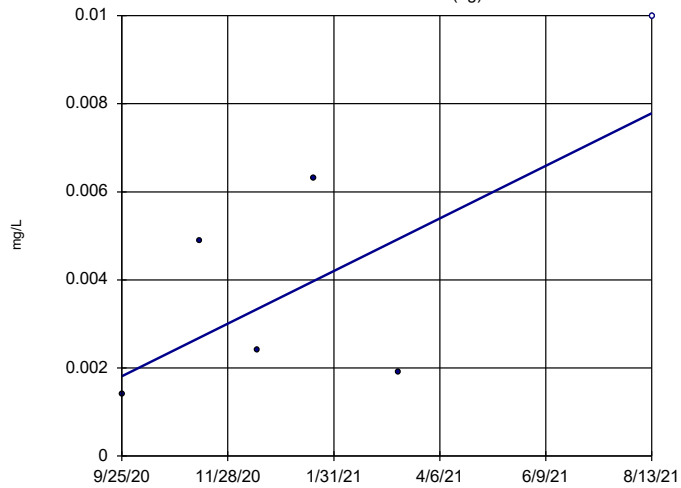


n = 6  
 Slope = 0.001043 units per year.  
 Mann-Kendall statistic = 6  
 critical = 14  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-45D (bg)

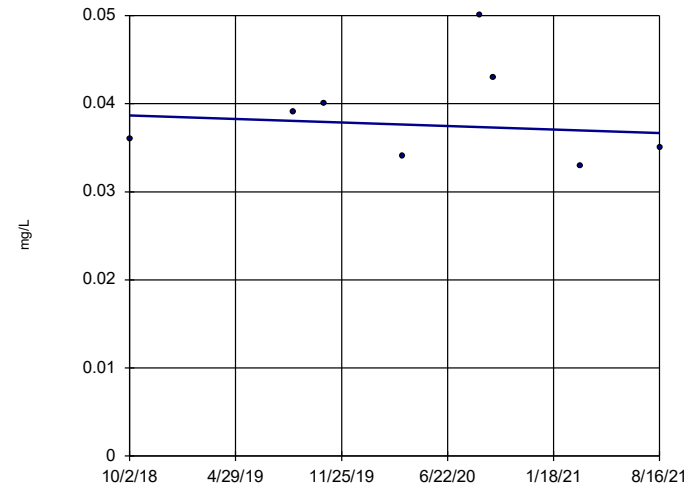


n = 6  
 Slope = 0.006769 units per year.  
 Mann-Kendall statistic = 7  
 critical = 14  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWC-120

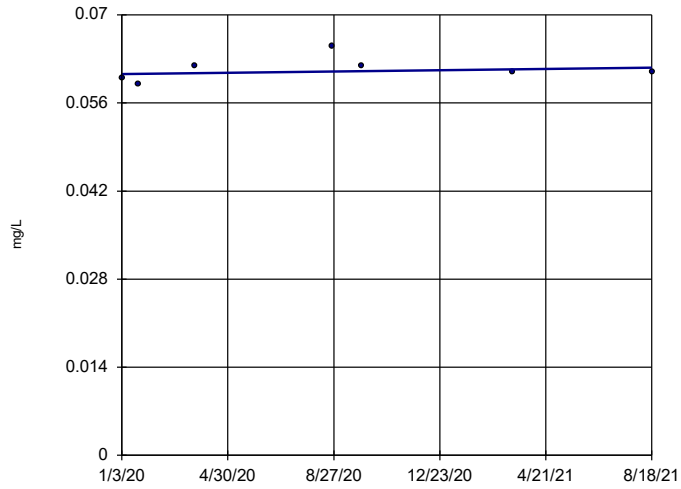


n = 8  
 Slope = -0.0006924 units per year.  
 Mann-Kendall statistic = -2  
 critical = -21  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

MW-32

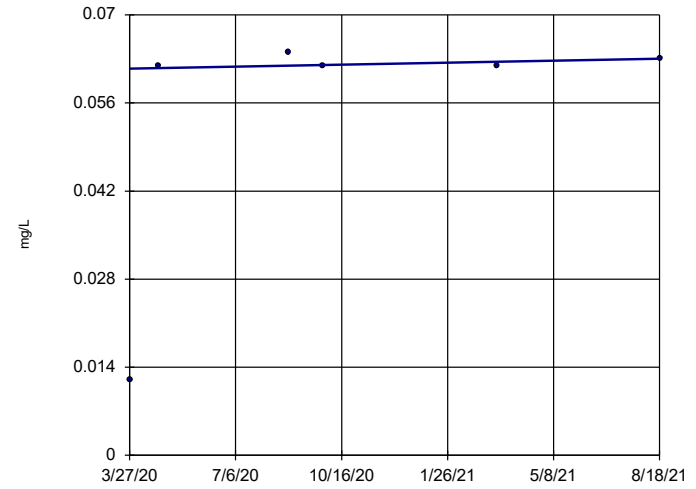


n = 7  
 Slope = 0.0006155 units per year.  
 Mann-Kendall statistic = 3  
 critical = 18  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

MW-39

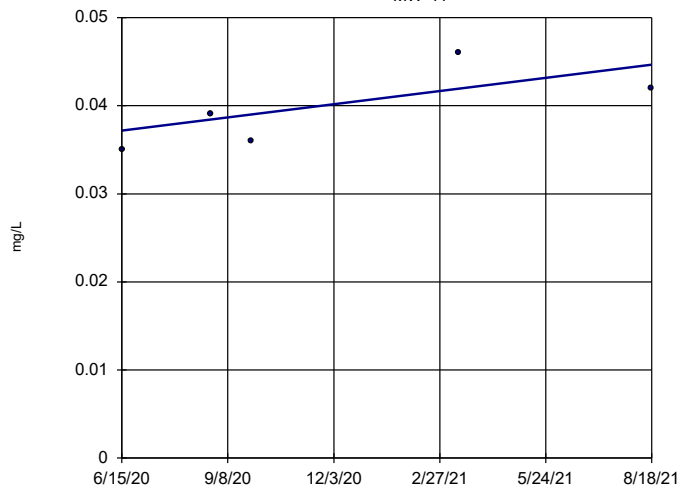


n = 6  
 Slope = 0.001127 units per year.  
 Mann-Kendall statistic = 6  
 critical = 14  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

MW-41

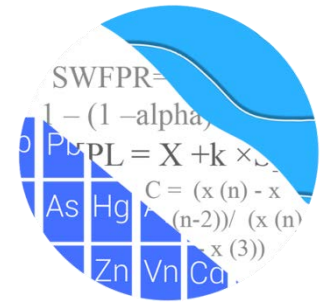


n = 5  
 Slope = 0.006357 units per year.  
 Mann-Kendall statistic = 6  
 critical = 12  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Molybdenum Analysis Run 1/31/2022 1:10 PM View: Appendix IV Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

February 2022

# GROUNDWATER STATS CONSULTING



July 29, 2022

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 2022 Statistical Analysis

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the February 2022 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-1, HGWA-2, and HGWA-3 are shared among Plant Hammond units AP-1, AP-2, and AP-3. Therefore, data included in this analysis from upgradient wells



HGWA-1, HGWA-2, and HGWA-3 are consistent with the historical sample events performed for AP-3.

New 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 will be incorporated into the statistical analyses. Sampling began at new downgradient wells HGWC-125 and HGWC-126 in May 2020 and also have at least 8 rounds of background sampling; therefore, they are statistically analyzed in this report with prediction limits and confidence intervals.

Additionally, sampling at the following delineation wells and piezometer listed below began in 2020:

- **Piezometers:** MW-32, MW-39, MW-41, and MW-46D

Confidence intervals are constructed for the Appendix IV constituents at delineation wells when a minimum of 4 samples is available. Delineation wells MW-32 and MW-41 and piezometer MW-39 have at least 4 samples for a subset of constituents, which are evaluated using confidence intervals.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Senior Statistician and Founder 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 and delineation 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 0.03 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 the following 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 in background, 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. 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 – February 2022**

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed 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 new 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 2022 (Figure D). Interwell prediction limits use all available upgradient well data to establish a background limit for an individual constituent. The February 2022 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, HGWC-125, and HGWC-126
- Sulfate: HGWC-120, HGWC-121A, and HGWC-125
- TDS: 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 (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 natural 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 (upgradient)
- Calcium: HGWA-3 (upgradient) and HGWC-126
- Sulfate: HGWA-2 (upgradient)

Decreasing trends:

- Boron: HGWA-122 (upgradient) and HGWC-121A
- Sulfate: HGWA-122 (upgradient), HGWC-120, and HGWC-121A
- TDS: 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 (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 2022

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. No new values were flagged and a summary of previously flagged outliers follows this report (Figure C).

### Interwell Upper Tolerance Limits

First, interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through February 2022 for Appendix IV constituents (Figure F). As mentioned above, a reporting limit of 0.03 mg/L was substituted across all wells for lithium. Parametric tolerance limits are used 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.

### 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. Delineation wells were included in the confidence intervals when a minimum of 4 samples were available. As discussed earlier, confidence intervals are included only for subset of constituents at delineation well MW-46D. 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 and delineation wells and piezometer MW-39, no confidence intervals were required for these constituents.

The Sanitas software was used to calculate both the tolerance limits and the confidence intervals. Confidence intervals were compared to the GWPS prepared as described above (Figure H). 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

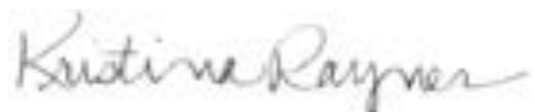
While this step was not necessary during this report, data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable. Upgradient wells are included in the trend analyses when a minimum of 5 samples are available to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient trends, it is an indication of natural variability in groundwater quality unrelated to practices at the site.

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 Collins  
Project Manager



Kristina Rayner  
Senior Statistician



# 100% Non-Detects: Appendix IV Downgradient, Delineation, & Piezometer

Analysis Run 3/28/2022 10:02 AM View: Appendix IV  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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Antimony (mg/L)

HGWC-121A, HGWC-124, MW-39, MW-41

Beryllium (mg/L)

HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126, MW-32, MW-39, MW-41, MW-46D

Cadmium (mg/L)

HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126, MW-32, MW-39, MW-41, MW-46D

Chromium (mg/L)

MW-39

Cobalt (mg/L)

HGWC-124, HGWC-126

Lead (mg/L)

MW-32, MW-39, MW-41

Mercury (mg/L)

HGWC-121A, HGWC-125, HGWC-126, MW-32, MW-39, MW-41, MW-46D

Molybdenum (mg/L)

HGWC-121A, HGWC-126

Selenium (mg/L)

HGWC-125, HGWC-126, MW-32, MW-39, MW-41, MW-46D

Thallium (mg/L)

HGWC-120, HGWC-121A, HGWC-124, HGWC-125, HGWC-126, MW-32, MW-39, MW-41, MW-46D

# Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/28/2022, 9:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	N Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-120	0.44	n/a	2/2/2022	0.91	Yes	93	n/a	n/a	4.301	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-121A	0.44	n/a	2/2/2022	1.6	Yes	93	n/a	n/a	4.301	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-125	0.44	n/a	2/3/2022	1.6	Yes	93	n/a	n/a	4.301	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-120	138	n/a	2/2/2022	159	Yes	93	n/a	n/a	0	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-121A	138	n/a	2/2/2022	148	Yes	93	n/a	n/a	0	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-125	138	n/a	2/3/2022	175	Yes	93	n/a	n/a	0	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-126	138	n/a	2/3/2022	157	Yes	93	n/a	n/a	0	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-120	88.2	n/a	2/2/2022	201	Yes	93	n/a	n/a	1.075	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-121A	88.2	n/a	2/2/2022	147	Yes	93	n/a	n/a	1.075	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-125	88.2	n/a	2/3/2022	304	Yes	93	n/a	n/a	1.075	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-121A	632	n/a	2/2/2022	638	Yes	92	n/a	n/a	0	n/a	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-125	632	n/a	2/3/2022	726	Yes	92	n/a	n/a	0	n/a	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2

# Interwell Prediction Limits - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 3/28/2022, 9:50 AM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg	N Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform Alpha	Method
<b>Boron (mg/L)</b>	<b>HGWC-120</b>	<b>0.44</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>0.91</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>4.301</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>HGWC-121A</b>	<b>0.44</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>1.6</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>4.301</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Boron (mg/L)	HGWC-124	0.44	n/a	2/2/2022	0.33	No	93	n/a	n/a	4.301	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
<b>Boron (mg/L)</b>	<b>HGWC-125</b>	<b>0.44</b>	<b>n/a</b>	<b>2/3/2022</b>	<b>1.6</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>4.301</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Boron (mg/L)	HGWC-126	0.44	n/a	2/3/2022	0.016J	No	93	n/a	n/a	4.301	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
<b>Calcium (mg/L)</b>	<b>HGWC-120</b>	<b>138</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>159</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium (mg/L)</b>	<b>HGWC-121A</b>	<b>138</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>148</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Calcium (mg/L)	HGWC-124	138	n/a	2/2/2022	95.9	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
<b>Calcium (mg/L)</b>	<b>HGWC-125</b>	<b>138</b>	<b>n/a</b>	<b>2/3/2022</b>	<b>175</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium (mg/L)</b>	<b>HGWC-126</b>	<b>138</b>	<b>n/a</b>	<b>2/3/2022</b>	<b>157</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride (mg/L)	HGWC-120	44.8	n/a	2/2/2022	2.5	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-121A	44.8	n/a	2/2/2022	16.8	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-124	44.8	n/a	2/2/2022	2.6	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-125	44.8	n/a	2/3/2022	8.1	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-126	44.8	n/a	2/3/2022	8.5	No	93	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-120	0.96	n/a	2/2/2022	0.36	No	107	n/a	n/a	26.17	n/a	n/a	0.000173	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-121A	0.96	n/a	2/2/2022	0.15	No	107	n/a	n/a	26.17	n/a	n/a	0.000173	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-124	0.96	n/a	2/2/2022	0.1ND	No	107	n/a	n/a	26.17	n/a	n/a	0.000173	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-125	0.96	n/a	2/3/2022	0.18	No	107	n/a	n/a	26.17	n/a	n/a	0.000173	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-126	0.96	n/a	2/3/2022	0.51	No	107	n/a	n/a	26.17	n/a	n/a	0.000173	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-120	8.25	4.9	2/2/2022	7	No	106	n/a	n/a	0	n/a	n/a	0.0003518	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-121A	8.25	4.9	2/2/2022	6.92	No	106	n/a	n/a	0	n/a	n/a	0.0003518	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-124	8.25	4.9	2/2/2022	7.28	No	106	n/a	n/a	0	n/a	n/a	0.0003518	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-125	8.25	4.9	2/3/2022	6.56	No	106	n/a	n/a	0	n/a	n/a	0.0003518	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-126	8.25	4.9	2/3/2022	7.01	No	106	n/a	n/a	0	n/a	n/a	0.0003518	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>HGWC-120</b>	<b>88.2</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>201</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>1.075</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>HGWC-121A</b>	<b>88.2</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>147</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>1.075</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	HGWC-124	88.2	n/a	2/2/2022	70.7	No	93	n/a	n/a	1.075	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>HGWC-125</b>	<b>88.2</b>	<b>n/a</b>	<b>2/3/2022</b>	<b>304</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>1.075</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	HGWC-126	88.2	n/a	2/3/2022	66.8	No	93	n/a	n/a	1.075	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-120	632	n/a	2/2/2022	612	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-121A</b>	<b>632</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>638</b>	<b>Yes</b>	<b>92</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002288</b>	<b>NP Inter (normality) 1 of 2</b>
Total Dissolved Solids (mg/L)	HGWC-124	632	n/a	2/2/2022	347	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-125</b>	<b>632</b>	<b>n/a</b>	<b>2/3/2022</b>	<b>726</b>	<b>Yes</b>	<b>92</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002288</b>	<b>NP Inter (normality) 1 of 2</b>
Total Dissolved Solids (mg/L)	HGWC-126	632	n/a	2/3/2022	466	No	92	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2

# Appendix III Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/28/2022, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-122 (bg)	-0.02654	-73	-58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-2 (bg)	0.002699	99	68	Yes	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-121A	-0.2637	-84	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	2.781	86	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-126	18.7	32	30	Yes	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-122 (bg)	-1.726	-70	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	1.393	83	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-120	-17.77	-93	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-121A	-27.1	-86	-58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-121A	-57.23	-88	-58	Yes	16	6.25	n/a	n/a	0.01	NP

# Appendix III Trend Tests - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 3/28/2022, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.00009951	-10	-74	No	19	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWA-122 (bg)</b>	<b>-0.02654</b>	<b>-73</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>0.002699</b>	<b>99</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWA-3 (bg)	0.00007969	6	74	No	19	15.79	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-120	-0.04174	-63	-63	No	17	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-121A</b>	<b>-0.2637</b>	<b>-84</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-125	0	15	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.687	54	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-122 (bg)	-2.592	-34	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	0.4885	35	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>2.781</b>	<b>86</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWC-120	1.408	25	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-121A	-5.958	-56	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-125	15.31	12	30	No	10	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWC-126</b>	<b>18.7</b>	<b>32</b>	<b>30</b>	<b>Yes</b>	<b>10</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWA-1 (bg)	1.77	34	74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-122 (bg)</b>	<b>-1.726</b>	<b>-70</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>1.393</b>	<b>83</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWA-3 (bg)	1.106	61	74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWC-120</b>	<b>-17.77</b>	<b>-93</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>HGWC-121A</b>	<b>-27.1</b>	<b>-86</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWC-125	-44.39	-23	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	1.455	7	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-122 (bg)	-12.97	-39	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	-1.375	-12	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	1.051	12	74	No	19	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-121A</b>	<b>-57.23</b>	<b>-88</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>6.25</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids (mg/L)	HGWC-125	-40.67	-8	-30	No	10	0	n/a	n/a	0.01	NP

# Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/28/2022, 9:58 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	n/a	92	n/a	n/a	83.7	n/a	n/a	0.008924	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	90	n/a	n/a	67.78	n/a	n/a	0.009888	NP Inter(NDs)
Barium (mg/L)	n/a	0.57	n/a	n/a	n/a	n/a	100	n/a	n/a	1	n/a	n/a	0.005921	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	92	n/a	n/a	82.61	n/a	n/a	0.008924	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	90	n/a	n/a	88.89	n/a	n/a	0.009888	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0079	n/a	n/a	n/a	n/a	94	n/a	n/a	76.6	n/a	n/a	0.008054	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.038	n/a	n/a	n/a	n/a	100	n/a	n/a	78	n/a	n/a	0.005921	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	4.36	n/a	n/a	n/a	n/a	93	n/a	n/a	0	n/a	n/a	0.008478	NP Inter(normality)
Fluoride (mg/L)	n/a	0.96	n/a	n/a	n/a	n/a	107	n/a	n/a	26.17	n/a	n/a	0.004135	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	94	n/a	n/a	64.89	n/a	n/a	0.008054	NP Inter(NDs)
Lithium (mg/L)	n/a	0.048	n/a	n/a	n/a	n/a	100	n/a	n/a	33	n/a	n/a	0.005921	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	n/a	72	n/a	n/a	93.06	n/a	n/a	0.02489	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a	102	n/a	n/a	67.65	n/a	n/a	0.005343	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	90	n/a	n/a	98.89	n/a	n/a	0.009888	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	90	n/a	n/a	98.89	n/a	n/a	0.009888	NP Inter(NDs)

<b>PLANT HAMMOND AP-3 GWPS</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>GWPS</b>
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		0.57	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		4.36	5
Fluoride, Total (mg/L)	4		0.96	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.048	0.048
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

*\*GWPS = Groundwater Protection Standard*

# Confidence Intervals - All Results (No Significant)

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 3/28/2022, 10:05 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	14	0.002914	0.0003207	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-125	0.003	0.00061	0.006	No	10	0.002508	0.001038	80	None	No	0.011	NP (NDs)
Antimony (mg/L)	HGWC-126	0.003	0.00043	0.006	No	10	0.002483	0.00109	80	None	No	0.011	NP (NDs)
Antimony (mg/L)	MW-32	0.003	0.00035	0.006	No	5	0.00247	0.001185	80	None	No	0.031	NP (NDs)
Antimony (mg/L)	MW-46D	0.003	0.00041	0.006	No	4	0.002353	0.001295	75	None	No	0.0625	NP (NDs)
Arsenic (mg/L)	HGWC-120	0.005	0.001	0.01	No	12	0.003417	0.001967	58.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-121A	0.005	0.0014	0.01	No	12	0.004067	0.001691	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-124	0.005	0.0006	0.01	No	12	0.004633	0.00127	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-125	0.005	0.00081	0.01	No	9	0.003934	0.001715	66.67	None	No	0.002	NP (NDs)
Arsenic (mg/L)	HGWC-126	0.005	0.00071	0.01	No	9	0.003802	0.00187	66.67	None	No	0.002	NP (NDs)
Barium (mg/L)	HGWC-120	0.05196	0.04641	2	No	16	0.04919	0.004264	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-121A	0.08132	0.06512	2	No	16	0.07322	0.01245	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-124	0.0731	0.06744	2	No	16	0.07027	0.004354	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-125	0.04653	0.04187	2	No	10	0.0442	0.002616	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-126	0.2582	0.2258	2	No	10	0.242	0.01814	0	None	No	0.01	Param.
Barium (mg/L)	MW-32	0.06043	0.05157	2	No	6	0.056	0.003225	0	None	No	0.01	Param.
Barium (mg/L)	MW-39	0.06018	0.05782	2	No	5	0.059	0.0007071	0	None	No	0.01	Param.
Barium (mg/L)	MW-41	0.07396	0.06204	2	No	6	0.068	0.004336	0	None	No	0.01	Param.
Barium (mg/L)	MW-46D	0.0458	0.0147	2	No	4	0.03025	0.00685	0	None	No	0.01	Param.
Chromium (mg/L)	HGWC-120	0.005	0.0015	0.1	No	16	0.004242	0.001639	81.25	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-121A	0.005	0.0005	0.1	No	16	0.004719	0.001125	93.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-124	0.005	0.00051	0.1	No	16	0.004436	0.001542	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-125	0.005	0.00058	0.1	No	10	0.003691	0.002109	70	None	No	0.011	NP (NDs)
Chromium (mg/L)	HGWC-126	0.005	0.005	0.1	No	10	0.004596	0.001278	90	None	No	0.011	NP (NDs)
Chromium (mg/L)	MW-32	0.005	0.00058	0.1	No	6	0.004263	0.001804	83.33	None	No	0.0155	NP (NDs)
Chromium (mg/L)	MW-41	0.005	0.0009	0.1	No	6	0.004317	0.001674	83.33	None	No	0.0155	NP (NDs)
Chromium (mg/L)	MW-46D	0.005	0.00075	0.1	No	4	0.003937	0.002125	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	HGWC-120	0.004251	0.0029	0.038	No	16	0.003631	0.001185	0	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	HGWC-121A	0.005	0.0005	0.038	No	16	0.004131	0.001868	81.25	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-125	0.01232	0.007244	0.038	No	10	0.00978	0.002843	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-32	0.004988	0.003079	0.038	No	6	0.004033	0.0006947	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-39	0.002829	0.002331	0.038	No	5	0.00258	0.0001483	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-41	0.0012	0.00056	0.038	No	6	0.0007183	0.0002409	0	None	No	0.0155	NP (normality)
Cobalt (mg/L)	MW-46D	0.005	0.00041	0.038	No	4	0.003852	0.002295	75	None	No	0.0625	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	HGWC-120	1.114	0.6303	5	No	15	0.8721	0.3569	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-121A	1.168	0.4489	5	No	15	0.8085	0.5306	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-124	0.9139	0.6097	5	No	15	0.7618	0.2244	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-125	1.488	0.5696	5	No	9	1.029	0.4756	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-126	1.739	0.9309	5	No	9	1.334	0.4194	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-32	1.718	0.06275	5	No	5	0.8904	0.4939	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-39	1.811	-0.07373	5	No	4	0.8688	0.4151	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-41	1.712	0.08726	5	No	5	0.8994	0.4847	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-120	1	0.36	4	No	19	0.6447	0.3705	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-121A	0.2	0.14	4	No	17	0.2479	0.269	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-124	0.11	0.05	4	No	17	0.09871	0.08077	41.18	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-125	0.1712	0.1108	4	No	10	0.141	0.03381	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-126	0.4922	0.4338	4	No	10	0.463	0.03268	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-32	0.363	0.2713	4	No	7	0.3171	0.03861	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-39	0.3446	0.2587	4	No	6	0.3017	0.03125	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-41	0.2635	0.1998	4	No	6	0.2317	0.02317	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-46D	1.202	0.6622	4	No	5	0.932	0.161	0	None	No	0.01	Param.



# Confidence Intervals - All Results (No Significant)

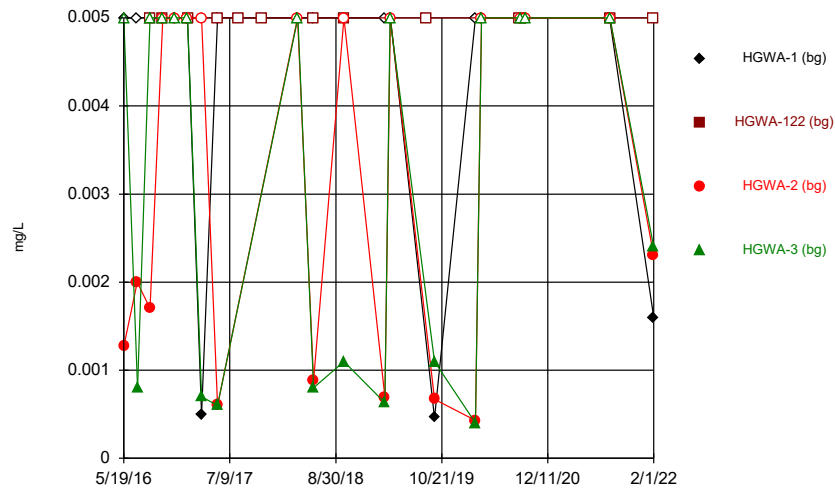
Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/28/2022, 10:05 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	HGWC-120	0.001	0.0002	0.015	No	16	0.0008356	0.0003542	81.25	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-121A	0.001	0.00036	0.015	No	16	0.0008488	0.0003297	81.25	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-124	0.001	0.000075	0.015	No	16	0.0007092	0.0004456	68.75	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-125	0.001	0.000047	0.015	No	10	0.0005453	0.0004802	50	None	No	0.011	NP (normality)
Lead (mg/L)	HGWC-126	0.001	0.000045	0.015	No	10	0.0007133	0.0004616	70	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-46D	0.001	0.000048	0.015	No	4	0.000762	0.000476	75	None	No	0.0625	NP (NDs)
Lithium (mg/L)	HGWC-120	0.0337	0.024	0.048	No	16	0.02941	0.004779	0	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-121A	0.00906	0.007765	0.048	No	16	0.008413	0.0009959	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-124	0.015	0.001	0.048	No	16	0.005451	0.00665	31.25	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-125	0.005939	0.003841	0.048	No	10	0.00489	0.001176	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-126	0.004185	0.003215	0.048	No	10	0.0037	0.0005437	0	None	No	0.01	Param.
Lithium (mg/L)	MW-32	0.034	0.03067	0.048	No	6	0.03233	0.001211	0	None	No	0.01	Param.
Lithium (mg/L)	MW-39	0.03331	0.0292	0.048	No	6	0.02967	0.007285	16.67	Kaplan-Meier	x^5	0.01	Param.
Lithium (mg/L)	MW-41	0.0321	0.02623	0.048	No	6	0.02917	0.002137	0	None	No	0.01	Param.
Lithium (mg/L)	MW-46D	0.01834	-0.0002851	0.048	No	4	0.009025	0.004101	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-120	0.0002	0.00007	0.002	No	12	0.0001758	0.0000568	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-124	0.0002	0.000051	0.002	No	12	0.0001876	0.00004301	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-120	0.03786	0.02612	0.1	No	16	0.03199	0.009023	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-124	0.005	0.00091	0.1	No	16	0.002296	0.001889	31.25	None	No	0.01	NP (normality)
Molybdenum (mg/L)	HGWC-125	0.009423	0.0007648	0.1	No	10	0.006189	0.006505	30	Kaplan-Meier	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-32	0.06327	0.05873	0.1	No	8	0.061	0.002138	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-39	0.064	0.012	0.1	No	7	0.05529	0.0191	0	None	No	0.008	NP (normality)
Molybdenum (mg/L)	MW-41	0.04775	0.03391	0.1	No	6	0.04083	0.005037	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-46D	0.02646	-0.00696	0.1	No	5	0.0103	0.01073	20	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	HGWC-120	0.005	0.002	0.05	No	12	0.00475	0.000866	91.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-121A	0.005	0.0011	0.05	No	12	0.004675	0.001126	91.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-124	0.005	0.0014	0.05	No	12	0.0047	0.001039	91.67	None	No	0.01	NP (NDs)

FIGURE A.

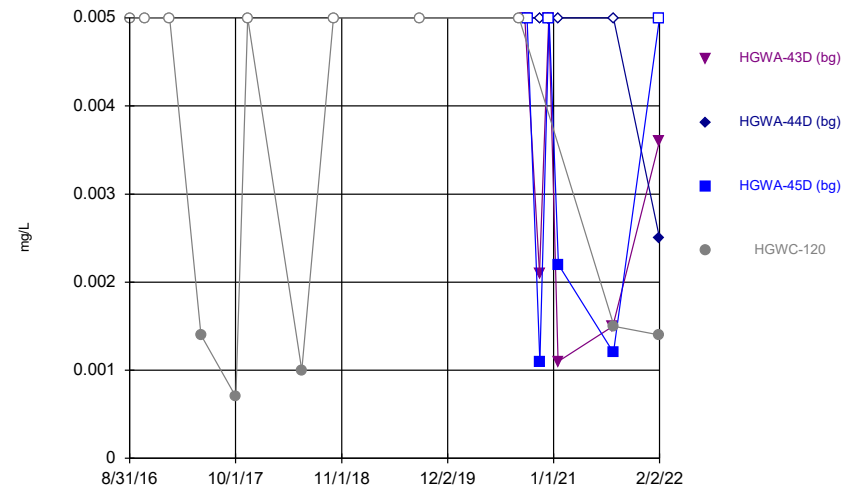


Time Series



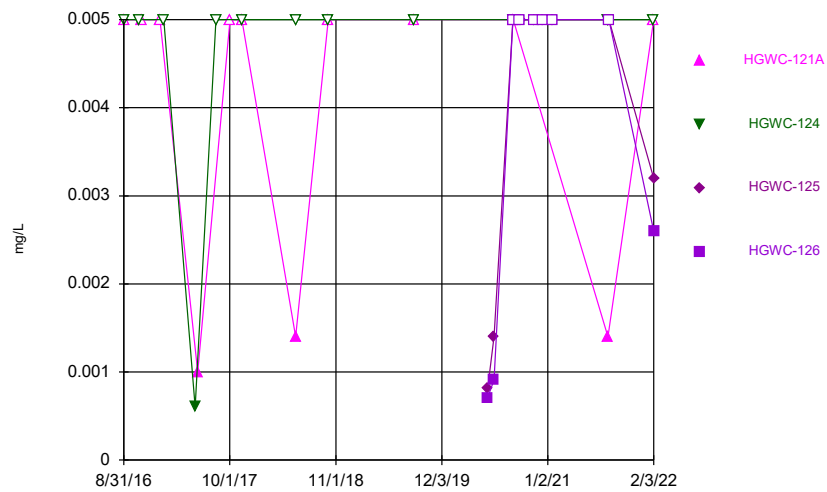
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



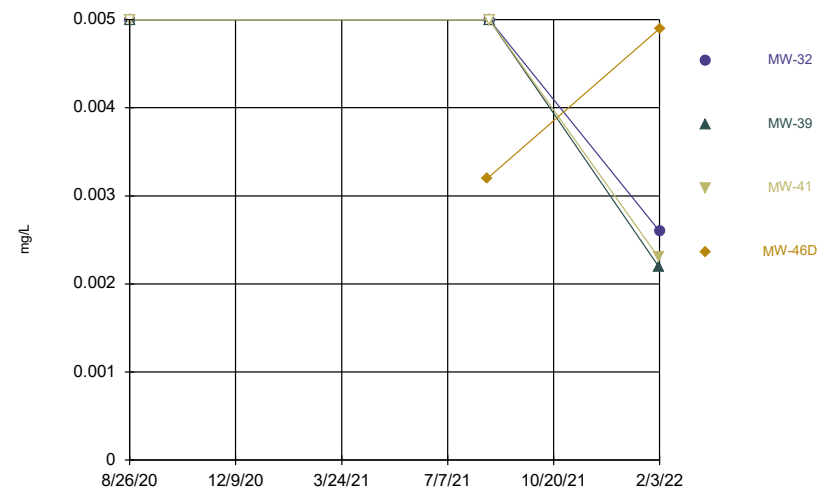
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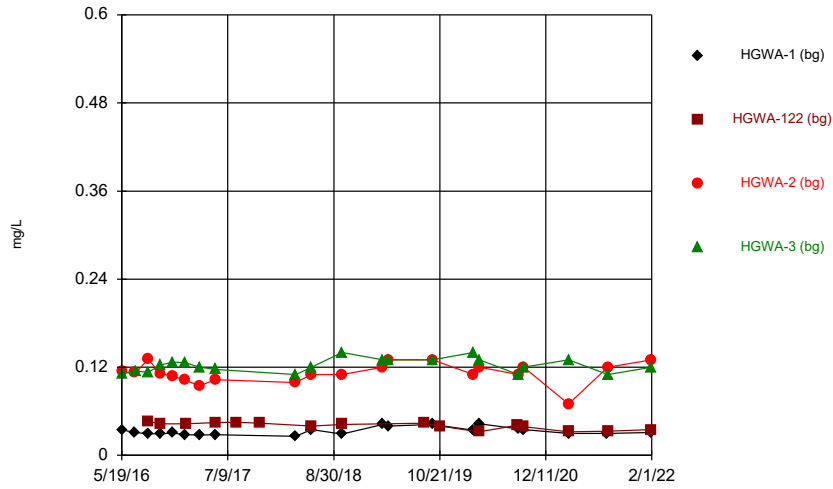
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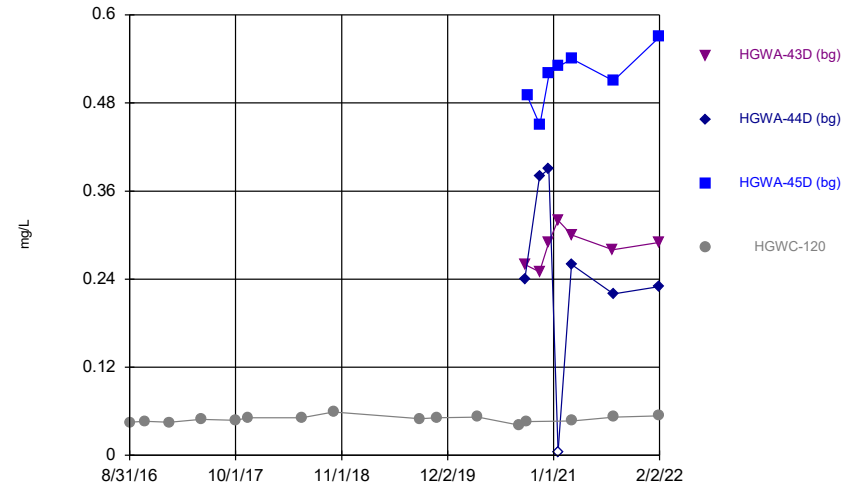
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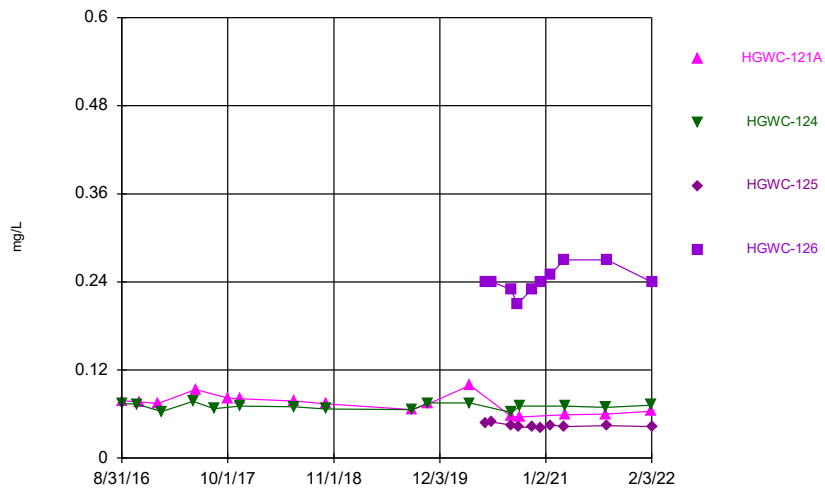
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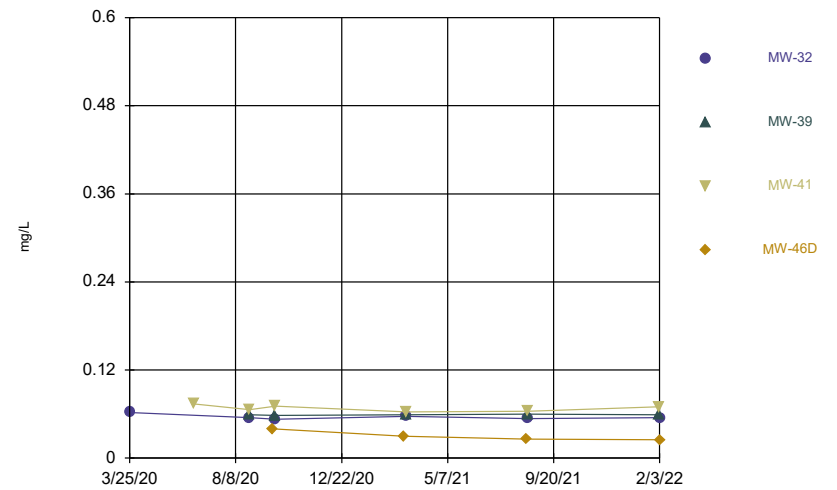
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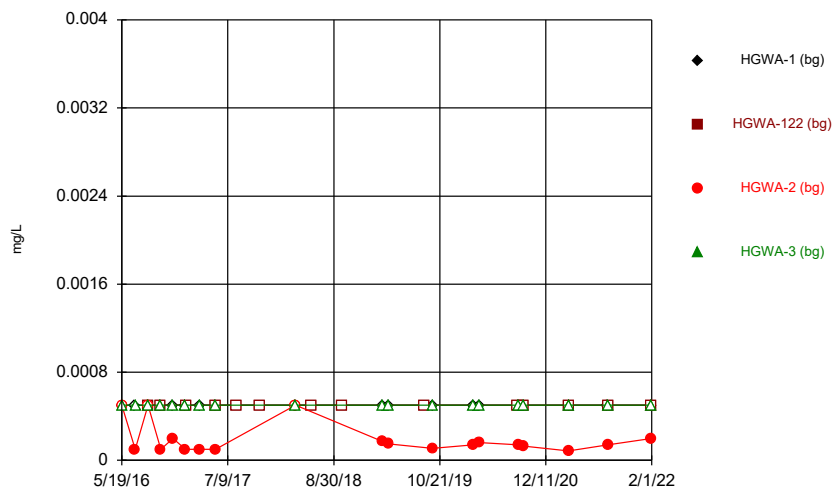
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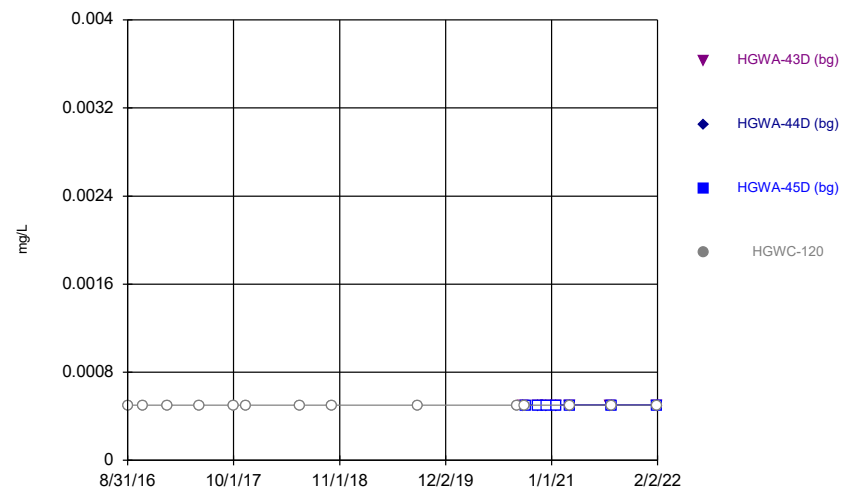
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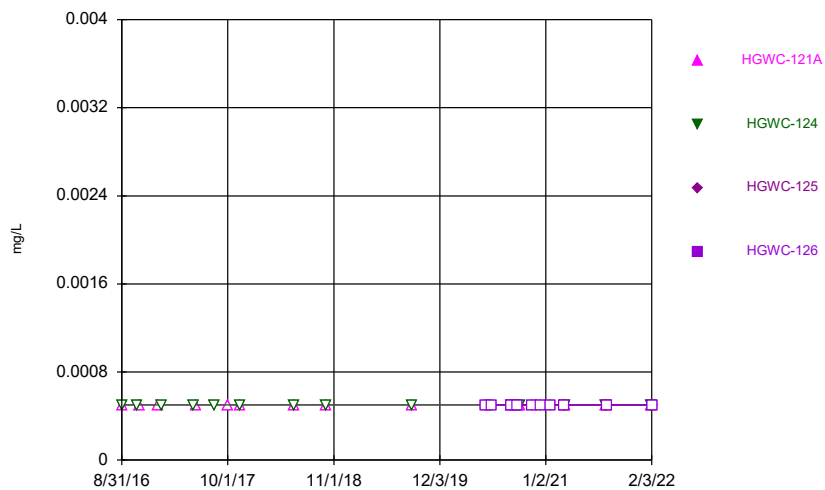
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### Time Series



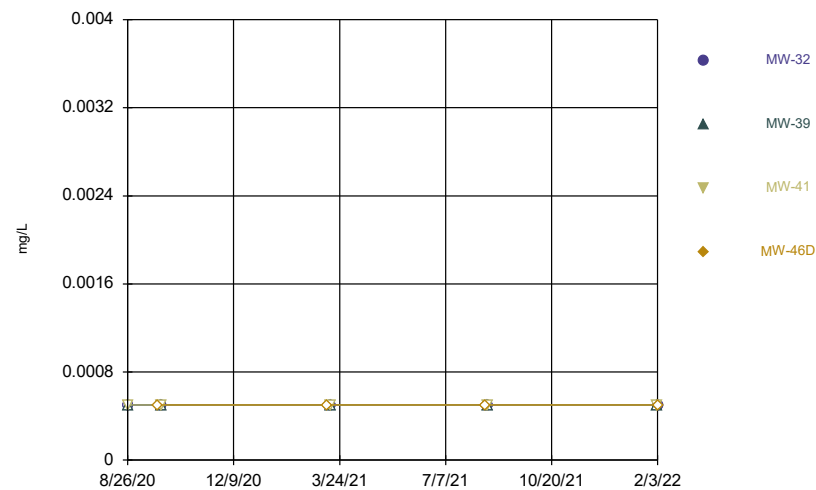
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### Time Series



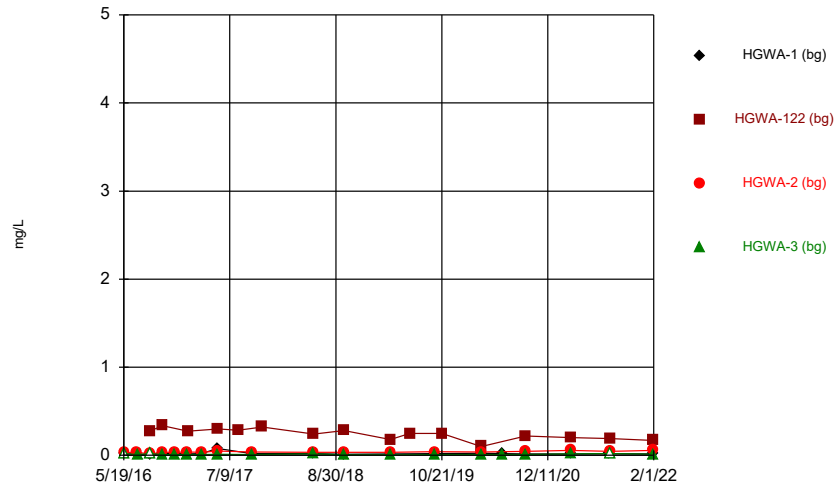
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### Time Series



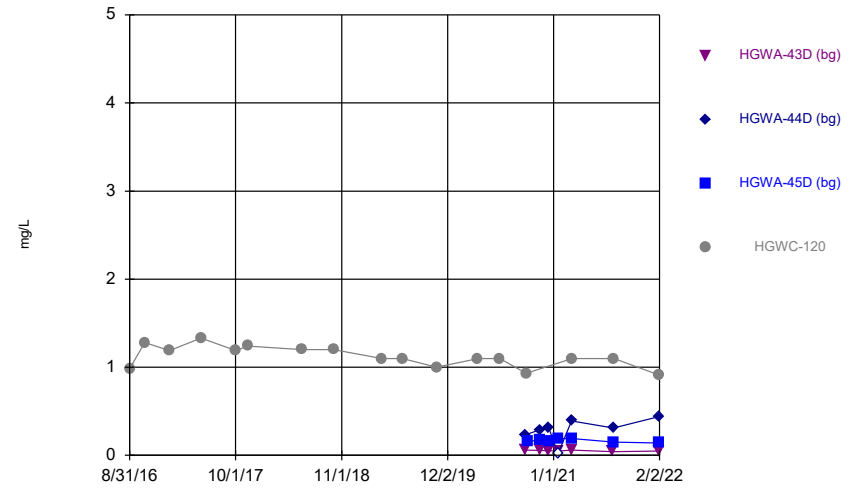
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Time Series



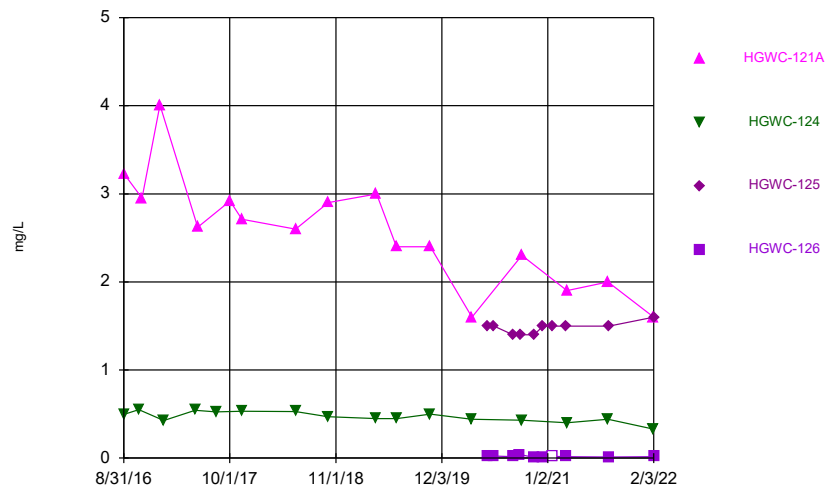
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Time Series



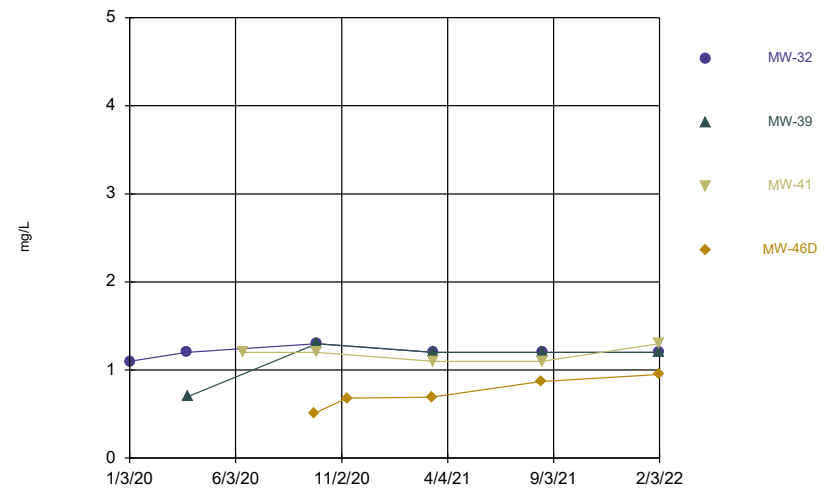
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Time Series



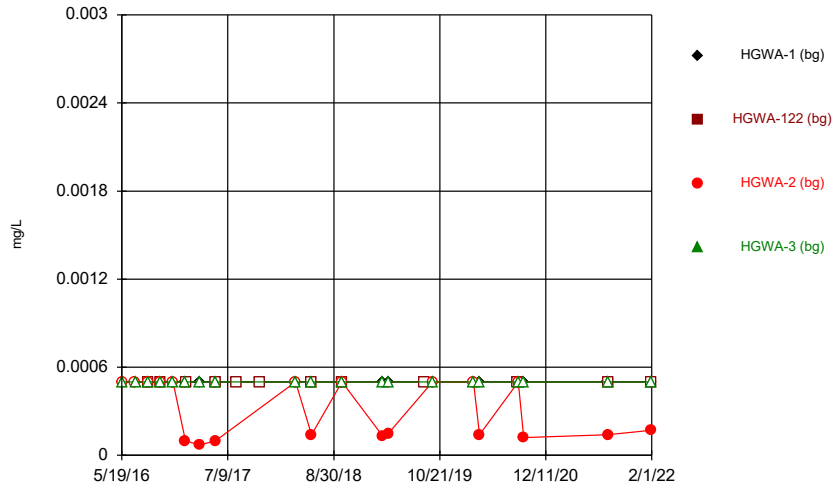
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Time Series



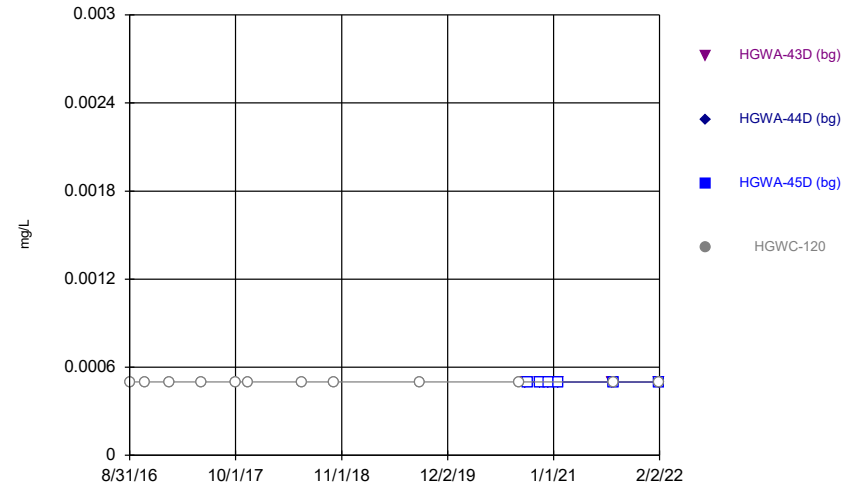
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Time Series



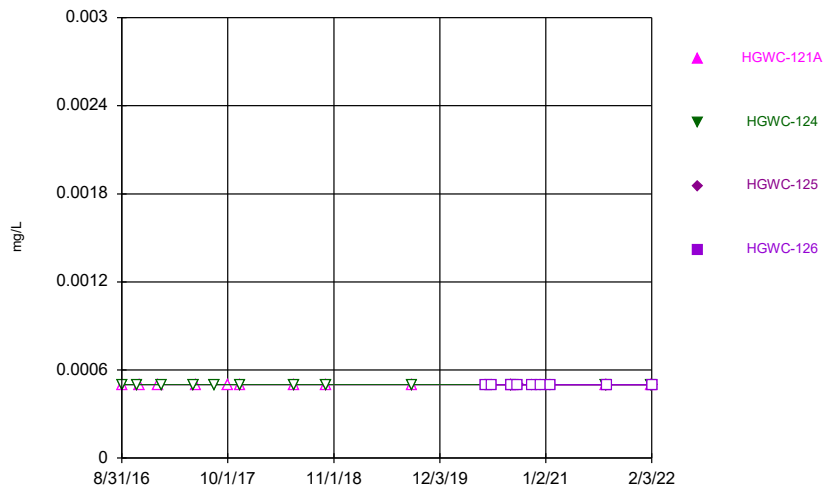
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



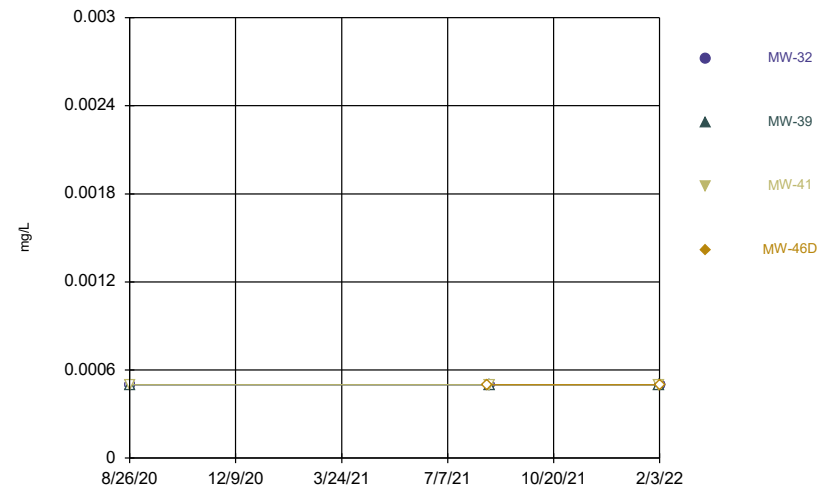
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



Constituent: Cadmium Analysis Run 3/28/2022 9:34 AM  
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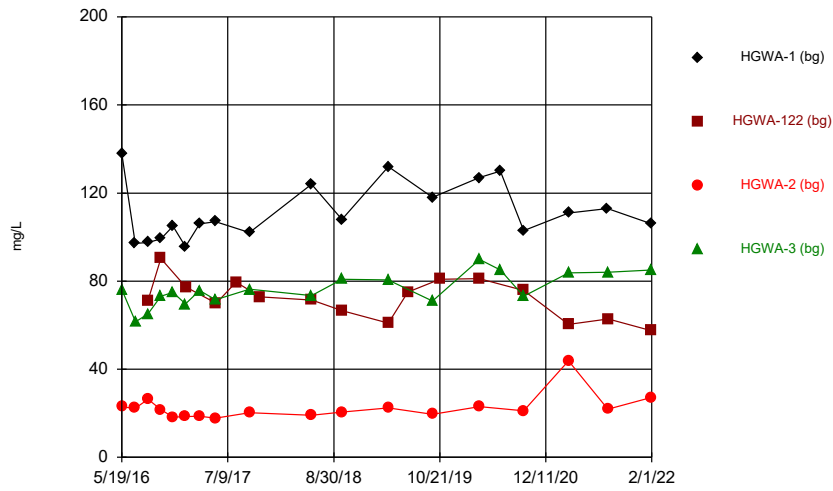
Time Series



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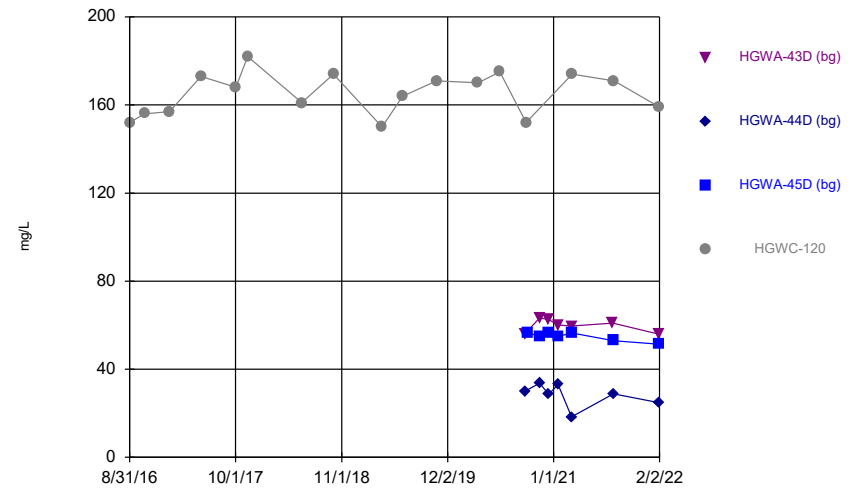


Time Series



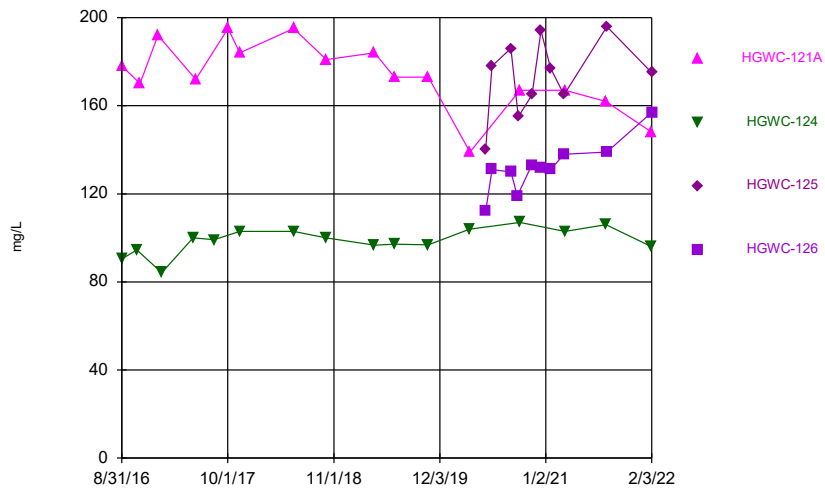
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Time Series



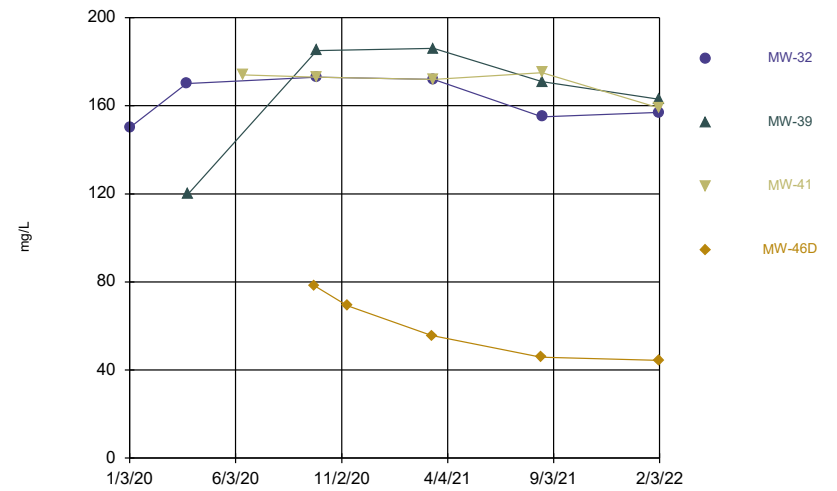
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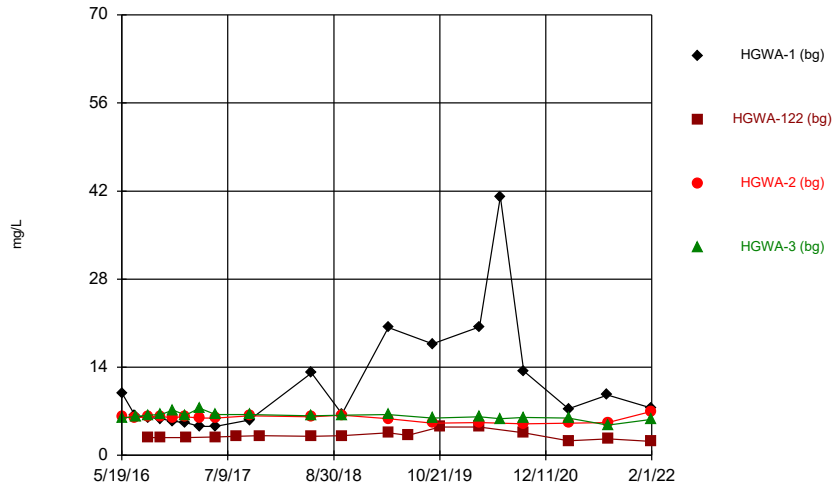
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Time Series



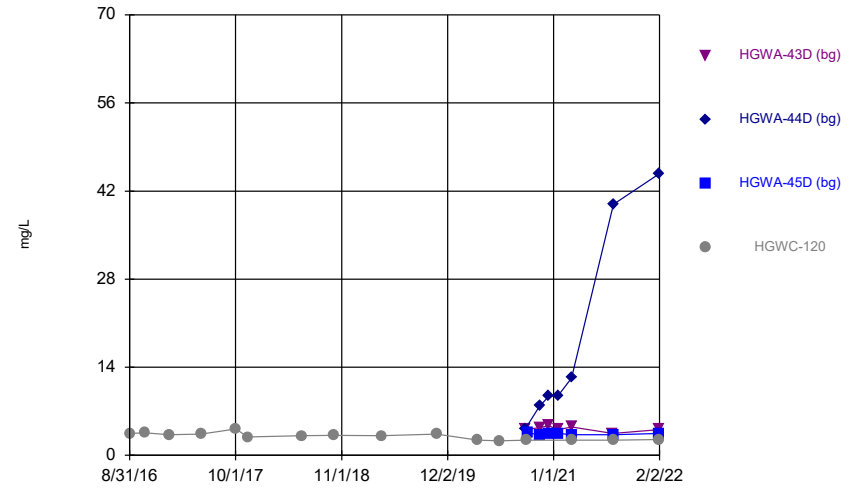
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



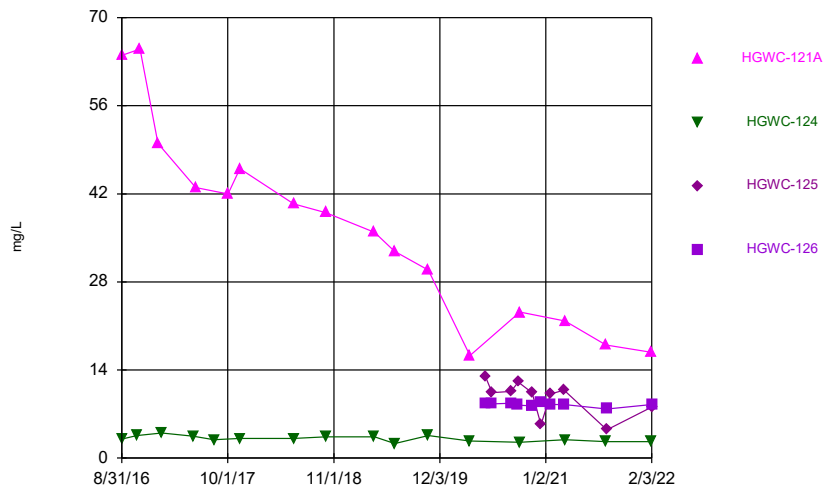
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### Time Series



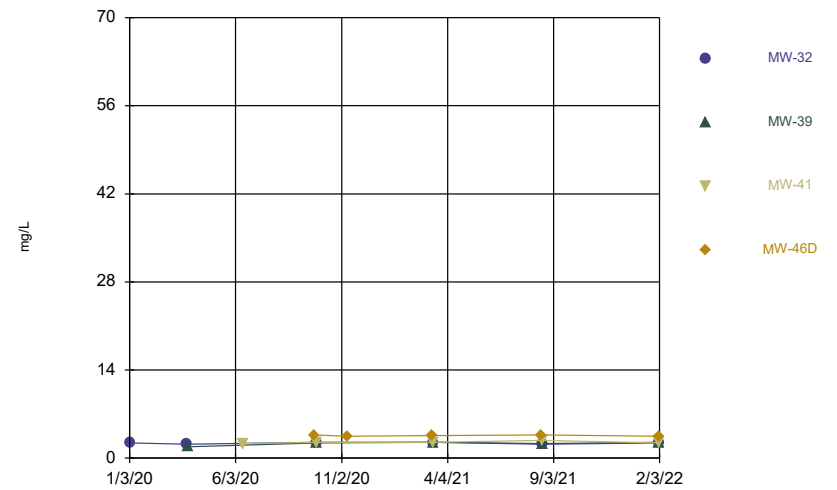
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



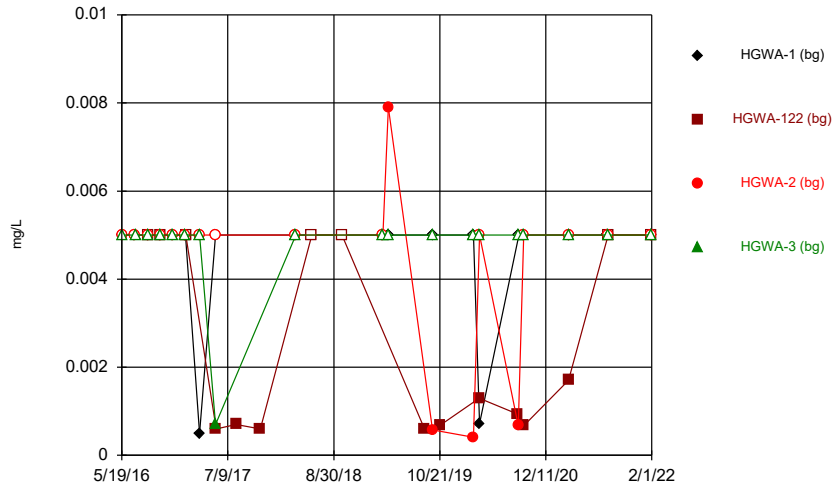
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### Time Series



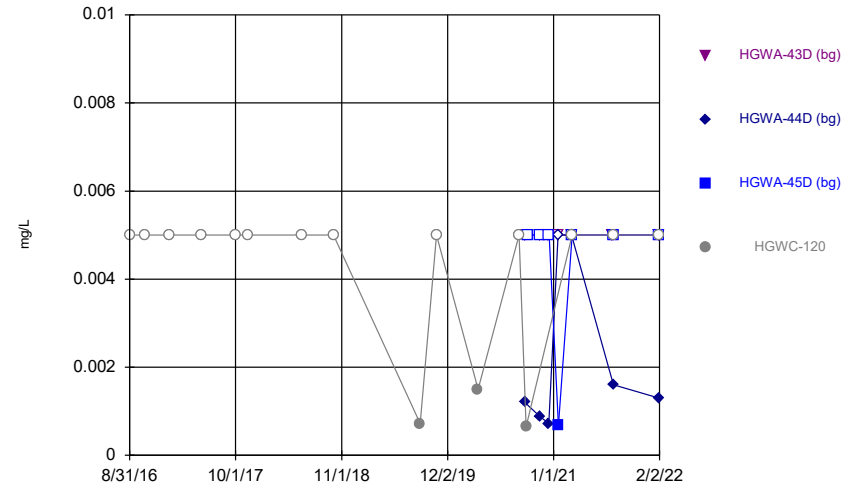
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



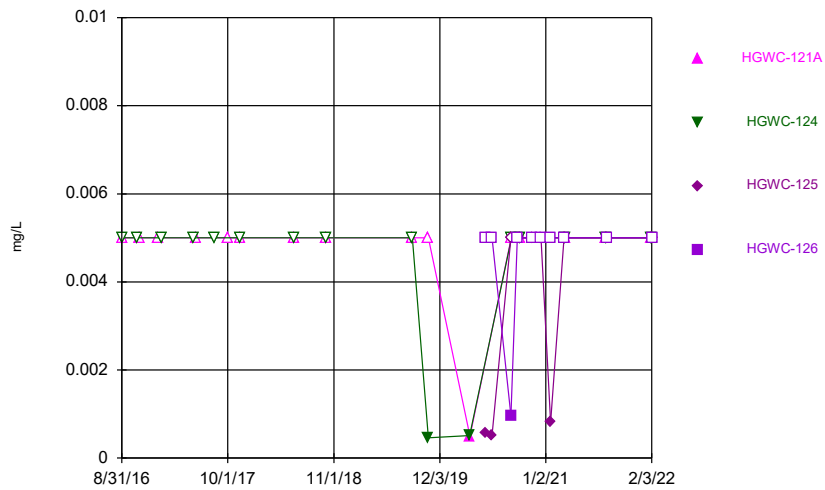
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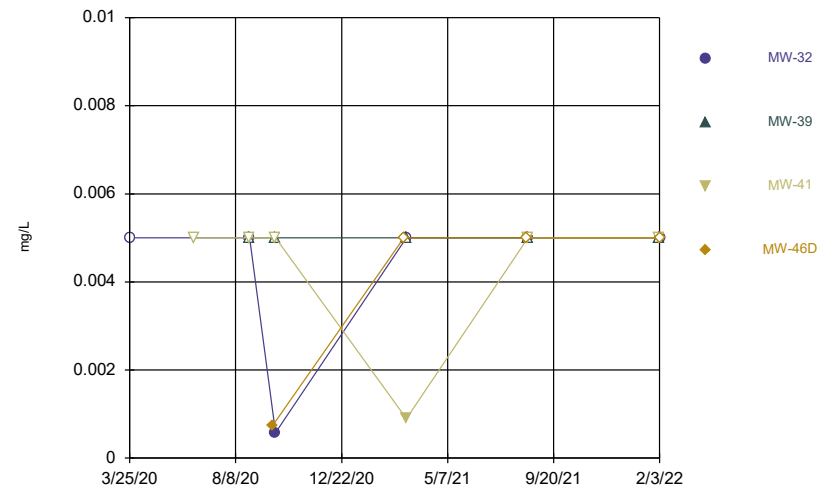
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Time Series



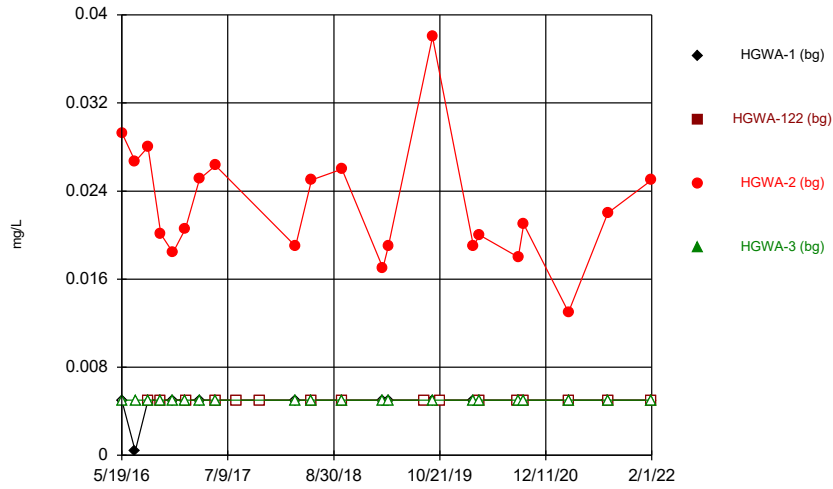
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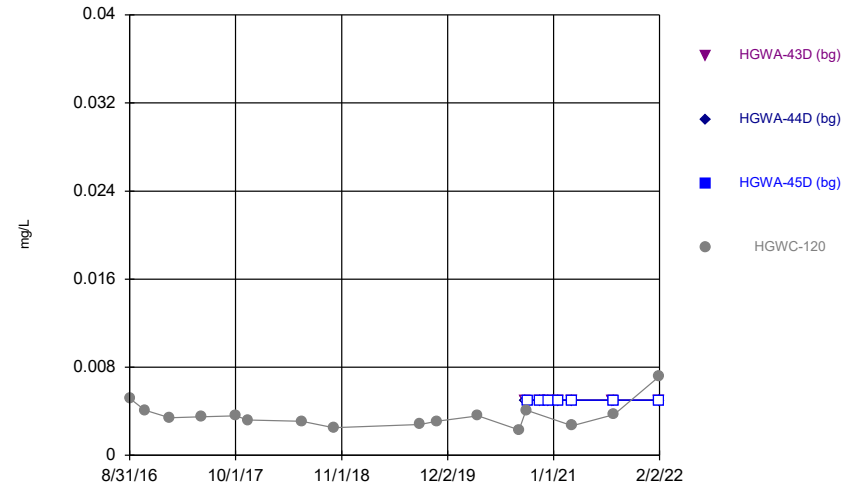
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Time Series



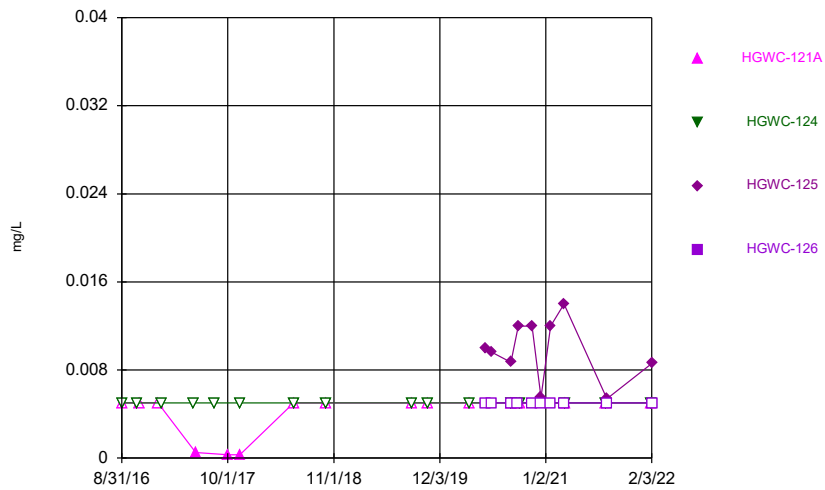
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series

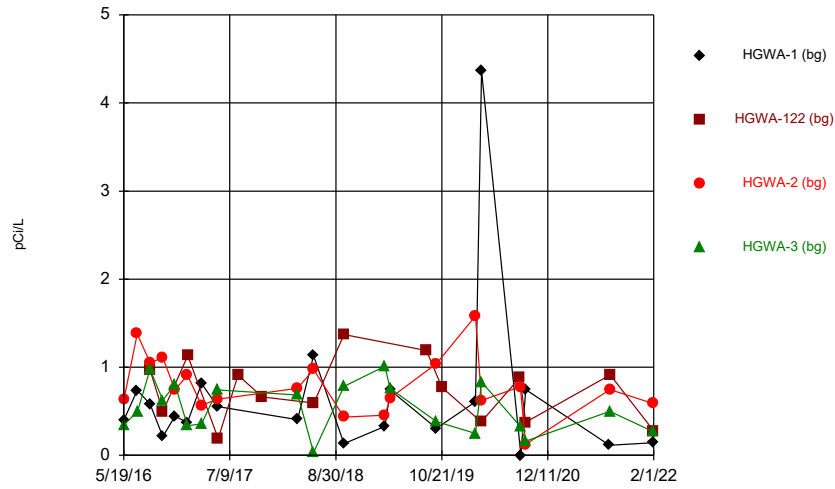


Constituent: Cobalt Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series

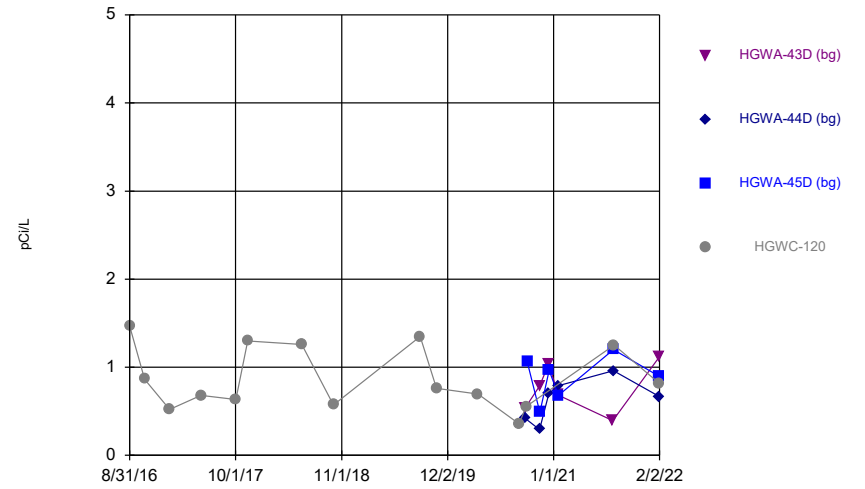


Time Series



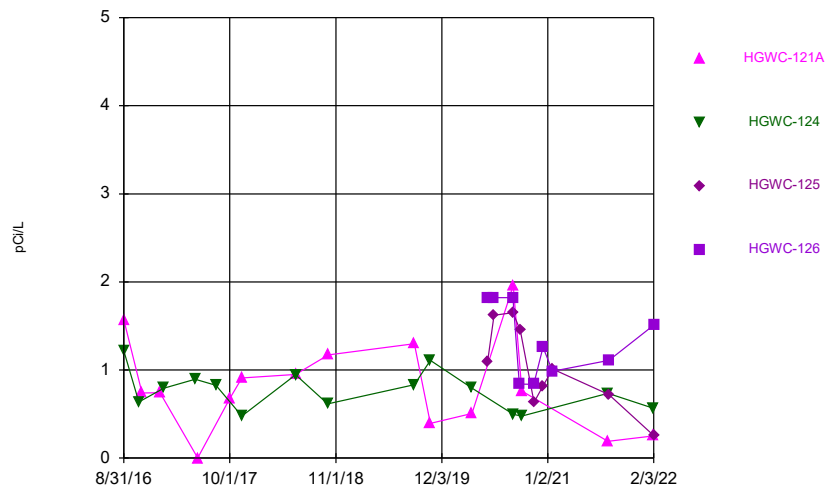
Constituent: Combined Radium 226 + 228 Analysis Run 3/28/2022 9:35 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



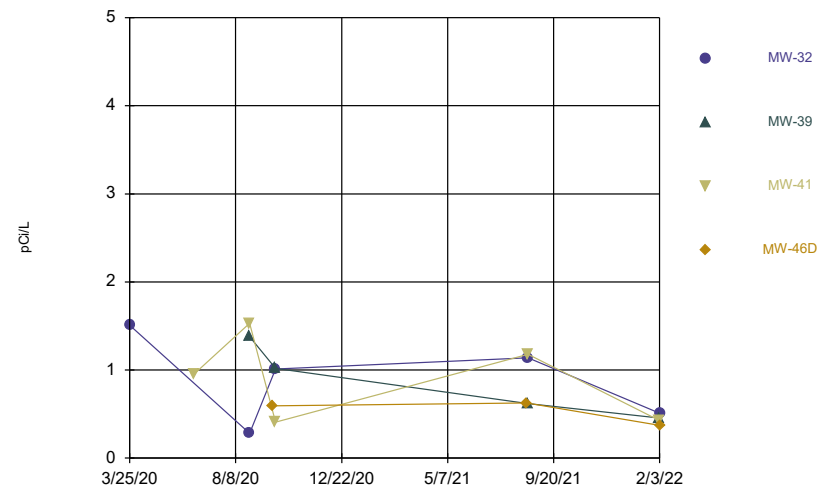
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



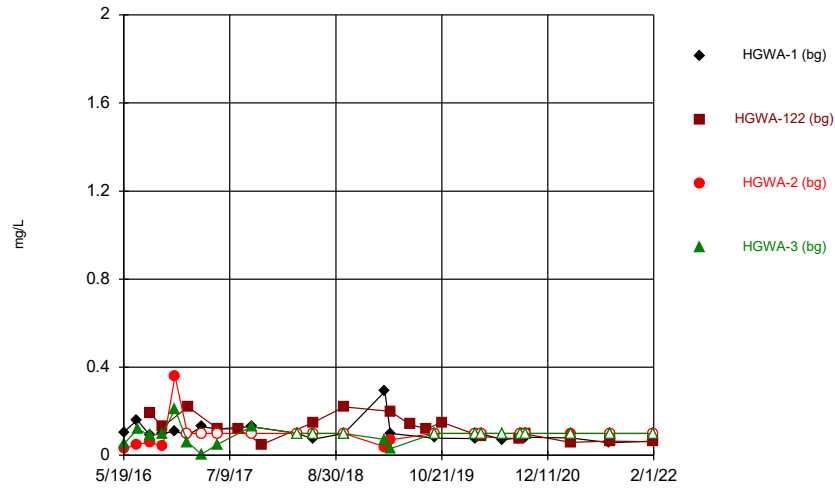
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Time Series



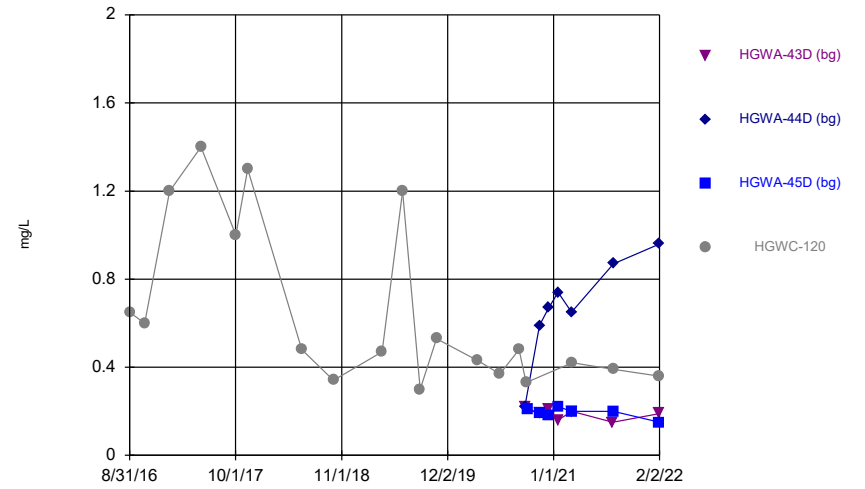
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Time Series



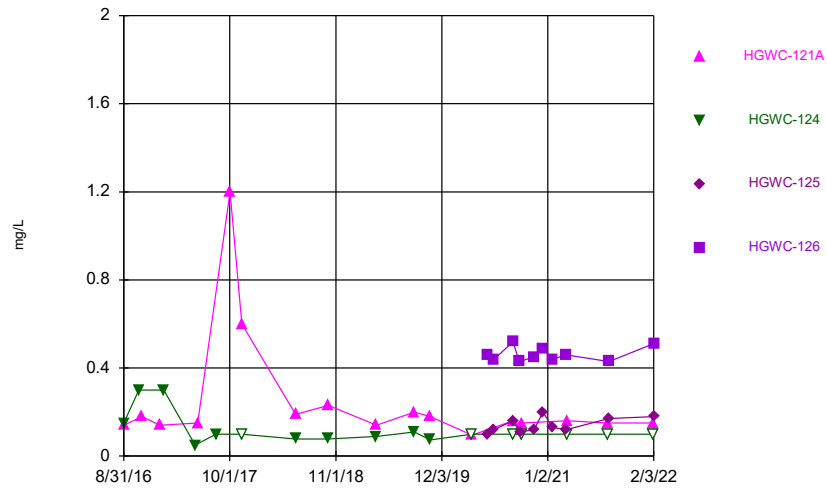
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Time Series



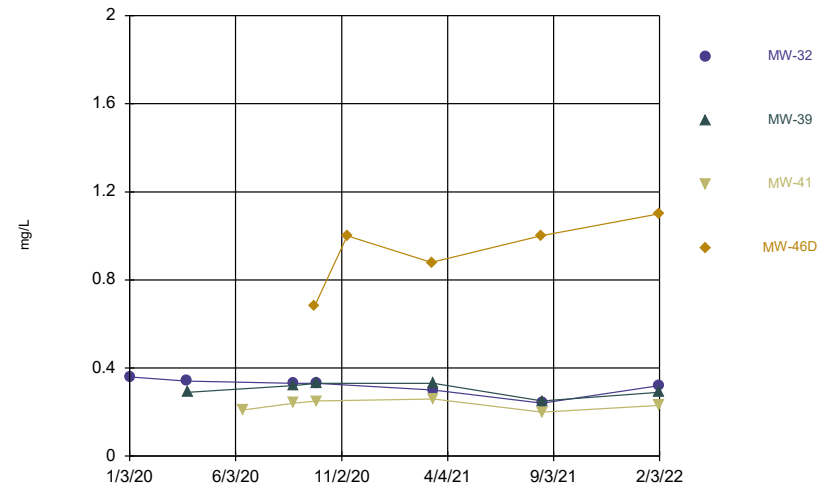
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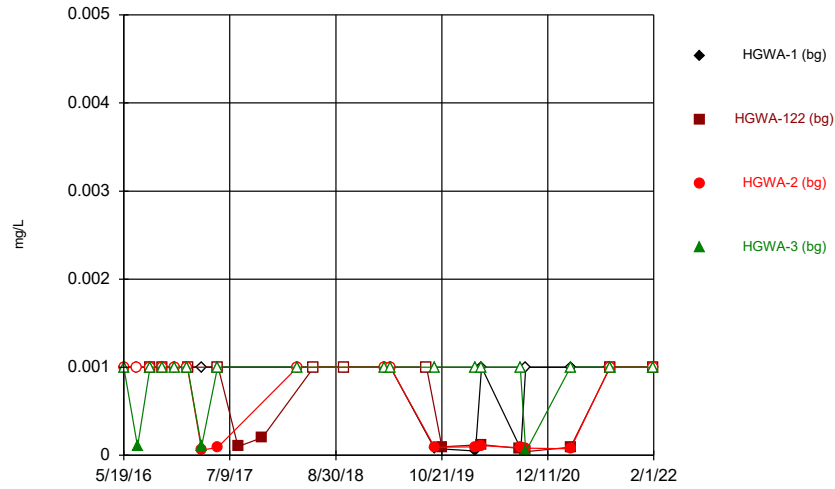
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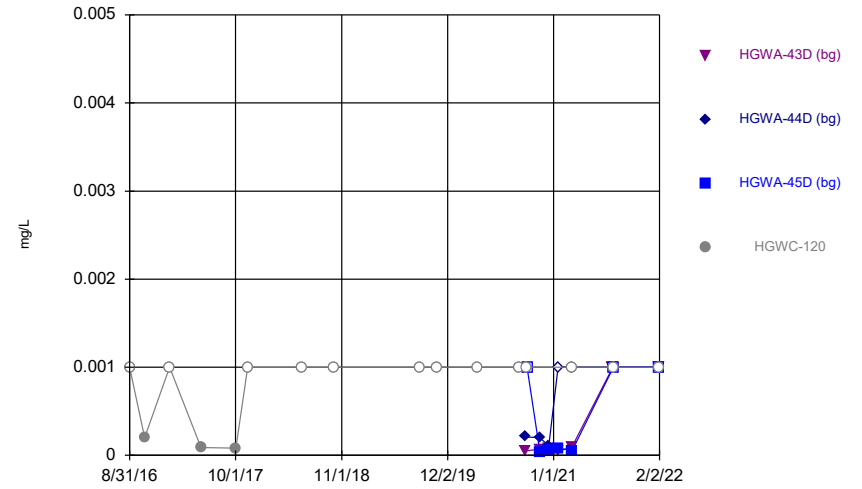
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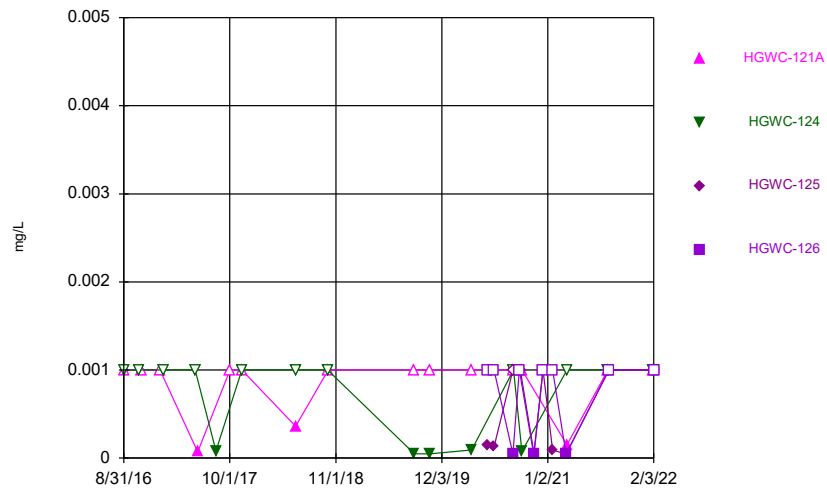
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Time Series



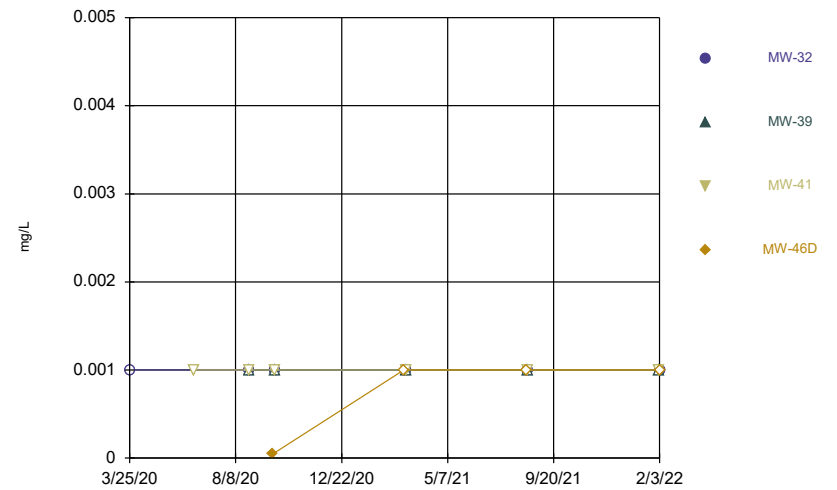
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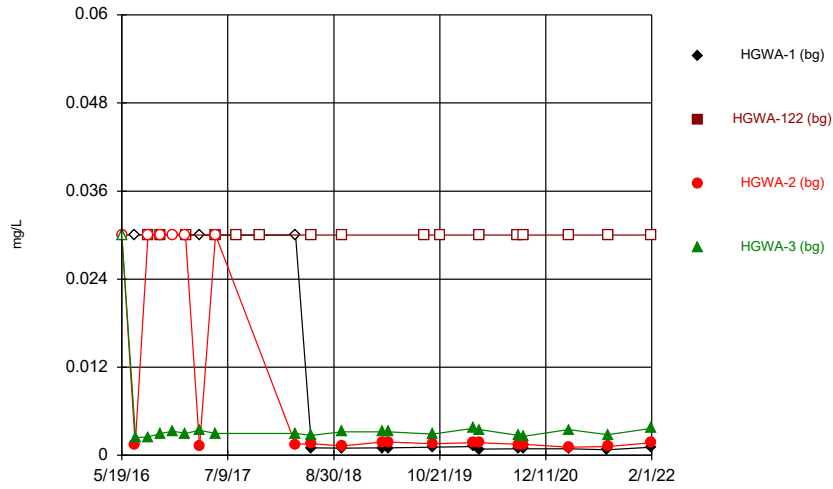
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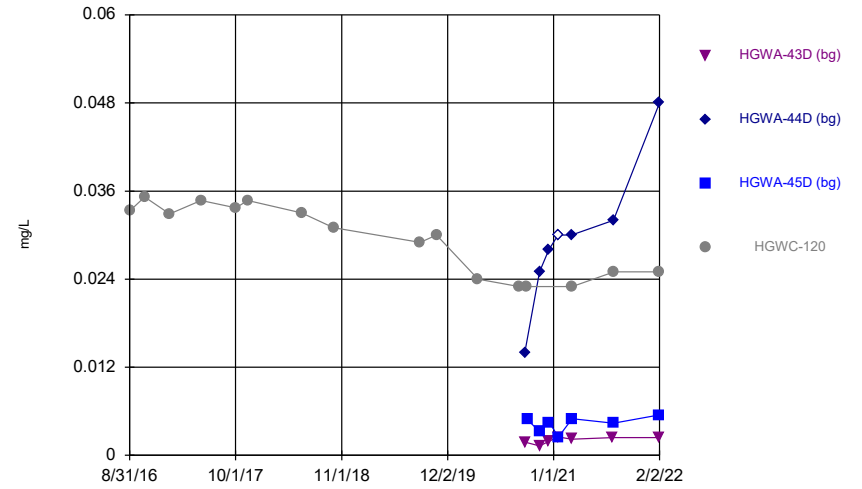
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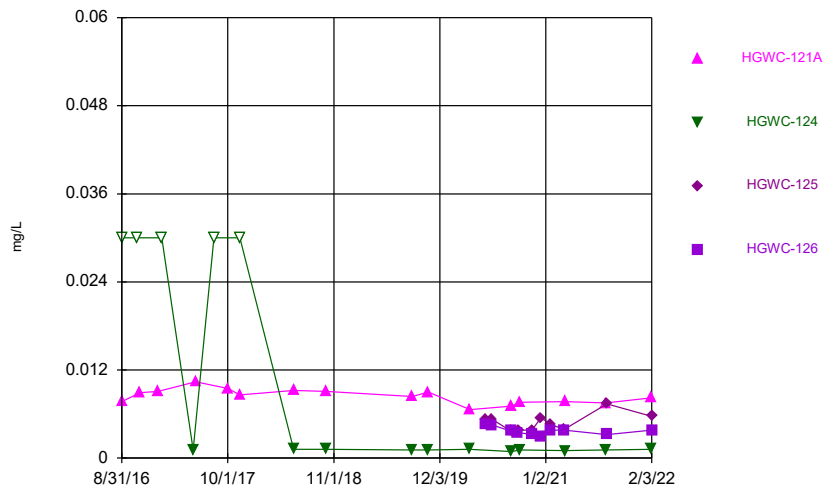
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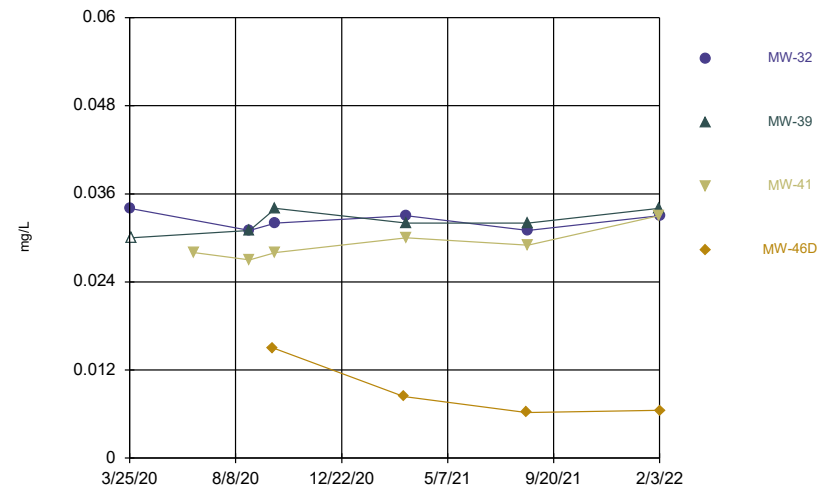
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Time Series



Constituent: Lithium Analysis Run 3/28/2022 9:35 AM  
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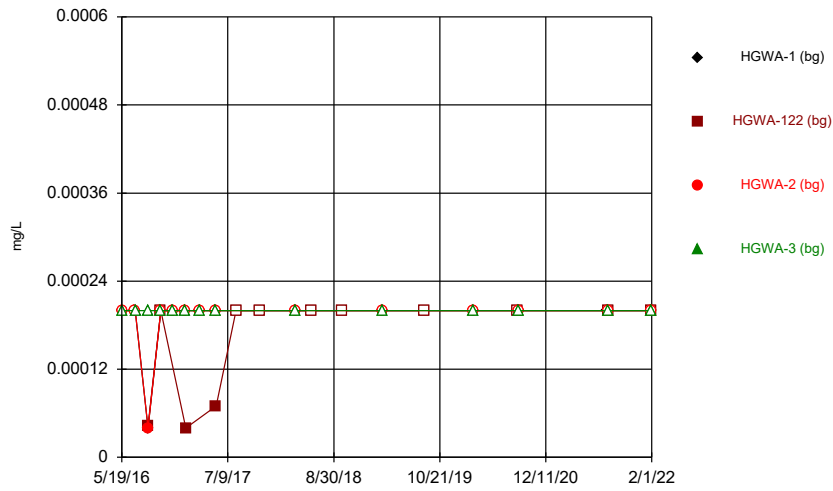
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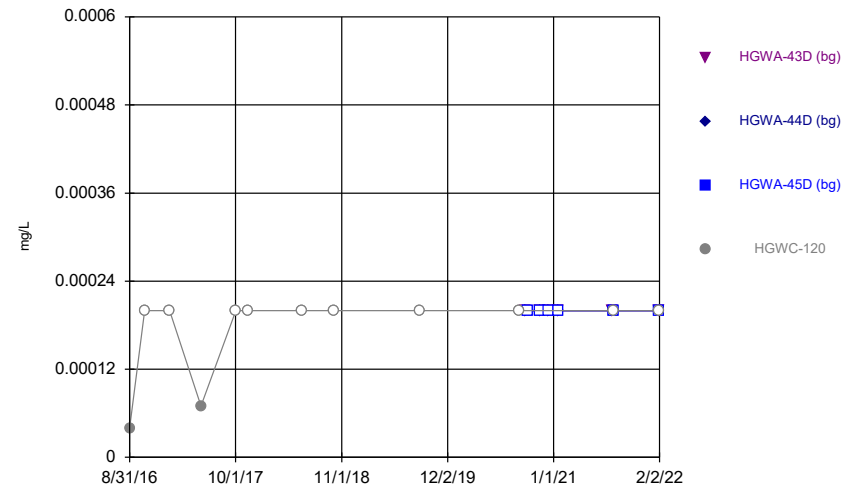


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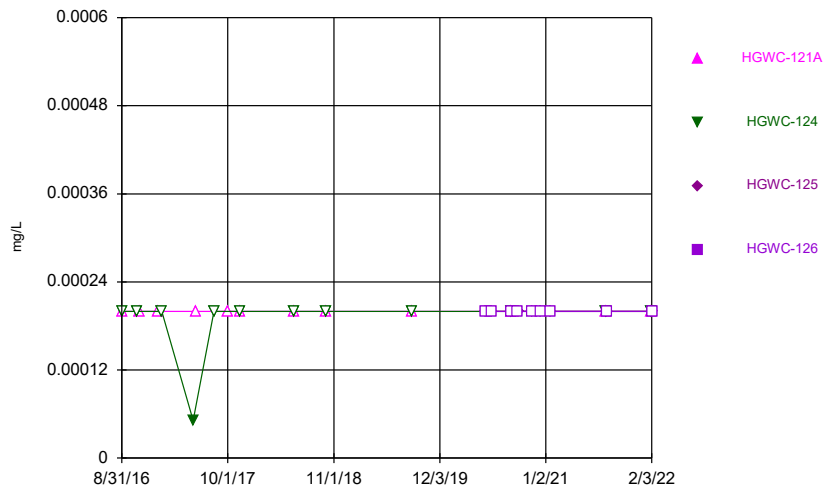
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



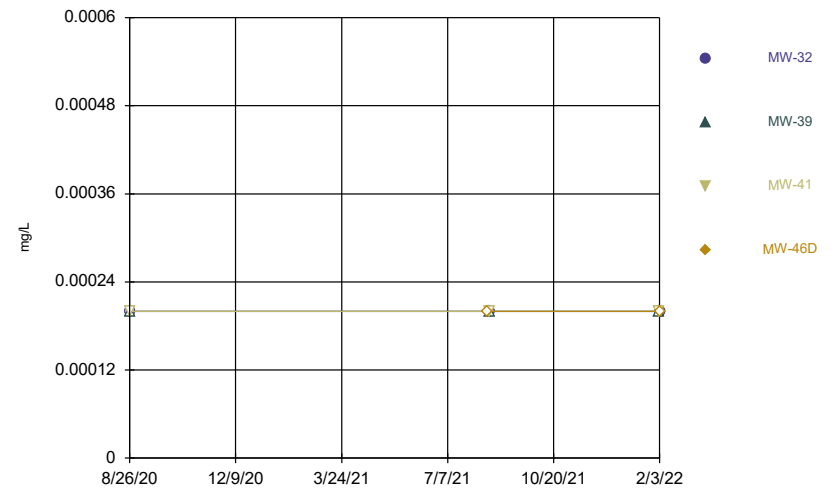
Constituent: Mercury Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



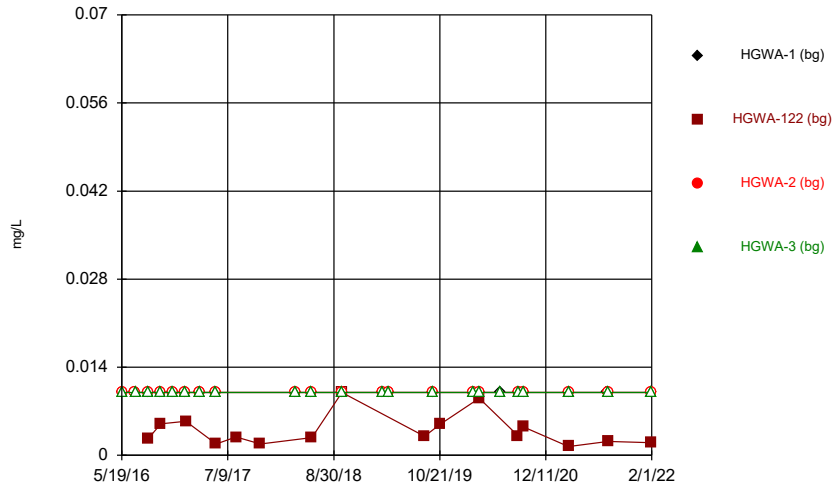
Constituent: Mercury Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



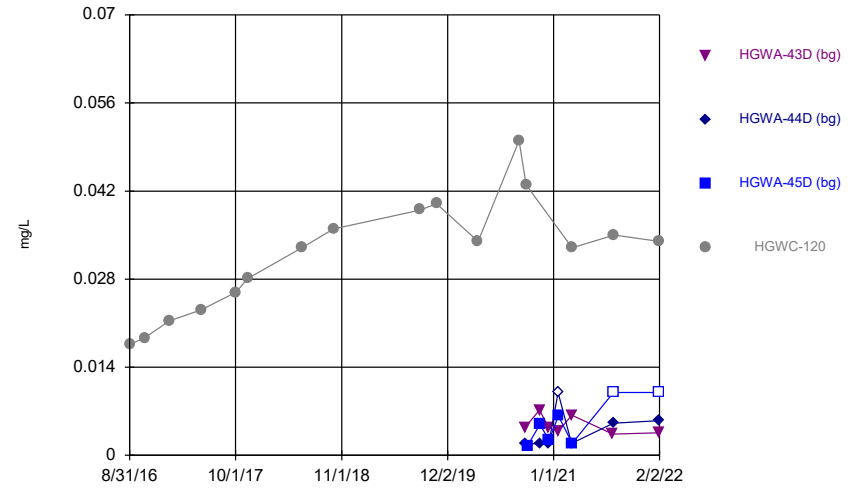
Constituent: Mercury Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



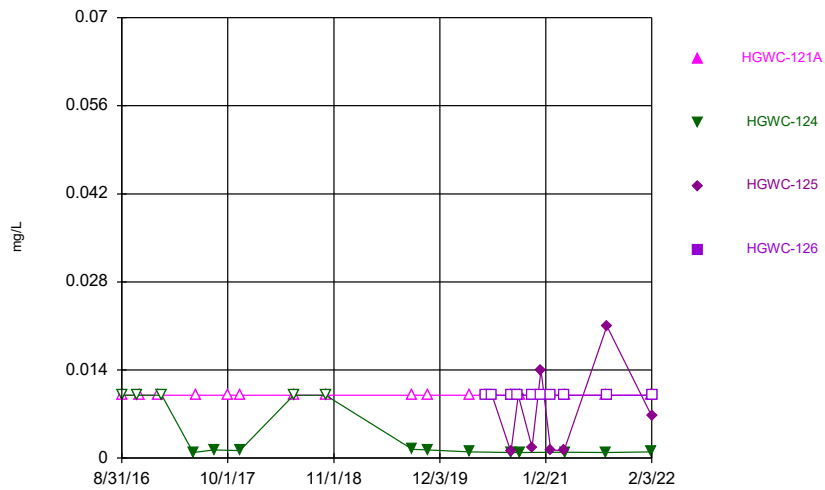
Constituent: Molybdenum Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



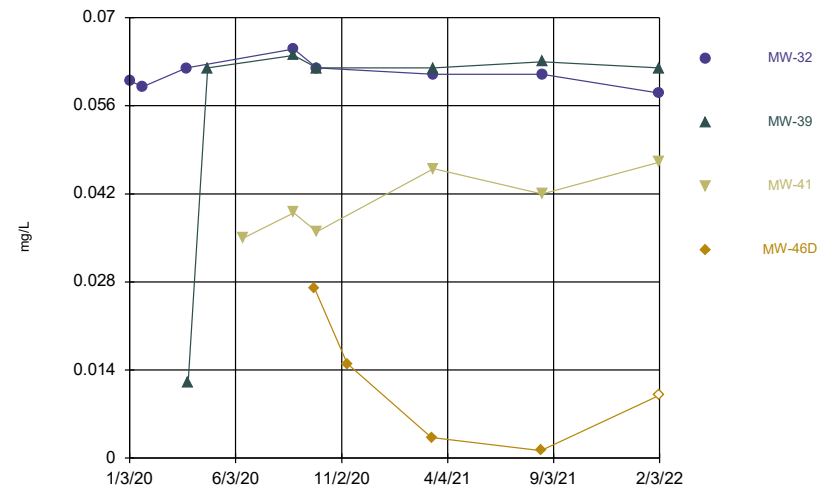
Constituent: Molybdenum Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



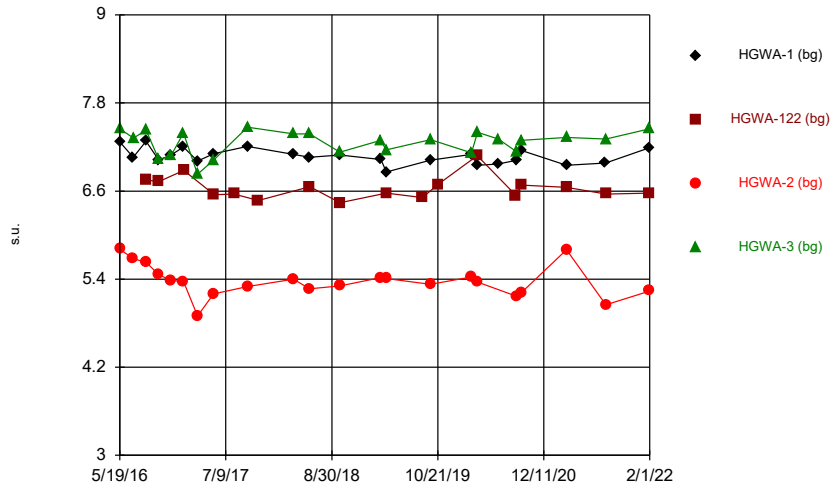
Constituent: Molybdenum Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



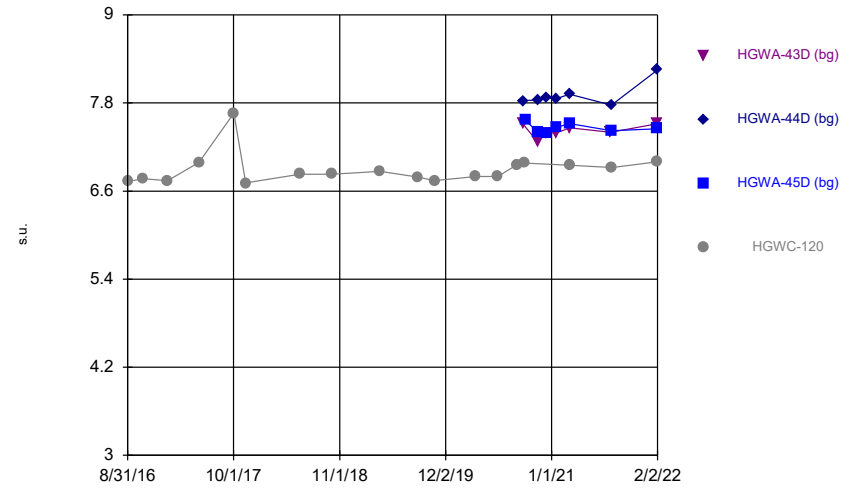
Constituent: Molybdenum Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



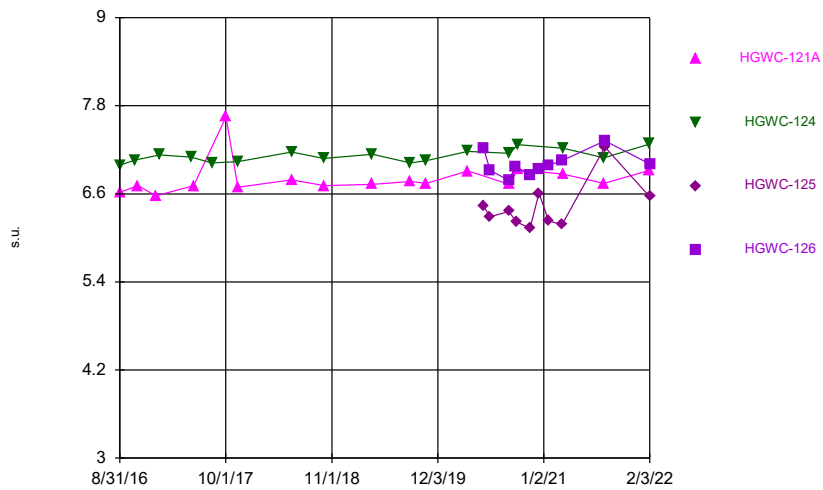
Constituent: pH Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



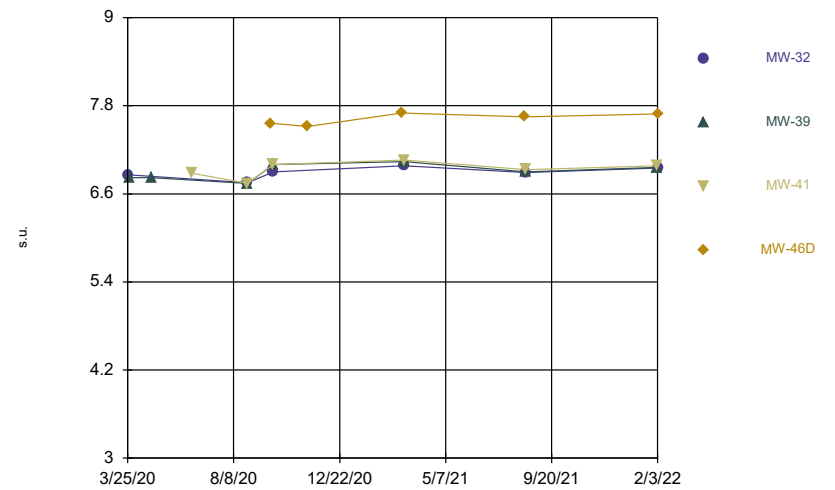
Constituent: pH Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



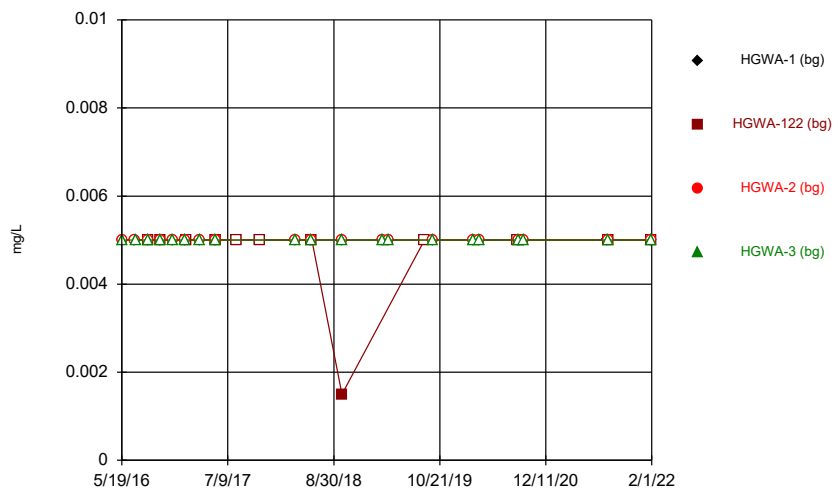
Constituent: pH Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



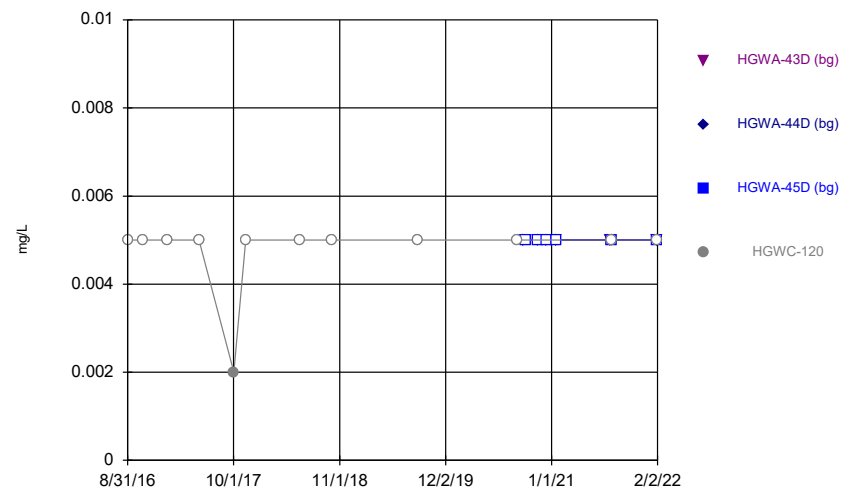
Constituent: pH Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



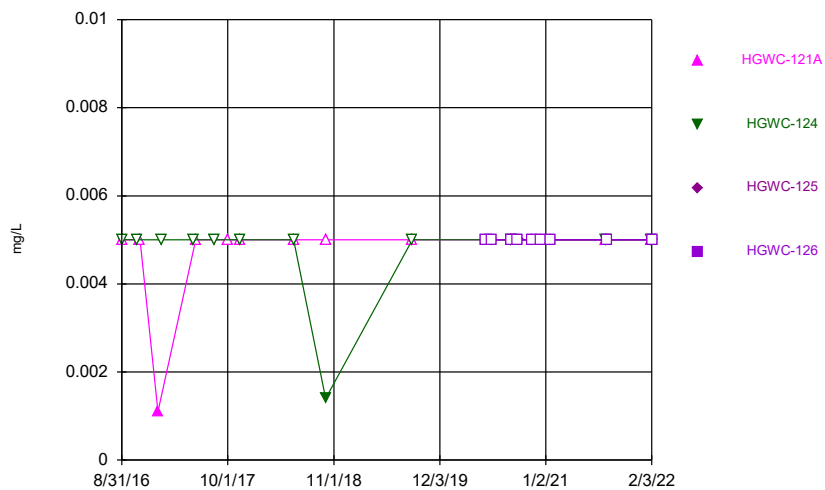
Constituent: Selenium Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



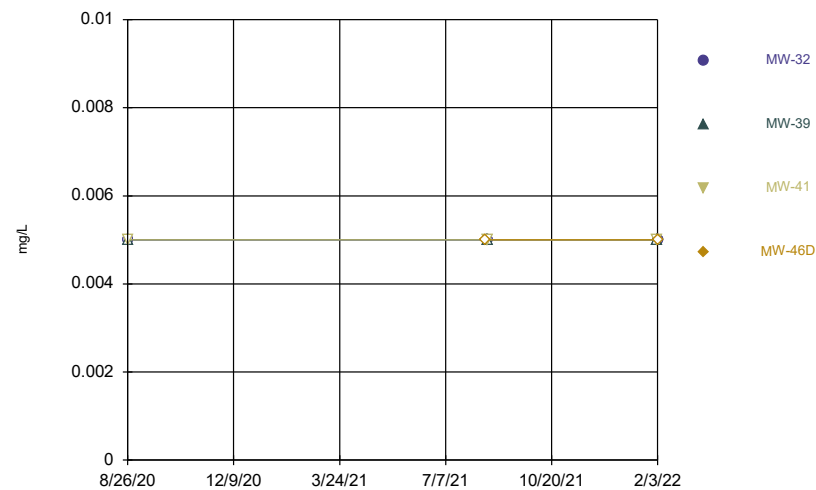
Constituent: Selenium Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



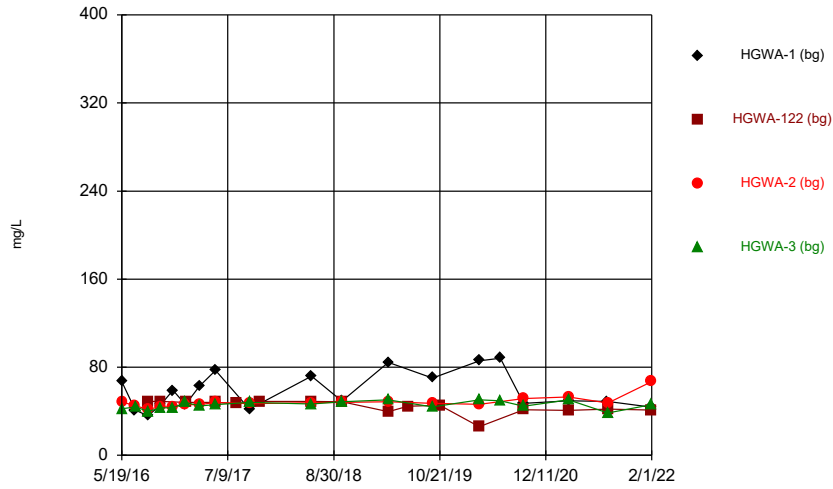
Constituent: Selenium Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Time Series



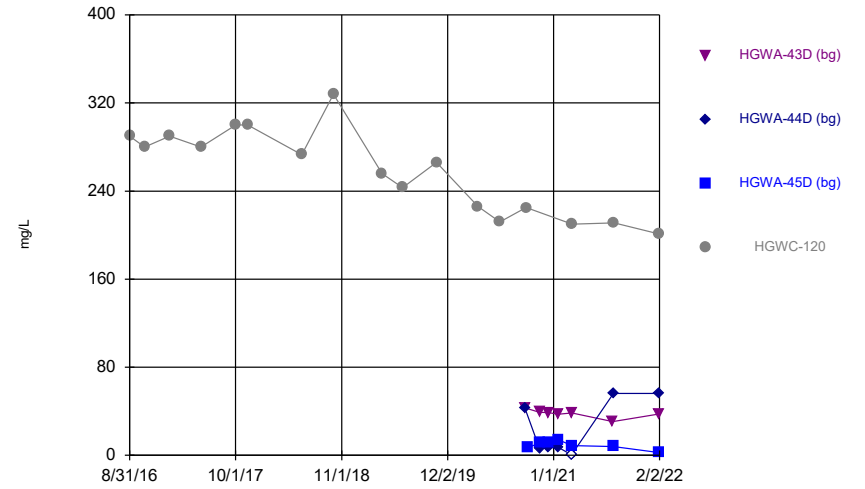
Constituent: Selenium Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



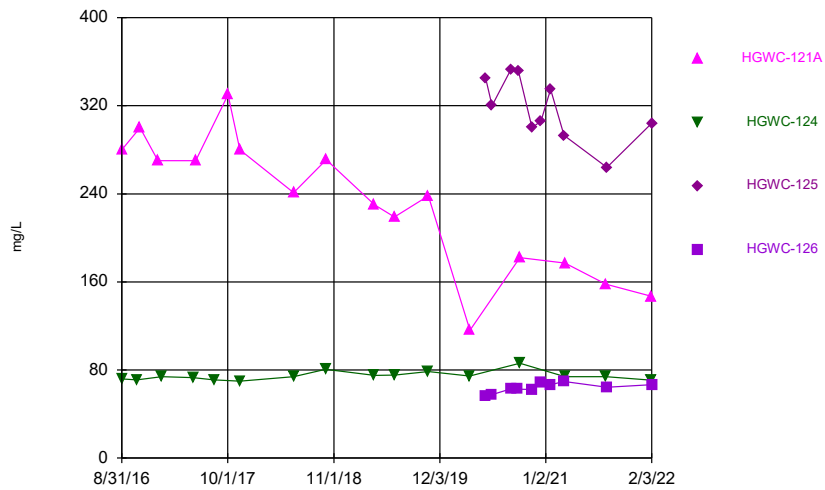
Constituent: Sulfate Analysis Run 3/28/2022 9:35 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



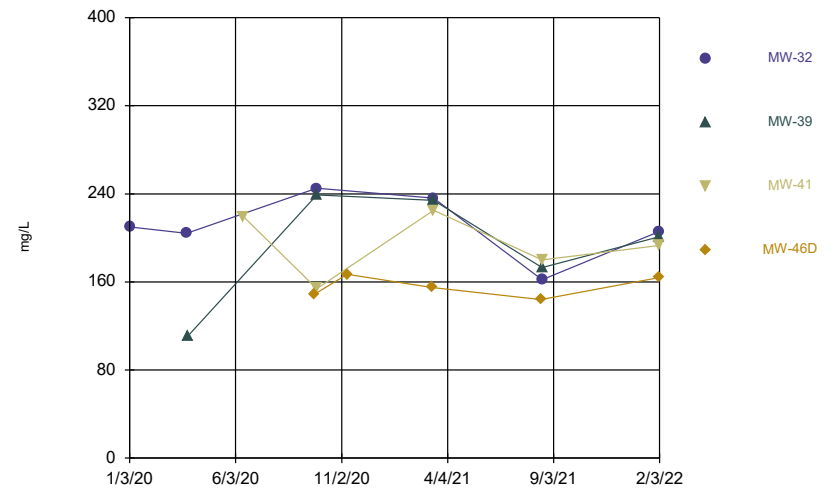
Constituent: Sulfate Analysis Run 3/28/2022 9:35 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



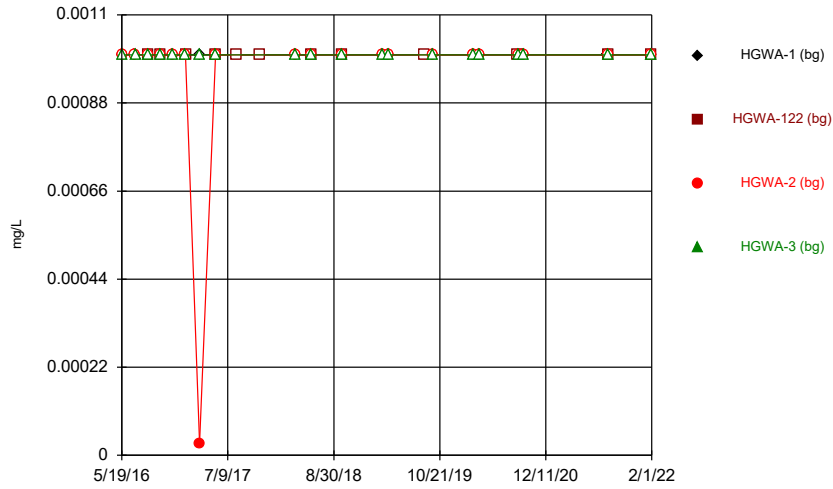
Constituent: Sulfate Analysis Run 3/28/2022 9:35 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



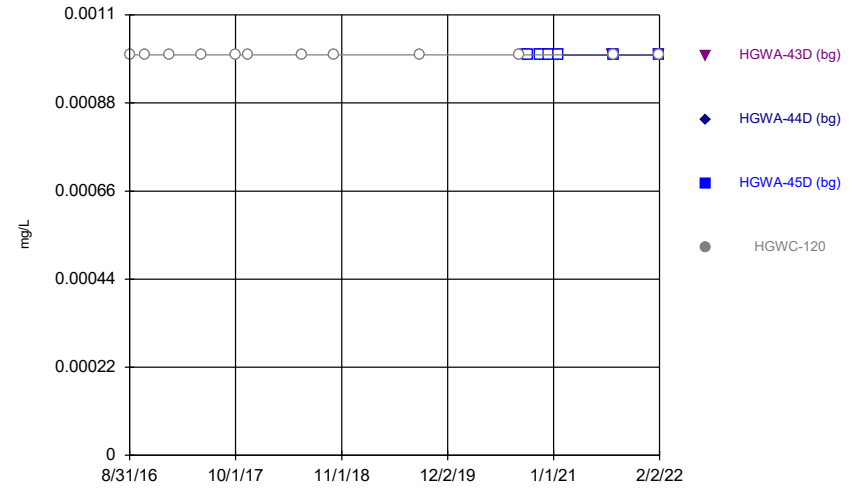
Constituent: Sulfate Analysis Run 3/28/2022 9:35 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



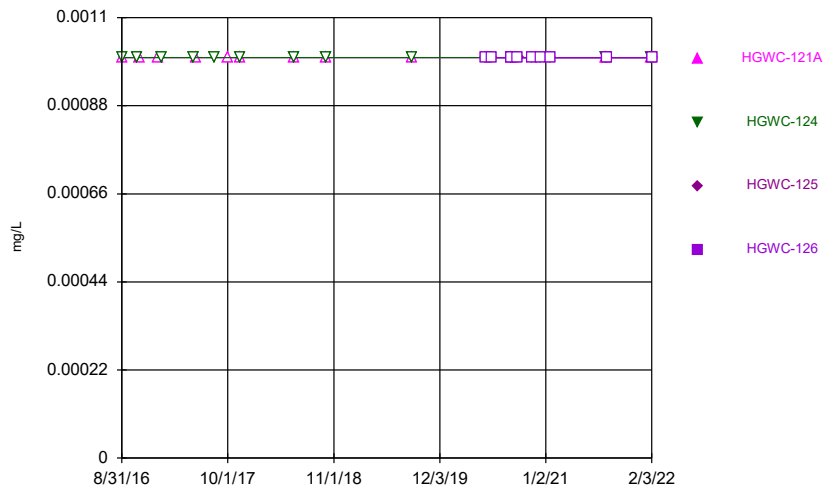
Constituent: Thallium Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



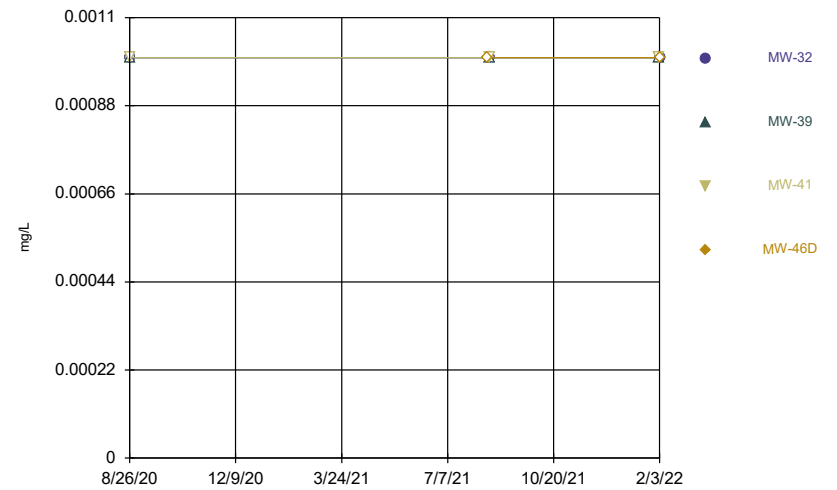
Constituent: Thallium Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



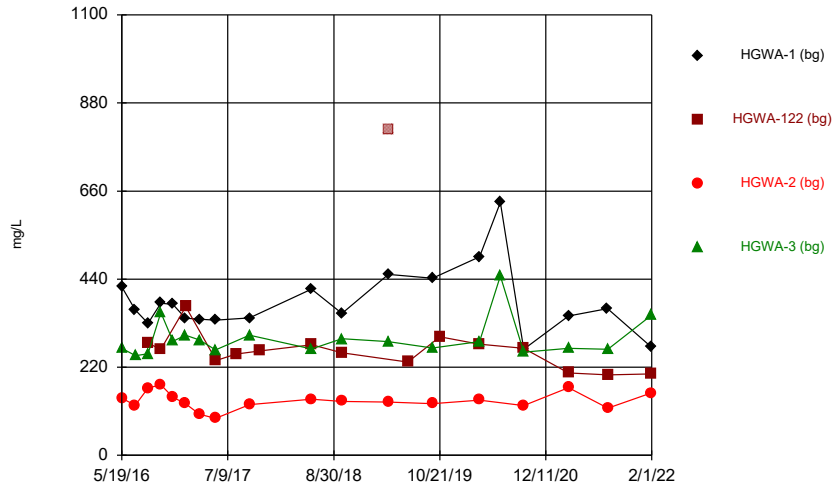
Constituent: Thallium Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



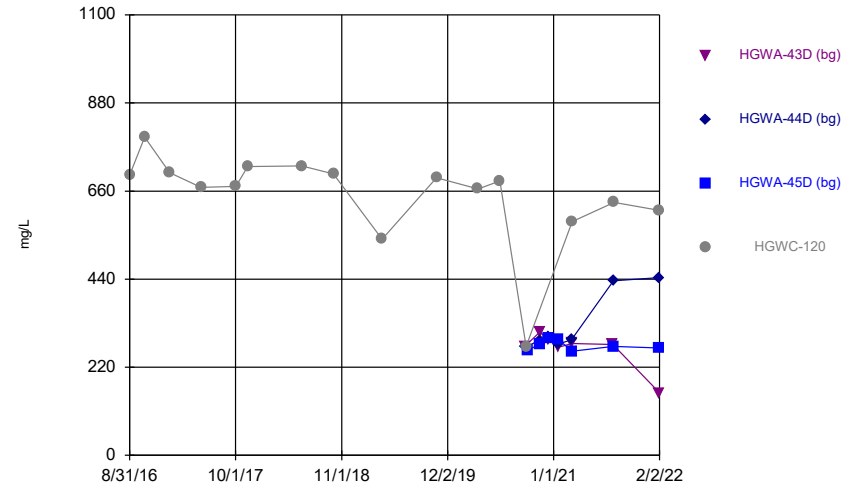
Constituent: Thallium Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



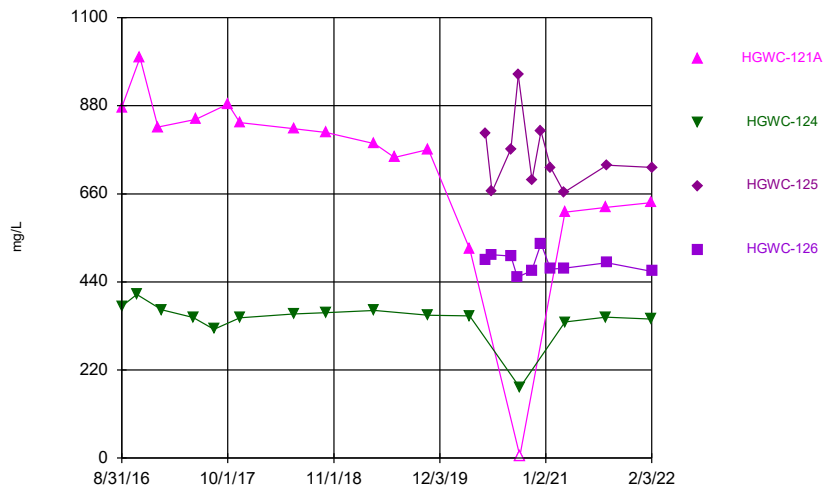
Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



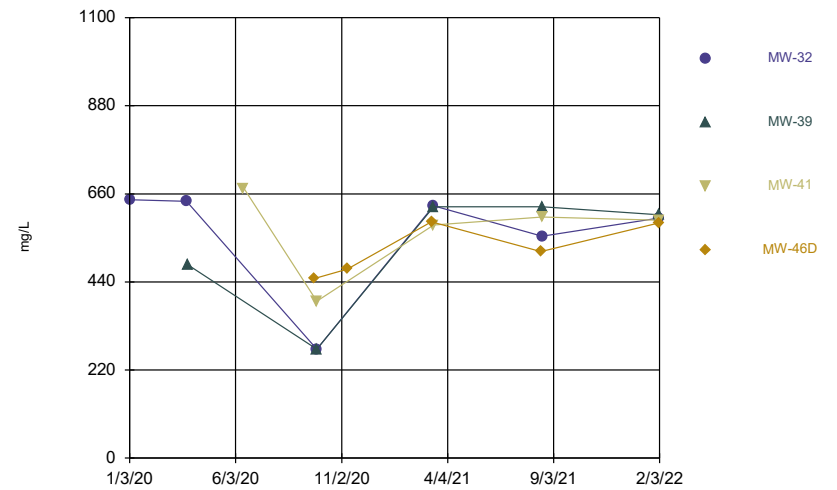
Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Time Series



Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:35 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

# Time Series

Constituent: Antimony (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	<0.003			
3/11/2021		<0.003	<0.003	<0.003
8/11/2021	<0.003			
8/12/2021			<0.003	<0.003
8/13/2021		<0.003		
2/1/2022	<0.003	<0.003	<0.003	<0.003



# Time Series

Constituent: Antimony (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.003
10/26/2016				<0.003
1/27/2017				<0.003
5/25/2017				<0.003
10/2/2017				<0.003
11/15/2017				<0.003
6/5/2018				<0.003
10/2/2018				<0.003
8/22/2019				<0.003
8/26/2020				<0.003
9/16/2020	0.00051 (J)	0.00049 (J)		
9/21/2020				<0.003
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)	<0.003		
1/20/2021			<0.003	
3/10/2021		0.00037 (J)		
3/11/2021	0.00057 (J)			
3/12/2021			0.0003 (J)	0.0018 (J)
8/11/2021	<0.003			
8/13/2021		<0.003	<0.003	
8/16/2021				<0.003
2/1/2022	<0.003	0.0013 (J)	0.0018 (J)	
2/2/2022				<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.003	<0.003		
10/26/2016		<0.003		
11/7/2016	<0.003			
1/13/2017	<0.003			
1/27/2017		<0.003		
5/25/2017		<0.003		
6/3/2017	<0.003			
8/11/2017		<0.003		
10/2/2017	<0.003			
11/15/2017	<0.003	<0.003		
6/5/2018	<0.003	<0.003		
10/2/2018		<0.003		
10/5/2018	<0.003			
8/22/2019	<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			
8/27/2020		<0.003		
9/18/2020				<0.003
9/21/2020			<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			0.00061 (J)	0.00043 (J)
3/15/2021	<0.003	<0.003		
8/16/2021	<0.003	<0.003		
8/19/2021			<0.003	<0.003
2/2/2022	<0.003	<0.003		
2/3/2022			<0.003	<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	0.00035 (J)	<0.003	<0.003	
9/25/2020				<0.003
9/28/2020	<0.003	<0.003	<0.003	
3/12/2021				0.00041 (J)
3/15/2021	<0.003	<0.003	<0.003	
8/16/2021				<0.003
8/18/2021	<0.003	<0.003	<0.003	
2/2/2022		<0.003	<0.003	
2/3/2022	<0.003			<0.003

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
8/11/2021	<0.005			
8/12/2021			<0.005	<0.005
8/13/2021		<0.005		
2/1/2022	0.0016 (J)	<0.005	0.0023 (J)	0.0024 (J)

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.005
10/26/2016				<0.005
1/27/2017				<0.005
5/25/2017				0.0014 (J)
10/2/2017				0.0007 (J)
11/15/2017				<0.005
6/5/2018				0.001 (J)
10/2/2018				<0.005
8/22/2019				<0.005
8/26/2020				<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)	
8/11/2021	0.0015 (J)			
8/13/2021		<0.005	0.0012 (J)	
8/16/2021				0.0015 (J)
2/1/2022	0.0036 (J)	0.0025 (J)	<0.005	
2/2/2022				0.0014 (J)

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005		
10/26/2016		<0.005		
11/7/2016	<0.005			
1/13/2017	<0.005			
1/27/2017		<0.005		
5/25/2017		0.0006 (J)		
6/3/2017	0.001 (J)			
8/11/2017		<0.005		
10/2/2017	<0.005			
11/15/2017	<0.005	<0.005		
6/5/2018	0.0014 (J)	<0.005		
10/2/2018		<0.005		
10/5/2018	<0.005			
8/22/2019	<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			
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	0.0014 (J)	<0.005		
8/19/2021			<0.005	<0.005
2/2/2022	<0.005	<0.005		
2/3/2022			0.0032 (J)	0.0026 (J)

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.005	<0.005	<0.005	
8/16/2021				0.0032 (J)
8/18/2021	<0.005	<0.005	<0.005	
2/2/2022		0.0022 (J)	0.0023 (J)	
2/3/2022	0.0026 (J)			0.0049 (J)

# Time Series

Constituent: Barium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	0.03			
3/11/2021		0.032	0.07	0.13
8/11/2021	0.03			
8/12/2021			0.12	0.11
8/13/2021		0.033		
2/1/2022	0.031	0.035	0.13	0.12



# Time Series

Constituent: Barium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.045
10/26/2016				0.0462
1/27/2017				0.0451
5/25/2017				0.0488
10/2/2017				0.0479
11/15/2017				0.051
6/5/2018				0.051
10/2/2018				0.059
8/22/2019				0.05
10/22/2019				0.051
3/25/2020				0.052
8/26/2020				0.041
9/16/2020	0.26	0.24		
9/21/2020				0.046
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	<0.01		
1/20/2021			0.53	
3/10/2021		0.26		
3/11/2021	0.3			
3/12/2021			0.54	0.047
8/11/2021	0.28			
8/13/2021		0.22	0.51	
8/16/2021				0.052
2/1/2022	0.29	0.23	0.57	
2/2/2022				0.054

# Time Series

Constituent: Barium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.0782	0.0744		
10/26/2016		0.0735		
11/7/2016	0.0764			
1/13/2017	0.0744			
1/27/2017		0.0632		
5/25/2017		0.0773		
6/3/2017	0.0933			
8/11/2017		0.0672		
10/2/2017	0.0815			
11/15/2017	0.0807	0.0707		
6/5/2018	0.078	0.07		
10/2/2018		0.067		
10/5/2018	0.074			
8/22/2019	0.066			
8/23/2019		0.066		
10/21/2019	0.074	0.075		
3/24/2020		0.075		
3/25/2020	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	0.057			
8/27/2020		0.062		
9/18/2020				0.21
9/21/2020			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			0.043	0.27
3/15/2021	0.059	0.071		
8/16/2021	0.06	0.069		
8/19/2021			0.044	0.27
2/2/2022	0.064	0.072		
2/3/2022			0.043	0.24

# Time Series

Constituent: Barium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	0.062			
6/15/2020			0.074	
8/26/2020	0.055	0.059	0.066	
9/25/2020				0.04
9/28/2020	0.053	0.058	0.071	
3/12/2021				0.03
3/15/2021	0.057	0.059	0.063	
8/16/2021				0.026
8/18/2021	0.054	0.06	0.064	
2/2/2022		0.059	0.07	
2/3/2022	0.055			0.025

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (bg)
5/19/2016	<0.0005		<0.0005	<0.0005
7/11/2016	<0.0005		0.0001 (J)	
7/12/2016				<0.0005
8/30/2016	<0.0005	<0.0005	<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		<0.0005	
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
3/10/2021	<0.0005			
3/11/2021		<0.0005	8.6E-05 (J)	<0.0005
8/11/2021	<0.0005			
8/12/2021			0.00014 (J)	<0.0005
8/13/2021		<0.0005		
2/1/2022	<0.0005	<0.0005	0.0002 (J)	<0.0005

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.0005
10/26/2016				<0.0005
1/27/2017				<0.0005
5/25/2017				<0.0005
10/2/2017				<0.0005
11/15/2017				<0.0005
6/5/2018				<0.0005
10/2/2018				<0.0005
8/22/2019				<0.0005
8/26/2020				<0.0005
9/16/2020	<0.0005	<0.0005		
9/21/2020				<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	
3/10/2021		<0.0005		
3/11/2021	<0.0005			
3/12/2021			<0.0005	<0.0005
8/11/2021	<0.0005			
8/13/2021		<0.0005	<0.0005	
8/16/2021				<0.0005
2/1/2022	<0.0005	<0.0005	<0.0005	
2/2/2022				<0.0005

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.0005	<0.0005		
10/26/2016		<0.0005		
11/7/2016	<0.0005			
1/13/2017	<0.0005			
1/27/2017		<0.0005		
5/25/2017		<0.0005		
6/3/2017	<0.0005			
8/11/2017		<0.0005		
10/2/2017	<0.0005			
11/15/2017	<0.0005	<0.0005		
6/5/2018	<0.0005	<0.0005		
10/2/2018		<0.0005		
10/5/2018	<0.0005			
8/22/2019	<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			
8/27/2020		<0.0005		
9/18/2020				<0.0005
9/21/2020			<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
3/15/2021	<0.0005	<0.0005		
8/16/2021	<0.0005	<0.0005		
8/19/2021			<0.0005	<0.0005
2/2/2022	<0.0005	<0.0005		
2/3/2022			<0.0005	<0.0005

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.0005	<0.0005	<0.0005	
9/25/2020				<0.0005
9/28/2020	<0.0005	<0.0005	<0.0005	
3/12/2021				<0.0005
3/15/2021	<0.0005	<0.0005	<0.0005	
8/16/2021				<0.0005
8/18/2021	<0.0005	<0.0005	<0.0005	
2/2/2022		<0.0005	<0.0005	
2/3/2022	<0.0005			<0.0005

# Time Series

Constituent: Boron (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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)
3/10/2021	0.015 (J)			
3/11/2021		0.2	0.056	0.015 (J)
8/11/2021	0.02 (J)			
8/12/2021			0.044	<0.04
8/13/2021		0.19		
2/1/2022	0.016 (J)	0.17	0.056	0.011 (J)



# Time Series

Constituent: Boron (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.981
10/26/2016				1.28
1/27/2017				1.19
5/25/2017				1.33
10/2/2017				1.19
11/15/2017				1.24
6/5/2018				1.2
10/2/2018				1.2
4/2/2019				1.1
6/17/2019				1.1
10/22/2019				1
3/25/2020				1.1
6/15/2020				1.1
9/16/2020	0.061 (J)	0.23		
9/21/2020				0.93
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)	<0.04		
1/20/2021			0.19	
3/10/2021		0.39		
3/11/2021	0.06			
3/12/2021			0.19	1.1
8/11/2021	0.042			
8/13/2021		0.31	0.15	
8/16/2021				1.1
2/1/2022	0.05	0.44	0.14	
2/2/2022				0.91

# Time Series

Constituent: Boron (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	3.23	0.494		
10/26/2016		0.55		
11/7/2016	2.95			
1/13/2017	4.01			
1/27/2017		0.428		
5/25/2017		0.544		
6/3/2017	2.62			
8/11/2017		0.524		
10/2/2017	2.92			
11/15/2017	2.71	0.531		
6/5/2018	2.6	0.53		
10/2/2018		0.47		
10/5/2018	2.9			
4/3/2019	3	0.45		
6/17/2019	2.4			
6/18/2019		0.45		
10/21/2019	2.4	0.5		
3/24/2020		0.44		
3/25/2020	1.6			
5/22/2020			1.5	0.026 (J)
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			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	<0.04
3/12/2021			1.5	0.016 (J)
3/15/2021	1.9	0.4		
8/16/2021	2	0.44		
8/19/2021			1.5	0.011 (J)
2/2/2022	1.6	0.33		
2/3/2022			1.6	0.016 (J)

# Time Series

Constituent: Boron (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	1.1			
3/25/2020	1.2			
3/27/2020		0.7		
6/15/2020			1.2	
9/25/2020				0.51
9/28/2020	1.3	1.3	1.2	
11/11/2020				0.68
3/12/2021				0.69
3/15/2021	1.2	1.2	1.1	
8/16/2021				0.87
8/18/2021	1.2	1.2	1.1	
2/2/2022		1.2	1.3	
2/3/2022	1.2			0.95

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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	<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
8/11/2021	<0.0005			
8/12/2021			0.00014 (J)	<0.0005
8/13/2021		<0.0005		
2/1/2022	<0.0005	<0.0005	0.00017 (J)	<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.0005
10/26/2016				<0.0005
1/27/2017				<0.0005
5/25/2017				<0.0005
10/2/2017				<0.0005
11/15/2017				<0.0005
6/5/2018				<0.0005
10/2/2018				<0.0005
8/22/2019				<0.0005
8/26/2020				<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	
8/11/2021	<0.0005			
8/13/2021		<0.0005	<0.0005	
8/16/2021				<0.0005
2/1/2022	<0.0005	<0.0005	<0.0005	
2/2/2022				<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.0005	<0.0005		
10/26/2016		<0.0005		
11/7/2016	<0.0005			
1/13/2017	<0.0005			
1/27/2017		<0.0005		
5/25/2017		<0.0005		
6/3/2017	<0.0005			
8/11/2017		<0.0005		
10/2/2017	<0.0005			
11/15/2017	<0.0005	<0.0005		
6/5/2018	<0.0005	<0.0005		
10/2/2018		<0.0005		
10/5/2018	<0.0005			
8/22/2019	<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			
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		
8/19/2021			<0.0005	<0.0005
2/2/2022	<0.0005	<0.0005		
2/3/2022			<0.0005	<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.0005	<0.0005	<0.0005	
8/16/2021				<0.0005
8/18/2021	<0.0005	<0.0005	<0.0005	
2/2/2022		<0.0005	<0.0005	
2/3/2022	<0.0005			<0.0005

# Time Series

Constituent: Calcium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	111			
3/11/2021		60.4 (M1)	43.8	83.8
8/11/2021	113			
8/12/2021			21.9	84
8/13/2021		62.9		
2/1/2022	106	57.5	27.2	85.1



# Time Series

Constituent: Calcium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				152
10/26/2016				156
1/27/2017				157
5/25/2017				173
10/2/2017				168
11/15/2017				182
6/5/2018				161
10/2/2018				174
4/2/2019				150
6/17/2019				164
10/22/2019				171
3/25/2020				170
6/15/2020				175
9/16/2020	56	30		
9/21/2020				152
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		18.3		
3/11/2021	59.6			
3/12/2021			56.5	174
8/11/2021	61			
8/13/2021		28.9	53	
8/16/2021				171
2/1/2022	55.9	24.8	51.3	
2/2/2022				159

# Time Series

Constituent: Calcium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	178	90.4		
10/26/2016		94.5		
11/7/2016	170			
1/13/2017	192			
1/27/2017		84.2		
5/25/2017		100		
6/3/2017	172			
8/11/2017		99.1		
10/2/2017	195			
11/15/2017	184	103		
6/5/2018	195	103		
10/2/2018		100		
10/5/2018	181			
4/3/2019	184	96.7		
6/17/2019	173			
6/18/2019		97.1		
10/21/2019	173	96.9		
3/24/2020		104		
3/25/2020	139			
5/22/2020			140	112
6/16/2020			178	131
8/25/2020			186	130
9/18/2020				119
9/21/2020			155	
9/28/2020	167	107		
11/11/2020				133
11/12/2020			165	
12/16/2020			194	132
1/20/2021			177 (M1)	131
3/12/2021			165	138
3/15/2021	167	103		
8/16/2021	162	106		
8/19/2021			196	139
2/2/2022	148	95.9		
2/3/2022			175	157

# Time Series

Constituent: Calcium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	150			
3/25/2020	170			
3/27/2020		120		
6/15/2020			174	
9/25/2020				78.3
9/28/2020	173	185	173	
11/11/2020				69.3
3/12/2021				55.7
3/15/2021	172	186	172	
8/16/2021				45.8
8/18/2021	155	171	175	
2/2/2022		163	159	
2/3/2022	157			44.4

# Time Series

Constituent: Chloride (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	7.4			
3/11/2021		2.3	5.1	5.9
8/11/2021	9.6			
8/12/2021			5.2	4.8
8/13/2021		2.6		
2/1/2022	7.5	2.2	7	5.7

# Time Series

Constituent: Chloride (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				3.5
10/26/2016				3.6
1/27/2017				3.3
5/25/2017				3.4
10/2/2017				4.2
11/15/2017				2.9
6/5/2018				3.1
10/2/2018				3.2
4/2/2019				3.1
10/22/2019				3.4
3/25/2020				2.4
6/15/2020				2.3
9/16/2020	4.1	4.1		
9/21/2020				2.4
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		12.3		
3/11/2021	4.5			
3/12/2021			3.3	2.4
8/11/2021	3.5			
8/13/2021		39.9	3.3	
8/16/2021				2.4
2/1/2022	4.1	44.8	3.5	
2/2/2022				2.5

# Time Series

Constituent: Chloride (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	64	3		
10/26/2016		3.6		
11/7/2016	65			
1/13/2017	50			
1/27/2017		4		
5/25/2017		3.5		
6/3/2017	43			
8/11/2017		2.9		
10/2/2017	42			
11/15/2017	46	3.1		
6/5/2018	40.4	3.1		
10/2/2018		3.4		
10/5/2018	39			
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		
3/24/2020		2.7		
3/25/2020	16.3			
5/22/2020			12.9	8.6
6/16/2020			10.4	8.6
8/25/2020			10.6	8.7
9/18/2020				8.4
9/21/2020			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			10.8	8.5
3/15/2021	21.8	2.9		
8/16/2021	18	2.6		
8/19/2021			4.5	7.8
2/2/2022	16.8	2.6		
2/3/2022			8.1	8.5

# Time Series

Constituent: Chloride (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	2.4			
3/25/2020	2.2			
3/27/2020		1.8		
6/15/2020			2.3	
9/25/2020				3.7
9/28/2020	2.5	2.4	2.5	
11/11/2020				3.5
3/12/2021				3.6
3/15/2021	2.5	2.5	2.5	
8/16/2021				3.7
8/18/2021	2.2	2.3	2.8	
2/2/2022		2.5	2.4	
2/3/2022	2.4			3.5

# Time Series

Constituent: Chromium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	<0.005			
3/11/2021		0.0017 (J)	<0.005	<0.005
8/11/2021	<0.005			
8/12/2021			<0.005	<0.005
8/13/2021		<0.005		
2/1/2022	<0.005	<0.005	<0.005	<0.005



# Time Series

Constituent: Chromium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.005
10/26/2016				<0.005
1/27/2017				<0.005
5/25/2017				<0.005
10/2/2017				<0.005
11/15/2017				<0.005
6/5/2018				<0.005
10/2/2018				<0.005
8/22/2019				0.00072 (J)
10/22/2019				<0.005
3/25/2020				0.0015 (J)
8/26/2020				<0.005
9/16/2020	<0.005	0.0012 (J)		
9/21/2020				0.00065 (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	<0.005		
1/20/2021			0.00067 (J)	
3/10/2021		<0.005		
3/11/2021	<0.005			
3/12/2021			<0.005	<0.005
8/11/2021	<0.005			
8/13/2021		0.0016 (J)	<0.005	
8/16/2021				<0.005
2/1/2022	<0.005	0.0013 (J)	<0.005	
2/2/2022				<0.005

# Time Series

Constituent: Chromium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005		
10/26/2016		<0.005		
11/7/2016	<0.005			
1/13/2017	<0.005			
1/27/2017		<0.005		
5/25/2017		<0.005		
6/3/2017	<0.005			
8/11/2017		<0.005		
10/2/2017	<0.005			
11/15/2017	<0.005	<0.005		
6/5/2018	<0.005	<0.005		
10/2/2018		<0.005		
10/5/2018	<0.005			
8/22/2019	<0.005			
8/23/2019		<0.005		
10/21/2019	<0.005	0.00046 (J)		
3/24/2020		0.00051 (J)		
3/25/2020	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			
8/27/2020		<0.005		
9/18/2020				<0.005
9/21/2020			<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
3/15/2021	<0.005	<0.005		
8/16/2021	<0.005	<0.005		
8/19/2021			<0.005	<0.005
2/2/2022	<0.005	<0.005		
2/3/2022			<0.005	<0.005

# Time Series

Constituent: Chromium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	<0.005			
6/15/2020			<0.005	
8/26/2020	<0.005	<0.005	<0.005	
9/25/2020				0.00075 (J)
9/28/2020	0.00058 (J)	<0.005	<0.005	
3/12/2021				<0.005
3/15/2021	<0.005	<0.005	0.0009 (J)	
8/16/2021				<0.005
8/18/2021	<0.005	<0.005	<0.005	
2/2/2022		<0.005	<0.005	
2/3/2022	<0.005			<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	<0.005			
3/11/2021		<0.005	0.013	<0.005
8/11/2021	<0.005			
8/12/2021			0.022	<0.005
8/13/2021		<0.005		
2/1/2022	<0.005	<0.005	0.025	<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.0052 (J)
10/26/2016				0.0041 (J)
1/27/2017				0.0034 (J)
5/25/2017				0.0035 (J)
10/2/2017				0.0036 (J)
11/15/2017				0.0032 (J)
6/5/2018				0.0031 (J)
10/2/2018				0.0025 (J)
8/22/2019				0.0028 (J)
10/22/2019				0.0031 (J)
3/25/2020				0.0036 (J)
8/26/2020				0.0023 (J)
9/16/2020	<0.005	<0.005		
9/21/2020				0.0041 (J)
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	
3/10/2021		<0.005		
3/11/2021	<0.005			
3/12/2021			<0.005	0.0027 (J)
8/11/2021	<0.005			
8/13/2021		<0.005	<0.005	
8/16/2021				0.0037 (J)
2/1/2022	<0.005	<0.005	<0.005	
2/2/2022				0.0072

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005		
10/26/2016		<0.005		
11/7/2016	<0.005			
1/13/2017	<0.005			
1/27/2017		<0.005		
5/25/2017		<0.005		
6/3/2017	0.0005 (J)			
8/11/2017		<0.005		
10/2/2017	0.0003 (J)			
11/15/2017	0.0003 (J)	<0.005		
6/5/2018	<0.005	<0.005		
10/2/2018		<0.005		
10/5/2018	<0.005			
8/22/2019	<0.005			
8/23/2019		<0.005		
10/21/2019	<0.005	<0.005		
3/24/2020		<0.005		
3/25/2020	<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	<0.005			
8/27/2020		<0.005		
9/18/2020				<0.005
9/21/2020			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			0.014	<0.005
3/15/2021	<0.005	<0.005		
8/16/2021	<0.005	<0.005		
8/19/2021			0.0054	<0.005
2/2/2022	<0.005	<0.005		
2/3/2022			0.0086	<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	0.0031 (J)			
6/15/2020			0.0012 (J)	
8/26/2020	0.0048 (J)	0.0026 (J)	0.00068 (J)	
9/25/2020				0.00041 (J)
9/28/2020	0.0047 (J)	0.0026 (J)	0.00066 (J)	
3/12/2021				<0.005
3/15/2021	0.0044 (J)	0.0024 (J)	0.00057 (J)	
8/16/2021				<0.005
8/18/2021	0.0036 (J)	0.0025 (J)	0.00064 (J)	
2/2/2022		0.0028 (J)	0.00056 (J)	
2/3/2022	0.0036 (J)			<0.005

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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)
8/11/2021	0.115 (U)			
8/12/2021			0.746 (U)	0.498 (U)
8/13/2021		0.914 (U)		
2/1/2022	0.143 (U)	0.276 (U)	0.588 (U)	0.266 (U)



# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				1.47
10/26/2016				0.864 (U)
1/27/2017				0.521 (U)
5/25/2017				0.681 (U)
10/2/2017				0.632 (U)
11/15/2017				1.3
6/5/2018				1.26 (U)
10/2/2018				0.572 (U)
8/22/2019				1.35
10/22/2019				0.76 (U)
3/25/2020				0.696 (U)
8/26/2020				0.357 (U)
9/16/2020	0.531 (U)	0.422 (U)		
9/21/2020				0.553 (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)	
8/11/2021	0.394 (U)			
8/13/2021		0.959 (U)	1.2	
8/16/2021				1.25
2/1/2022	1.12	0.665 (U)	0.895	
2/2/2022				0.816 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	1.57	1.22		
10/26/2016		0.637 (U)		
11/7/2016	0.739 (U)			
1/13/2017	0.744 (U)			
1/27/2017		0.795 (U)		
5/25/2017		0.896 (U)		
6/3/2017	0 (U)			
8/11/2017		0.828 (U)		
10/2/2017	0.68 (U)			
11/15/2017	0.911 (U)	0.478 (U)		
6/5/2018	0.948 (U)	0.947 (U)		
10/2/2018		0.617 (U)		
10/5/2018	1.17 (U)			
8/22/2019	1.3			
8/23/2019		0.834		
10/21/2019	0.393 (U)	1.11 (U)		
3/24/2020		0.796 (U)		
3/25/2020	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	1.96			
8/27/2020		0.494 (U)		
9/18/2020				0.841 (U)
9/21/2020			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	0.192 (U)	0.734 (U)		
8/19/2021			0.721 (U)	1.11
2/2/2022	0.254 (U)	0.564 (U)		
2/3/2022			0.257 (U)	1.51

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	1.51			
6/15/2020			0.948 (U)	
8/26/2020	0.281 (U)	1.38	1.53	
9/25/2020				0.594 (U)
9/28/2020	1.01 (U)	1.02 (U)	0.409 (U)	
8/16/2021				0.625 (U)
8/18/2021	1.14	0.619 (U)	1.18	
2/2/2022		0.456 (U)	0.43 (U)	
2/3/2022	0.511 (U)			0.372 (U)

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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	<0.1		<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	<0.1		<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
3/10/2021	0.079 (J)			
3/11/2021		0.059 (J)	0.1	<0.1
8/11/2021	0.058 (J)			
8/12/2021			<0.1	<0.1
8/13/2021		0.065 (J)		
2/1/2022	0.064 (J)	0.062 (J)	<0.1	<0.1

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.65
10/26/2016				0.6
1/27/2017				1.2
5/25/2017				1.4
10/2/2017				1
11/15/2017				1.3
6/5/2018				0.48
10/2/2018				0.34
4/2/2019				0.47
6/17/2019				1.2
8/22/2019				0.3 (J)
10/22/2019				0.53
3/25/2020				0.43
6/15/2020				0.37
8/26/2020				0.48
9/16/2020	0.22	0.22		
9/21/2020				0.33
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	
3/10/2021		0.65		
3/11/2021	0.2			
3/12/2021			0.2	0.42
8/11/2021	0.15			
8/13/2021		0.87	0.2	
8/16/2021				0.39
2/1/2022	0.19	0.96	0.15	
2/2/2022				0.36

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.14 (J)	0.15 (J)		
10/26/2016		0.3		
11/7/2016	0.18 (J)			
1/13/2017	0.14 (J)			
1/27/2017		0.3		
5/25/2017		0.05 (J)		
6/3/2017	0.15 (J)			
8/11/2017		0.1 (J)		
10/2/2017	1.2			
11/15/2017	0.6	<0.1		
6/5/2018	0.19 (J)	0.078 (J)		
10/2/2018		0.078 (J)		
10/5/2018	0.23 (J)			
4/3/2019	0.14 (J)	0.089 (J)		
8/22/2019	0.2 (J)			
8/23/2019		0.11 (J)		
10/21/2019	0.18 (J)	0.073 (J)		
3/24/2020		<0.1		
3/25/2020	0.095 (J)			
5/22/2020			0.1 (J)	0.46
6/16/2020			0.12	0.44
8/25/2020			0.16	0.52
8/26/2020	0.16			
8/27/2020		<0.1		
9/18/2020				0.43
9/21/2020			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			0.12	0.46
3/15/2021	0.16	<0.1		
8/16/2021	0.15	<0.1		
8/19/2021			0.17	0.43
2/2/2022	0.15	<0.1		
2/3/2022			0.18	0.51

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	0.36			
3/25/2020	0.34			
3/27/2020		0.29		
6/15/2020			0.21	
8/26/2020	0.33	0.32	0.24	
9/25/2020				0.68
9/28/2020	0.33	0.33	0.25	
11/11/2020				1
3/12/2021				0.88
3/15/2021	0.3	0.33	0.26	
8/16/2021				1
8/18/2021	0.24	0.25	0.2	
2/2/2022		0.29	0.23	
2/3/2022	0.32			1.1

# Time Series

Constituent: Lead (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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)
3/10/2021	<0.001			
3/11/2021		9.3E-05 (J)	7.6E-05 (J)	<0.001
8/11/2021	<0.001			
8/12/2021			<0.001	<0.001
8/13/2021		<0.001		
2/1/2022	<0.001	<0.001	<0.001	<0.001



# Time Series

Constituent: Lead (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.001
10/26/2016				0.0002 (J)
1/27/2017				<0.001
5/25/2017				9E-05 (J)
10/2/2017				8E-05 (J)
11/15/2017				<0.001
6/5/2018				<0.001
10/2/2018				<0.001
8/22/2019				<0.001
10/22/2019				<0.001
3/25/2020				<0.001
8/26/2020				<0.001
9/16/2020	5E-05 (J)	0.00021 (J)		
9/21/2020				<0.001
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)	<0.001		
1/20/2021			8.2E-05 (J)	
3/10/2021		<0.001		
3/11/2021	9.4E-05 (J)			
3/12/2021			5.5E-05 (J)	<0.001
8/11/2021	<0.001			
8/13/2021		<0.001	<0.001	
8/16/2021				<0.001
2/1/2022	<0.001	<0.001	<0.001	
2/2/2022				<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.001	<0.001		
10/26/2016		<0.001		
11/7/2016	<0.001			
1/13/2017	<0.001			
1/27/2017		<0.001		
5/25/2017		<0.001		
6/3/2017	7E-05 (J)			
8/11/2017		8E-05 (J)		
10/2/2017	<0.001			
11/15/2017	<0.001	<0.001		
6/5/2018	0.00036 (J)	<0.001		
10/2/2018		<0.001		
10/5/2018	<0.001			
8/22/2019	<0.001			
8/23/2019		4.9E-05 (J)		
10/21/2019	<0.001	4.9E-05 (J)		
3/24/2020		9.4E-05 (J)		
3/25/2020	<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			
8/27/2020		<0.001		
9/18/2020				<0.001
9/21/2020			<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			4.4E-05 (J)	4.6E-05 (J)
3/15/2021	0.00015 (J)	<0.001		
8/16/2021	<0.001	<0.001		
8/19/2021			<0.001	<0.001
2/2/2022	<0.001	<0.001		
2/3/2022			<0.001	<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	<0.001			
6/15/2020			<0.001	
8/26/2020	<0.001	<0.001	<0.001	
9/25/2020				4.8E-05 (J)
9/28/2020	<0.001	<0.001	<0.001	
3/12/2021				<0.001
3/15/2021	<0.001	<0.001	<0.001	
8/16/2021				<0.001
8/18/2021	<0.001	<0.001	<0.001	
2/2/2022		<0.001	<0.001	
2/3/2022	<0.001			<0.001

# Time Series

Constituent: Lithium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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)
3/10/2021	0.0009 (J)			
3/11/2021		<0.03	0.0011 (J)	0.0035 (J)
8/11/2021	0.00078 (J)			
8/12/2021			0.0012 (J)	0.0028 (J)
8/13/2021		<0.03		
2/1/2022	0.0011 (J)	<0.03	0.0017 (J)	0.0037 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.0333 (J)
10/26/2016				0.0352 (J)
1/27/2017				0.0329 (J)
5/25/2017				0.0347 (J)
10/2/2017				0.0337 (J)
11/15/2017				0.0347 (J)
6/5/2018				0.033 (J)
10/2/2018				0.031 (J)
8/22/2019				0.029 (J)
10/22/2019				0.03 (J)
3/25/2020				0.024 (J)
8/26/2020				0.023 (J)
9/16/2020	0.0018 (J)	0.014 (J)		
9/21/2020				0.023 (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)	<0.03		
1/20/2021			0.0025 (J)	
3/10/2021		0.03		
3/11/2021	0.0022 (J)			
3/12/2021			0.005 (J)	0.023 (J)
8/11/2021	0.0024 (J)			
8/13/2021		0.032	0.0044 (J)	
8/16/2021				0.025 (J)
2/1/2022	0.0024 (J)	0.048	0.0055 (J)	
2/2/2022				0.025 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	0.0077 (J)	<0.03		
10/26/2016		<0.03		
11/7/2016	0.0089 (J)			
1/13/2017	0.0091 (J)			
1/27/2017		<0.03		
5/25/2017		0.0011 (J)		
6/3/2017	0.0104 (J)			
8/11/2017		<0.03		
10/2/2017	0.0095 (J)			
11/15/2017	0.0086 (J)	<0.03		
6/5/2018	0.0092 (J)	0.0012 (J)		
10/2/2018		0.0012 (J)		
10/5/2018	0.0091 (J)			
8/22/2019	0.0084 (J)			
8/23/2019		0.0011 (J)		
10/21/2019	0.009 (J)	0.0011 (J)		
3/24/2020		0.0012 (J)		
3/25/2020	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	0.0071 (J)			
8/27/2020		0.00091 (J)		
9/18/2020				0.0035 (J)
9/21/2020			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			0.0039 (J)	0.0038 (J)
3/15/2021	0.0077 (J)	0.001 (J)		
8/16/2021	0.0075 (J)	0.0011 (J)		
8/19/2021			0.0074 (J)	0.0032 (J)
2/2/2022	0.0082 (J)	0.0012 (J)		
2/3/2022			0.0057 (J)	0.0038 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	0.034			
3/27/2020		<0.03		
6/15/2020			0.028 (J)	
8/26/2020	0.031	0.031	0.027 (J)	
9/25/2020				0.015 (J)
9/28/2020	0.032	0.034	0.028 (J)	
3/12/2021				0.0084 (J)
3/15/2021	0.033	0.032	0.03 (J)	
8/16/2021				0.0062 (J)
8/18/2021	0.031	0.032	0.029 (J)	
2/2/2022		0.034	0.033	
2/3/2022	0.033			0.0065 (J)

# Time Series

Constituent: Mercury (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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			
8/11/2021	<0.0002			
8/12/2021			<0.0002	<0.0002
8/13/2021		<0.0002		
2/1/2022	<0.0002	<0.0002	<0.0002	<0.0002



# Time Series

Constituent: Mercury (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				4E-05 (J)
10/26/2016				<0.0002
1/27/2017				<0.0002
5/25/2017				7E-05 (J)
10/2/2017				<0.0002
11/15/2017				<0.0002
6/5/2018				<0.0002
10/2/2018				<0.0002
8/22/2019				<0.0002
8/26/2020				<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	
8/11/2021	<0.0002			
8/13/2021		<0.0002	<0.0002	
8/16/2021				<0.0002
2/1/2022	<0.0002	<0.0002	<0.0002	
2/2/2022				<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.0002	<0.0002		
10/26/2016		<0.0002		
11/7/2016	<0.0002			
1/13/2017	<0.0002			
1/27/2017		<0.0002		
5/25/2017		5.1E-05 (J)		
6/3/2017	<0.0002			
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		
10/5/2018	<0.0002			
8/22/2019	<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			
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		
8/19/2021			<0.0002	<0.0002
2/2/2022	<0.0002	<0.0002		
2/3/2022			<0.0002	<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.0002	<0.0002	<0.0002	
8/16/2021				<0.0002
8/18/2021	<0.0002	<0.0002	<0.0002	
2/2/2022		<0.0002	<0.0002	
2/3/2022	<0.0002			<0.0002

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	<0.01			
3/11/2021		0.0014 (J)	<0.01	<0.01
8/11/2021	<0.01			
8/12/2021			<0.01	<0.01
8/13/2021		0.0022 (J)		
2/1/2022	<0.01	0.002 (J)	<0.01	<0.01

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				0.0176
10/26/2016				0.0187
1/27/2017				0.0214
5/25/2017				0.0231
10/2/2017				0.0259
11/15/2017				0.0281
6/5/2018				0.033
10/2/2018				0.036
8/22/2019				0.039
10/22/2019				0.04
3/25/2020				0.034
8/26/2020				0.05
9/16/2020	0.0044 (J)	0.0019 (J)		
9/21/2020				0.043
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)	<0.01		
1/20/2021			0.0063 (J)	
3/10/2021		0.0019 (J)		
3/11/2021	0.0064 (J)			
3/12/2021			0.0019 (J)	0.033
8/11/2021	0.0034 (J)			
8/13/2021		0.0051 (J)	<0.01	
8/16/2021				0.035
2/1/2022	0.0036 (J)	0.0055 (J)	<0.01	
2/2/2022				0.034

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.01	<0.01		
10/26/2016		<0.01		
11/7/2016	<0.01			
1/13/2017	<0.01			
1/27/2017		<0.01		
5/25/2017		0.0009 (J)		
6/3/2017	<0.01			
8/11/2017		0.0013 (J)		
10/2/2017	<0.01			
11/15/2017	<0.01	0.0012 (J)		
6/5/2018	<0.01	<0.01		
10/2/2018		<0.01		
10/5/2018	<0.01			
8/22/2019	<0.01			
8/23/2019		0.0014 (J)		
10/21/2019	<0.01	0.0013 (J)		
3/24/2020		0.001 (J)		
3/25/2020	<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	<0.01			
8/27/2020		0.00091 (J)		
9/18/2020				<0.01
9/21/2020			<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			0.0012 (J)	<0.01
3/15/2021	<0.01	0.00092 (J)		
8/16/2021	<0.01	0.00091 (J)		
8/19/2021			0.021	<0.01
2/2/2022	<0.01	0.001 (J)		
2/3/2022			0.0067 (J)	<0.01

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	0.06			
1/22/2020	0.059			
3/25/2020	0.062			
3/27/2020		0.012		
4/24/2020		0.062		
6/15/2020			0.035	
8/26/2020	0.065	0.064	0.039	
9/25/2020				0.027
9/28/2020	0.062	0.062	0.036	
11/11/2020				0.015
3/12/2021				0.0033 (J)
3/15/2021	0.061	0.062	0.046	
8/16/2021				0.0012 (J)
8/18/2021	0.061	0.063	0.042	
2/2/2022		0.062	0.047	
2/3/2022	0.058			<0.01

# Time Series

Constituent: pH (s.u.) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	6.95			
3/11/2021		6.65	5.8	7.33
8/11/2021	6.98			
8/12/2021			5.05	7.31
8/13/2021		6.56		
2/1/2022	7.19	6.57	5.24	7.45



# Time Series

Constituent: pH (s.u.) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				6.73
10/27/2016				6.77
1/27/2017				6.74
5/25/2017				6.99
10/2/2017				7.66
11/15/2017				6.71
6/5/2018				6.83
10/2/2018				6.83
4/2/2019				6.87
8/22/2019				6.79
10/22/2019				6.74
3/25/2020				6.8
6/15/2020				6.8
8/26/2020				6.96
9/16/2020	7.52	7.83		
9/21/2020				6.98
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	
3/10/2021		7.92		
3/11/2021	7.46			
3/12/2021			7.52	6.95
8/11/2021	7.4			
8/13/2021		7.77	7.42	
8/16/2021				6.92
2/1/2022	7.52	8.25	7.45	
2/2/2022				7

# Time Series

Constituent: pH (s.u.) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	6.62	6.99		
10/27/2016		7.06		
11/7/2016	6.71			
1/13/2017	6.57			
1/27/2017		7.13		
5/25/2017		7.1		
6/3/2017	6.71			
8/11/2017		7.02		
10/2/2017	7.65			
11/15/2017	6.69	7.04		
6/5/2018	6.79	7.17		
10/2/2018		7.08		
10/5/2018	6.71			
4/3/2019	6.73	7.14		
8/22/2019	6.77			
8/23/2019		7.02		
10/21/2019	6.74	7.05		
3/24/2020		7.18		
3/25/2020	6.91			
5/22/2020			6.43	7.22
6/16/2020			6.29	6.92
8/25/2020			6.36	6.78
8/26/2020	6.73			
8/27/2020		7.15		
9/18/2020				6.97
9/21/2020			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			6.18	7.05
3/15/2021	6.87	7.22		
8/16/2021	6.74	7.09		
8/19/2021			7.24	7.32
2/2/2022	6.92	7.28		
2/3/2022			6.56	7.01

# Time Series

Constituent: pH (s.u.) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
3/25/2020	6.86			
3/27/2020		6.82		
4/24/2020		6.82		
6/15/2020			6.88	
8/26/2020	6.75	6.74	6.74	
9/25/2020				7.56
9/28/2020	6.9	7	7	
11/11/2020				7.52
3/12/2021				7.7
3/15/2021	6.98	7.04	7.06	
8/16/2021				7.65
8/18/2021	6.89	6.9	6.93	
2/2/2022		6.96	6.98	
2/3/2022	6.95			7.69

# Time Series

Constituent: Selenium (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
8/11/2021	<0.005			
8/12/2021			<0.005	<0.005
8/13/2021		<0.005		
2/1/2022	<0.005	<0.005	<0.005	<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.005
10/26/2016				<0.005
1/27/2017				<0.005
5/25/2017				<0.005
10/2/2017				0.002 (J)
11/15/2017				<0.005
6/5/2018				<0.005
10/2/2018				<0.005
8/22/2019				<0.005
8/26/2020				<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	
8/11/2021	<0.005			
8/13/2021		<0.005	<0.005	
8/16/2021				<0.005
2/1/2022	<0.005	<0.005	<0.005	
2/2/2022				<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.005	<0.005		
10/26/2016		<0.005		
11/7/2016	<0.005			
1/13/2017	0.0011 (J)			
1/27/2017		<0.005		
5/25/2017		<0.005		
6/3/2017	<0.005			
8/11/2017		<0.005		
10/2/2017	<0.005			
11/15/2017	<0.005	<0.005		
6/5/2018	<0.005	<0.005		
10/2/2018		0.0014 (J)		
10/5/2018	<0.005			
8/22/2019	<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			
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		
8/19/2021			<0.005	<0.005
2/2/2022	<0.005	<0.005		
2/3/2022			<0.005	<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

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	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.005	<0.005	<0.005	
8/16/2021				<0.005
8/18/2021	<0.005	<0.005	<0.005	
2/2/2022		<0.005	<0.005	
2/3/2022	<0.005			<0.005

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	49.6			
3/11/2021		40.7	52.9	50.4
8/11/2021	48.9			
8/12/2021			47.4	38.6
8/13/2021		42.1		
2/1/2022	43.7	41.1	67.1	46



# Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				290
10/26/2016				280
1/27/2017				290
5/25/2017				280
10/2/2017				300
11/15/2017				300
6/5/2018				273
10/2/2018				328
4/2/2019				256
6/17/2019				243
10/22/2019				266
3/25/2020				226
6/15/2020				212
9/16/2020	43	43		
9/21/2020				225
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		<1		
3/11/2021	38.6			
3/12/2021			8.7	210
8/11/2021	30.5			
8/13/2021		56.1	8.1	
8/16/2021				211
2/1/2022	37.5	56.3	2.5	
2/2/2022				201

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	280	72		
10/26/2016		71		
11/7/2016	300			
1/13/2017	270			
1/27/2017		74		
5/25/2017		73		
6/3/2017	270			
8/11/2017		71		
10/2/2017	330			
11/15/2017	280	70		
6/5/2018	241	74		
10/2/2018		80.7		
10/5/2018	271			
4/3/2019	230	75.2		
6/17/2019	219			
6/18/2019		75.3		
10/21/2019	238	78.5		
3/24/2020		74.6		
3/25/2020	116			
5/22/2020			345	56.1
6/16/2020			320	57.6
8/25/2020			353	62.8
9/18/2020				62.7
9/21/2020			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			293	69.7
3/15/2021	177	74		
8/16/2021	158	74		
8/19/2021			264	64.4
2/2/2022	147	70.7		
2/3/2022			304	66.8

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	210			
3/25/2020	204			
3/27/2020		111		
6/15/2020			219	
9/25/2020				149
9/28/2020	245	239	154	
11/11/2020				167
3/12/2021				155
3/15/2021	236	234	225	
8/16/2021				144
8/18/2021	162	173	180	
2/2/2022		201	193	
2/3/2022	206			164

# Time Series

Constituent: Thallium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
8/11/2021	<0.001			
8/12/2021			<0.001	<0.001
8/13/2021		<0.001		
2/1/2022	<0.001	<0.001	<0.001	<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				<0.001
10/26/2016				<0.001
1/27/2017				<0.001
5/25/2017				<0.001
10/2/2017				<0.001
11/15/2017				<0.001
6/5/2018				<0.001
10/2/2018				<0.001
8/22/2019				<0.001
8/26/2020				<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	
8/11/2021	<0.001			
8/13/2021		<0.001	<0.001	
8/16/2021				<0.001
2/1/2022	<0.001	<0.001	<0.001	
2/2/2022				<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	<0.001	<0.001		
10/26/2016		<0.001		
11/7/2016	<0.001			
1/13/2017	<0.001			
1/27/2017		<0.001		
5/25/2017		<0.001		
6/3/2017	<0.001			
8/11/2017		<0.001		
10/2/2017	<0.001			
11/15/2017	<0.001	<0.001		
6/5/2018	<0.001	<0.001		
10/2/2018		<0.001		
10/5/2018	<0.001			
8/22/2019	<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			
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		
8/19/2021			<0.001	<0.001
2/2/2022	<0.001	<0.001		
2/3/2022			<0.001	<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
8/26/2020	<0.001	<0.001	<0.001	
8/16/2021				<0.001
8/18/2021	<0.001	<0.001	<0.001	
2/2/2022		<0.001	<0.001	
2/3/2022	<0.001			<0.001

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-1 (bg)	HGWA-122 (bg)	HGWA-2 (bg)	HGWA-3 (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
3/10/2021	348			
3/11/2021		206	169	267
8/11/2021	366			
8/12/2021			118	265
8/13/2021		201		
2/1/2022	270	203	156	350



# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-45D (bg)	HGWC-120
8/31/2016				700
10/26/2016				795
1/27/2017				706
5/25/2017				669
10/2/2017				672
11/15/2017				721
6/5/2018				723
10/2/2018				703
4/2/2019				540
10/22/2019				693
3/25/2020				665
6/15/2020				685
9/16/2020	272	270		
9/21/2020				272
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		289		
3/11/2021	279			
3/12/2021			260	584
8/11/2021	277			
8/13/2021		436	272	
8/16/2021				632
2/1/2022	156	444	268	
2/2/2022				612

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-121A	HGWC-124	HGWC-125	HGWC-126
8/31/2016	876	379		
10/26/2016		409		
11/7/2016	1000			
1/13/2017	827			
1/27/2017		370		
5/25/2017		351		
6/3/2017	846			
8/11/2017		322		
10/2/2017	884			
11/15/2017	838	350		
6/5/2018	823	360		
10/2/2018		363		
10/5/2018	813			
4/3/2019	785	369		
6/17/2019	751			
10/21/2019	771	357		
3/24/2020		355		
3/25/2020	521			
5/22/2020			809	496
6/16/2020			665	508
8/25/2020			772	505
9/18/2020				452
9/21/2020			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			664	474
3/15/2021	614	340		
8/16/2021	626	352		
8/19/2021			732	488
2/2/2022	638	347		
2/3/2022			726	466

# Time Series

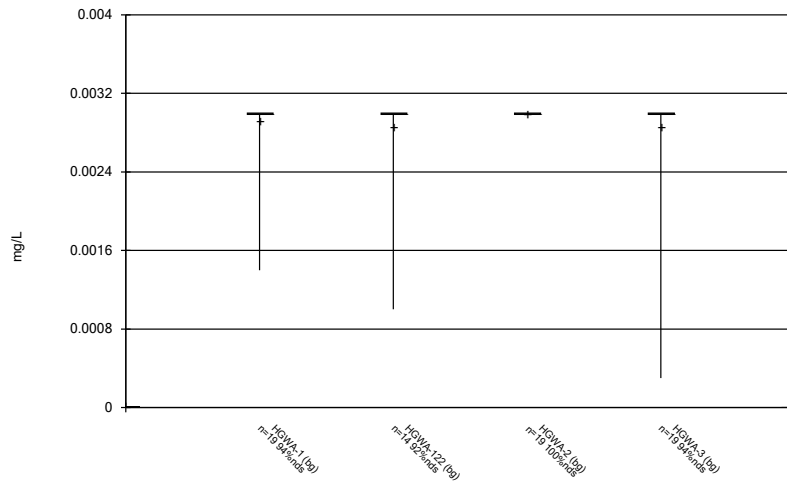
Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/28/2022 9:37 AM

Plant Hammond Client: Southern Company Data: Hammond AP-3

	MW-32	MW-39	MW-41	MW-46D
1/3/2020	645			
3/25/2020	641			
3/27/2020		482		
6/15/2020			674	
9/25/2020				449
9/28/2020	272	272	392	
11/11/2020				472
3/12/2021				590
3/15/2021	630	628	582	
8/16/2021				516
8/18/2021	554	628	602	
2/2/2022		608	594	
2/3/2022	600			588

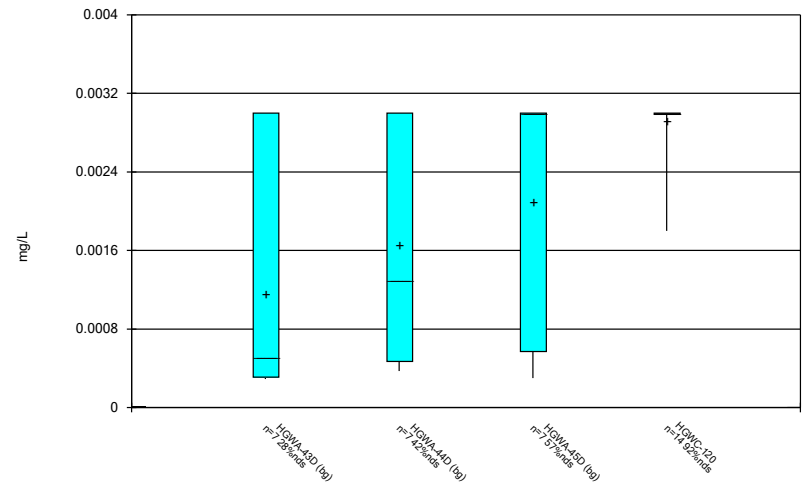
FIGURE B.

Box & Whiskers Plot



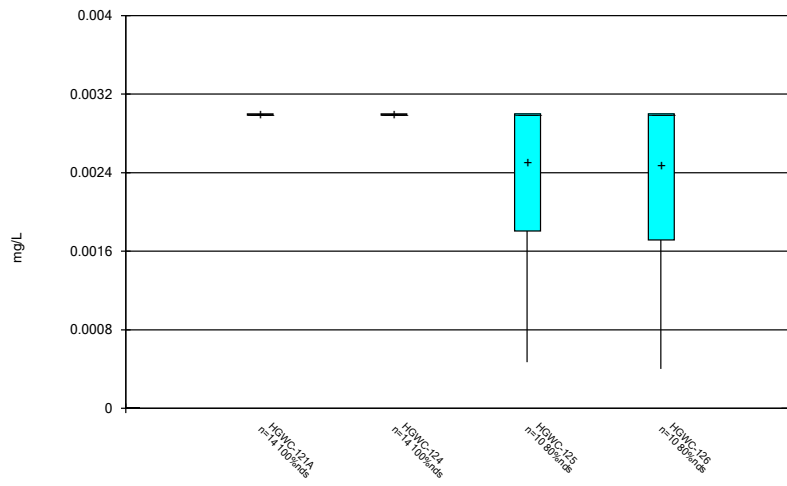
Constituent: Antimony Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



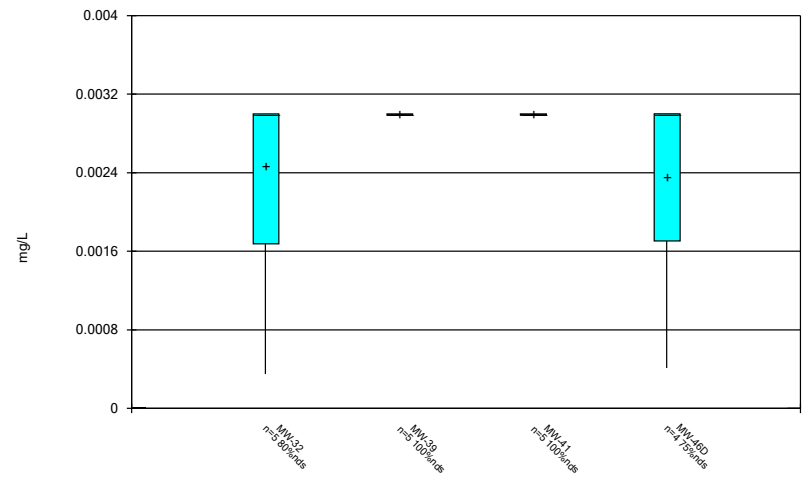
Constituent: Antimony Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



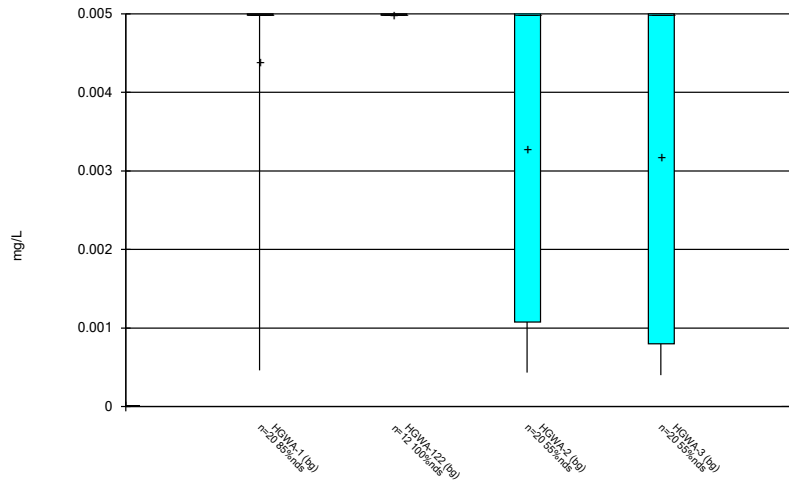
Constituent: Antimony Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



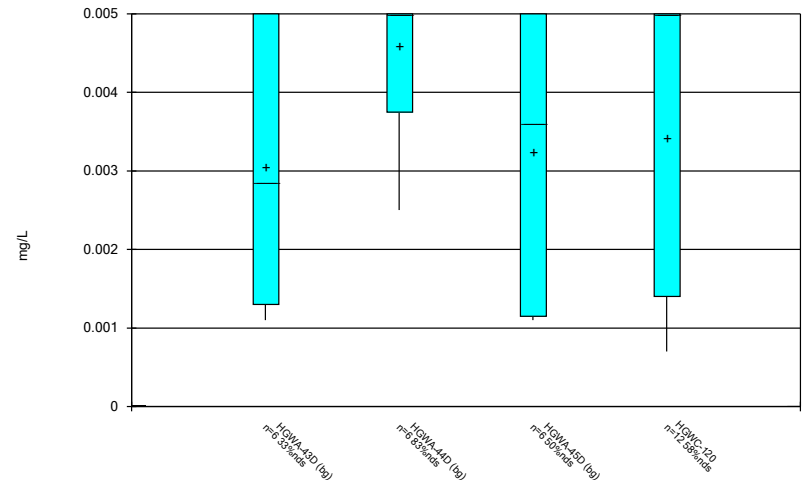
Constituent: Antimony Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



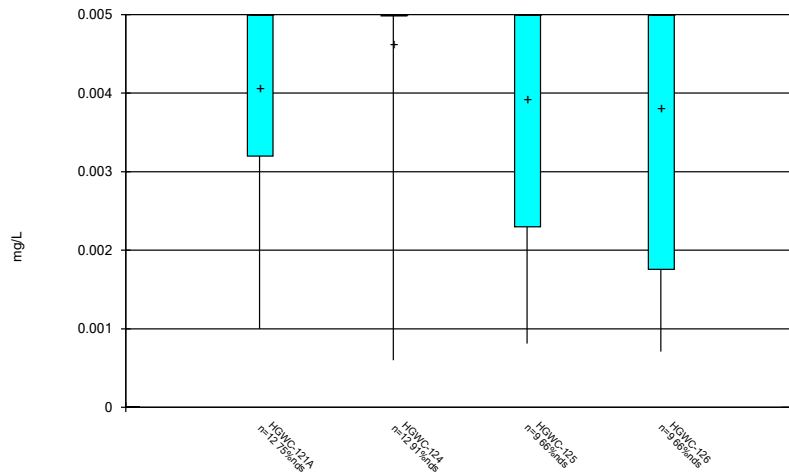
Constituent: Arsenic Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



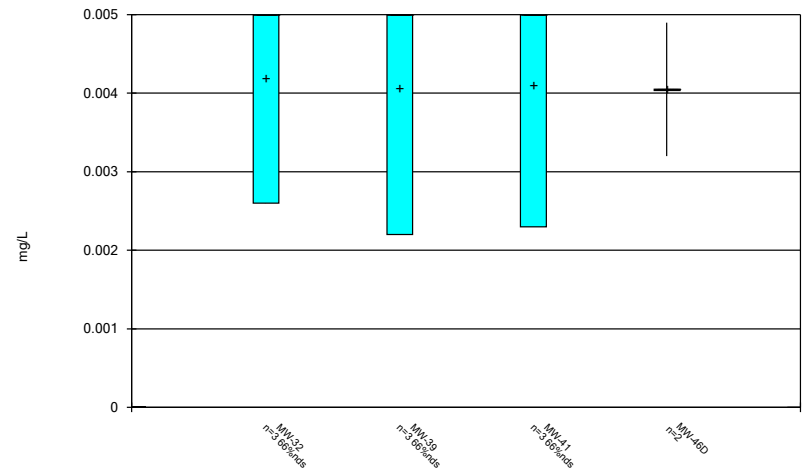
Constituent: Arsenic Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



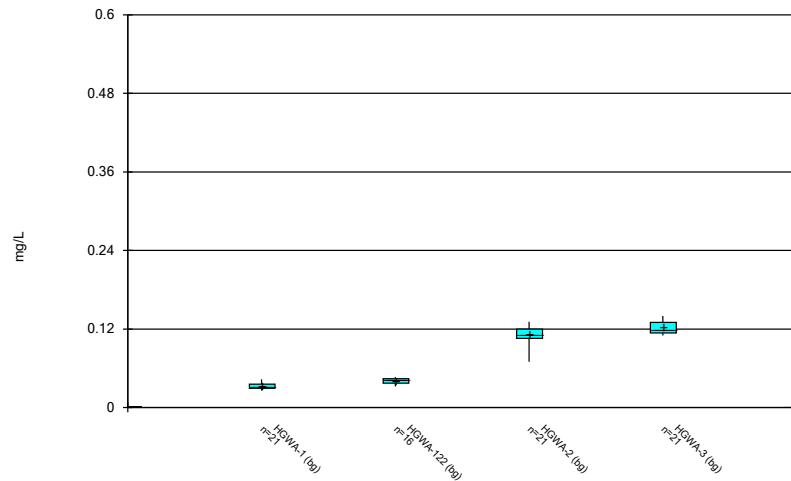
Constituent: Arsenic Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



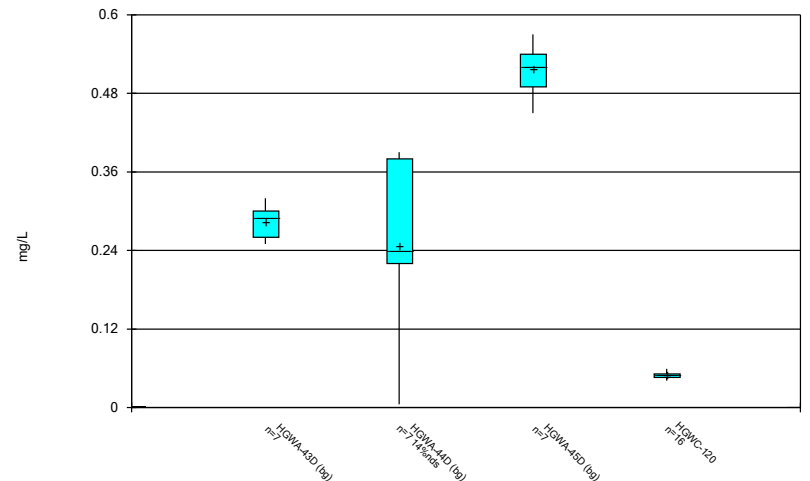
Constituent: Arsenic Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



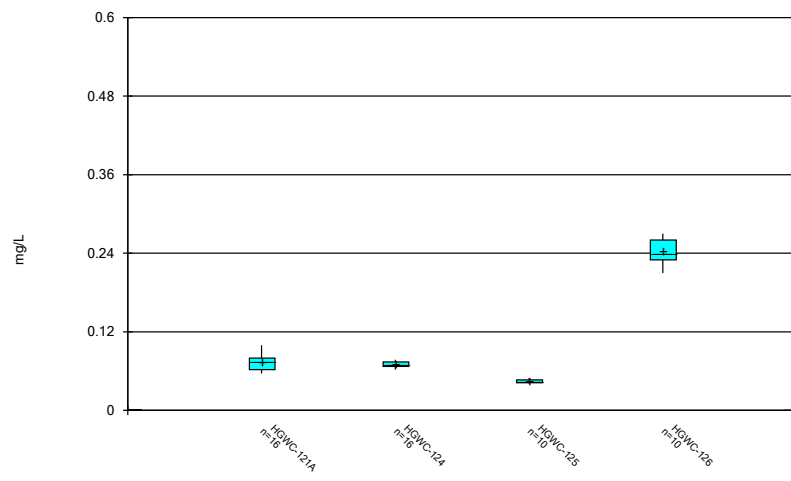
Constituent: Barium Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



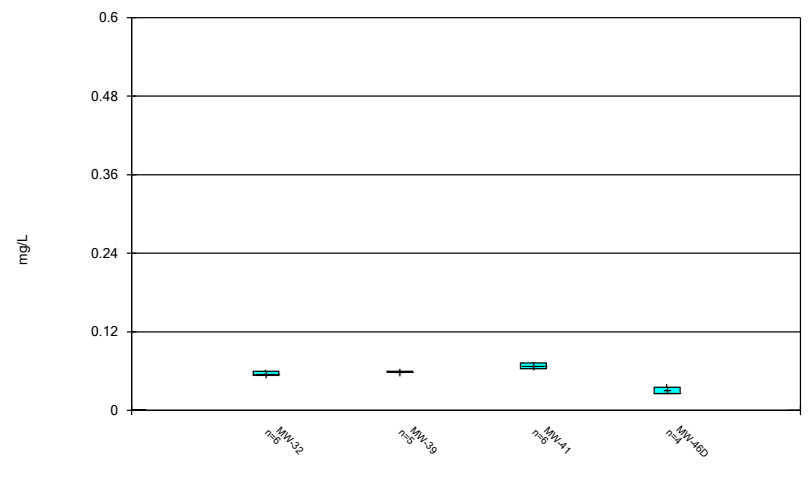
Constituent: Barium Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



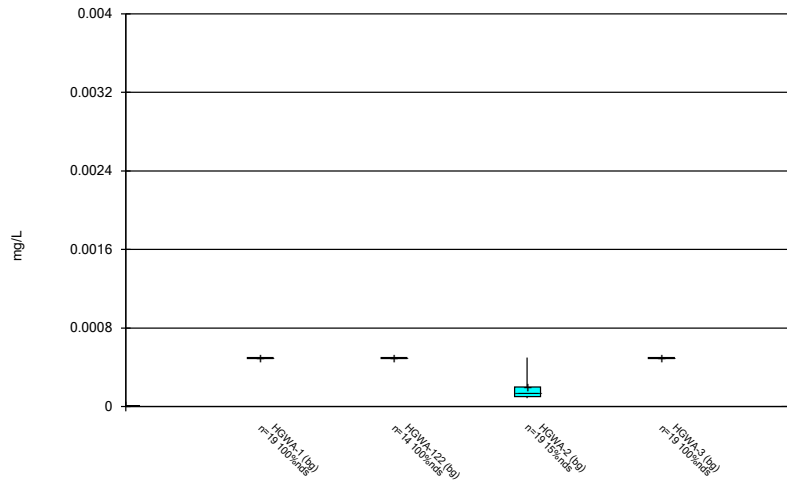
Constituent: Barium Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



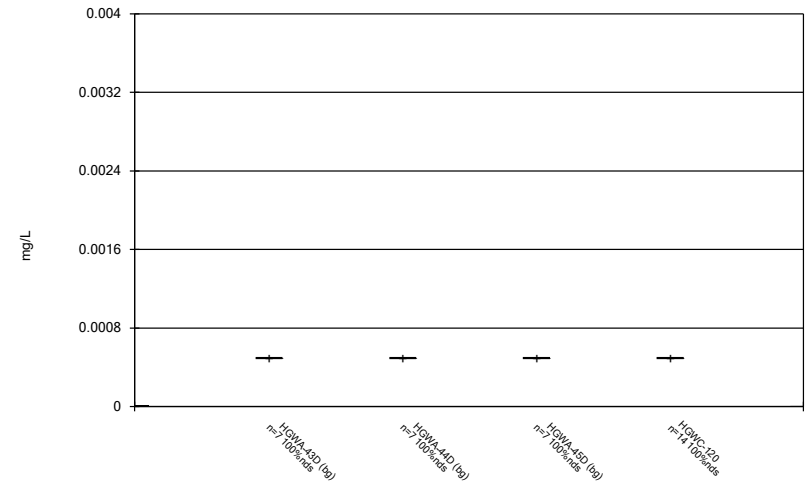
Constituent: Barium Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



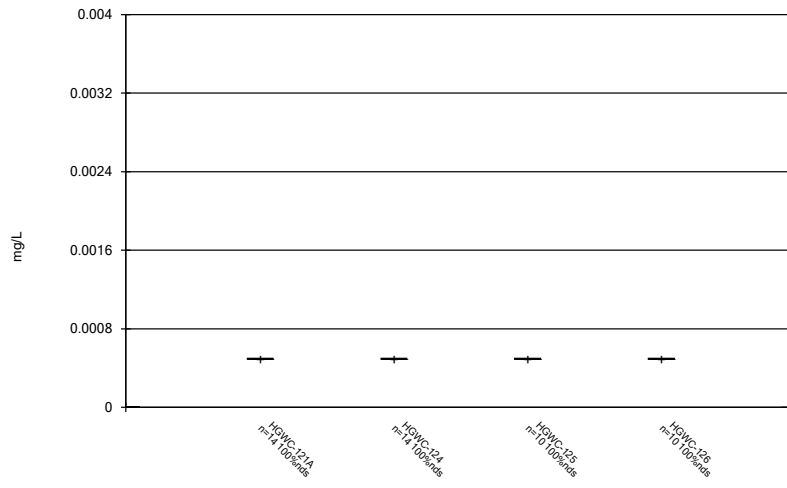
Constituent: Beryllium Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



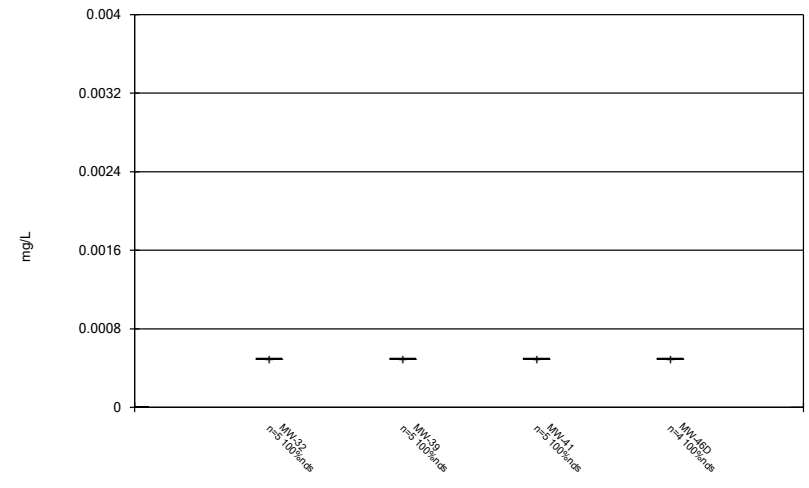
Constituent: Beryllium Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



Constituent: Beryllium Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

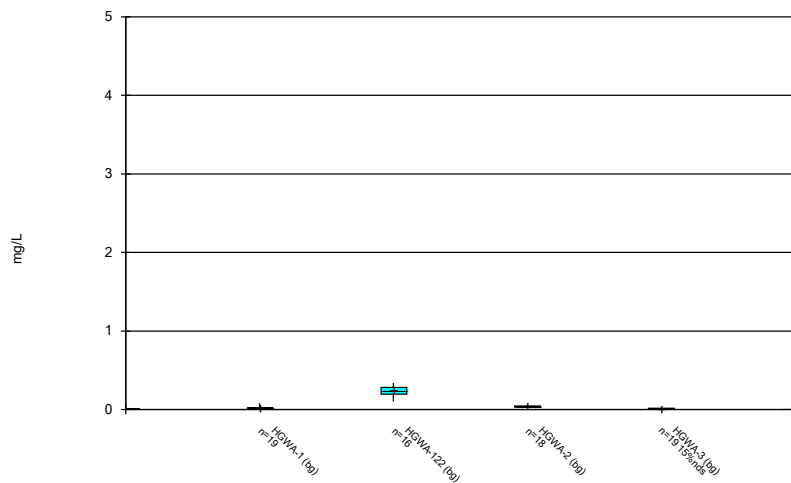
### Box & Whiskers Plot



Constituent: Beryllium Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

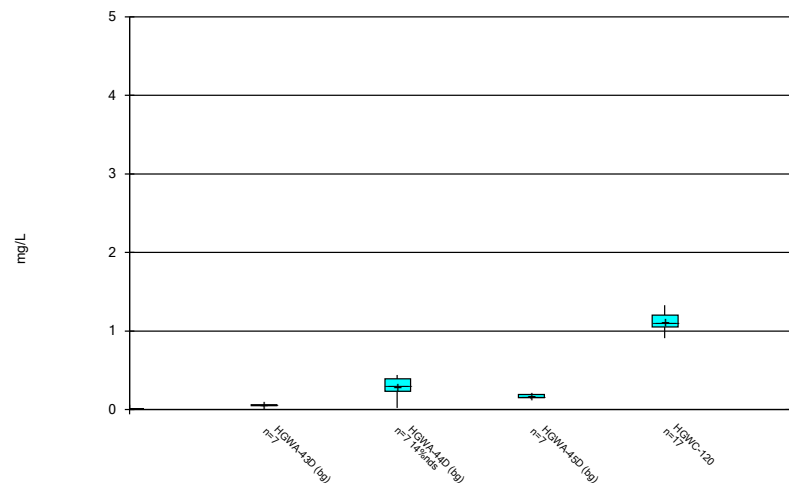


Box & Whiskers Plot



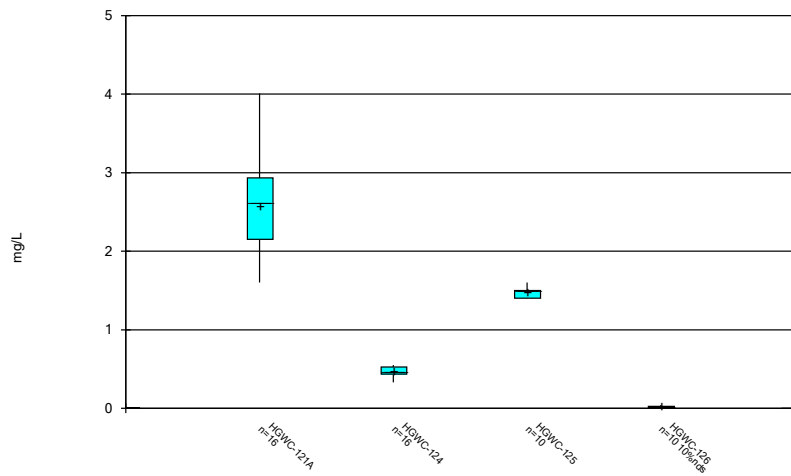
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



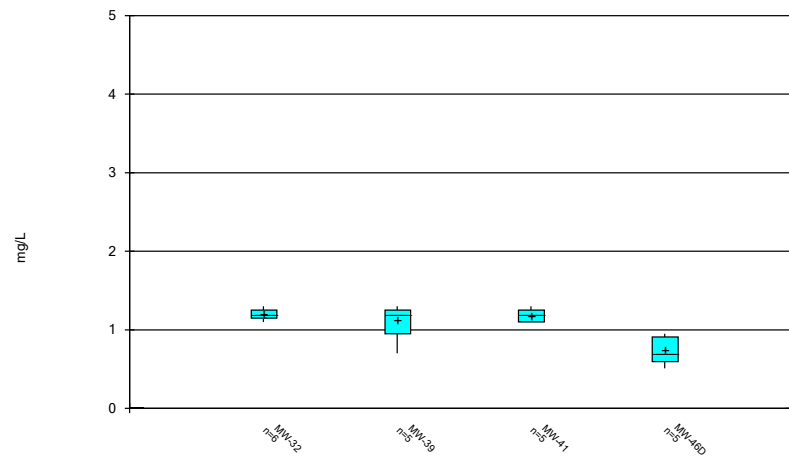
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



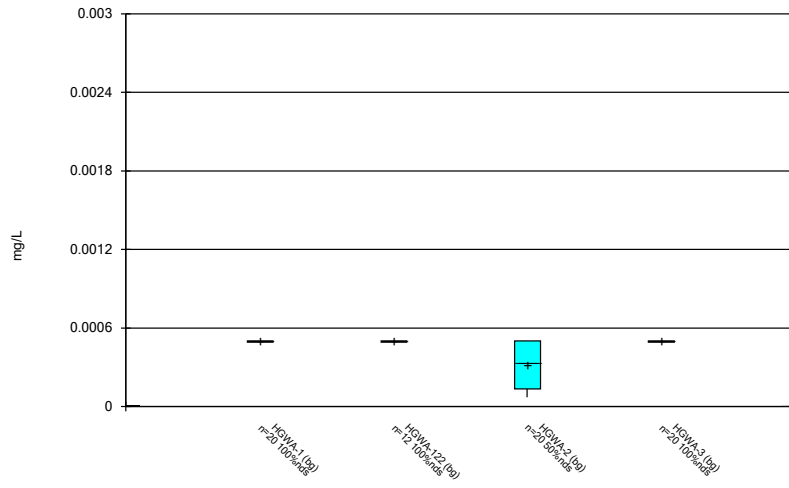
Constituent: Boron Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



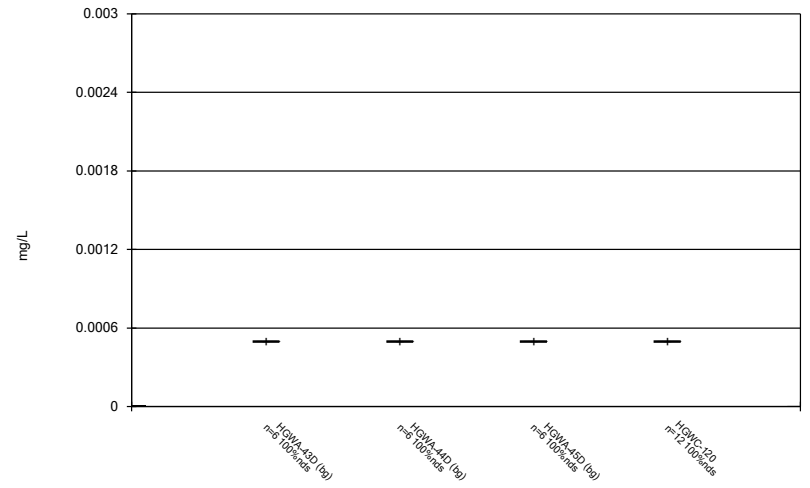
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



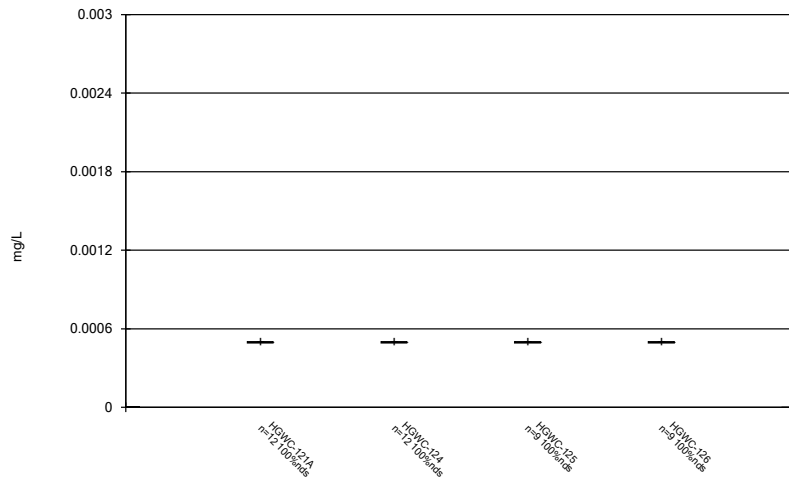
Constituent: Cadmium Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



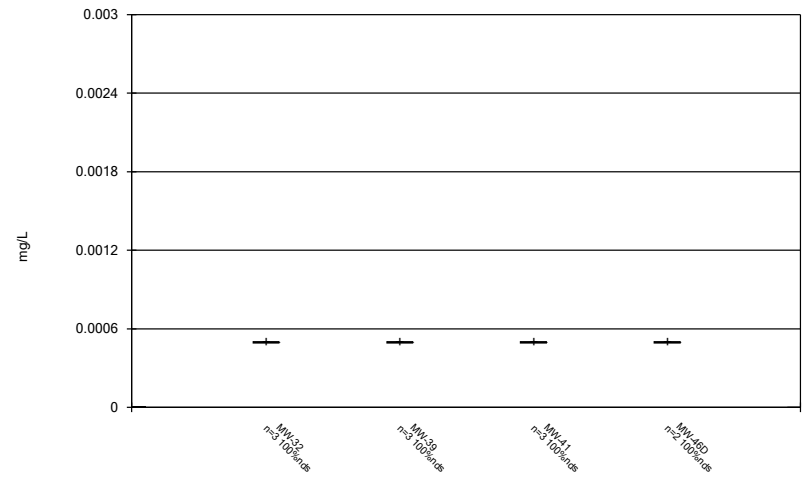
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



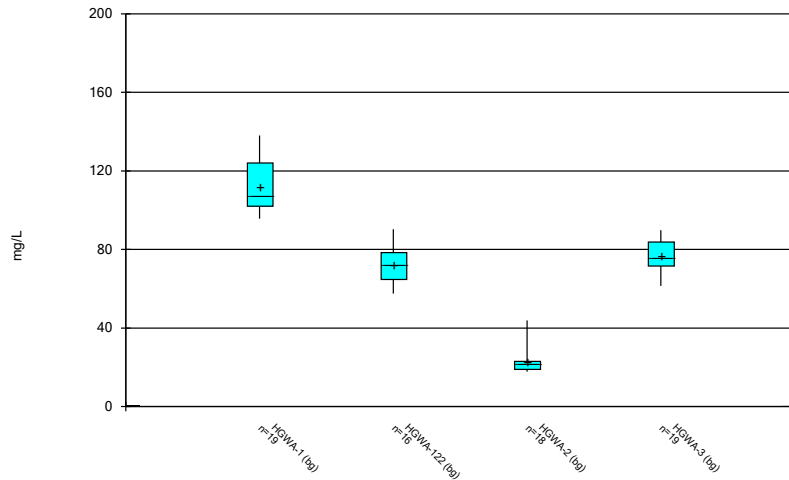
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



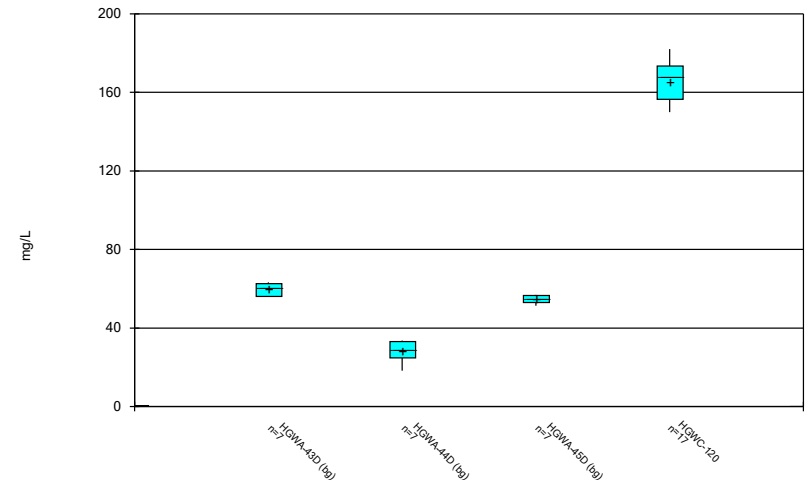
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



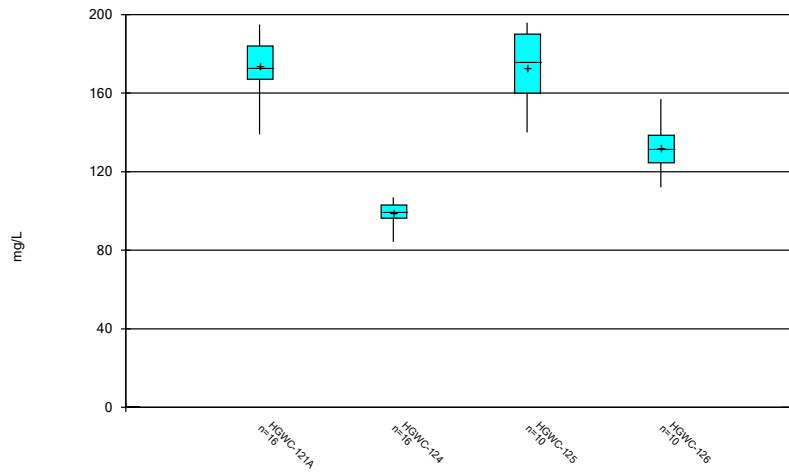
Constituent: Calcium Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



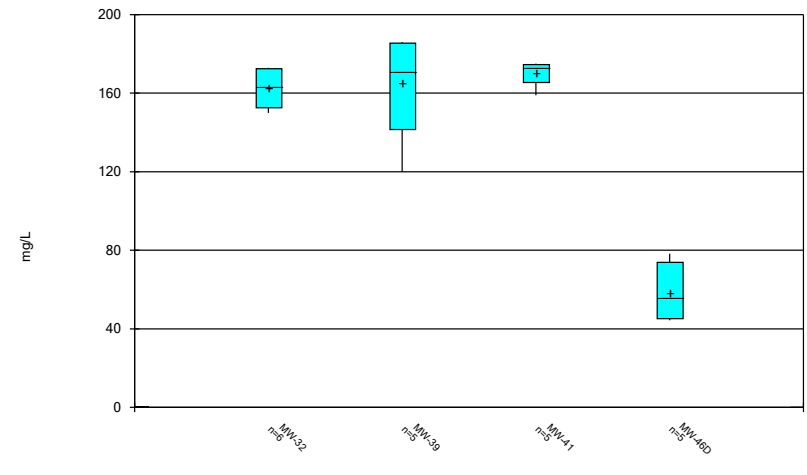
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



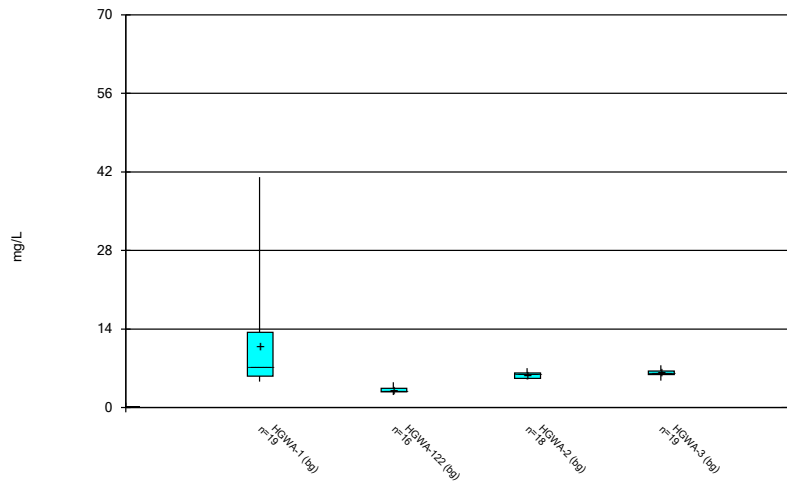
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



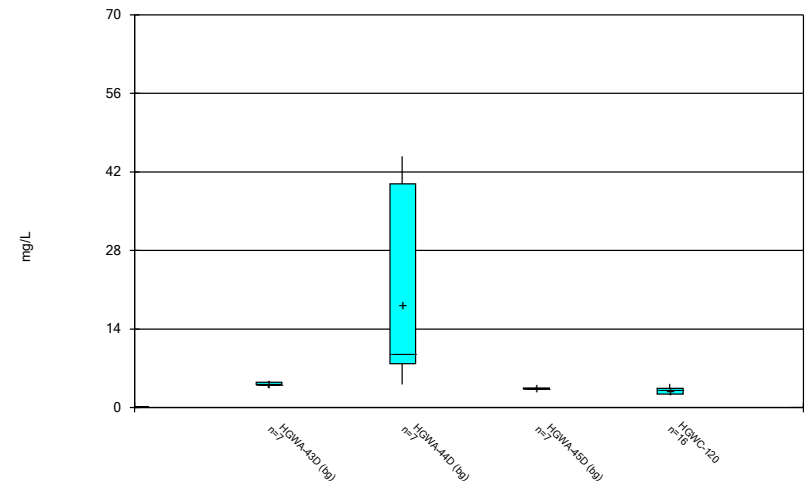
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



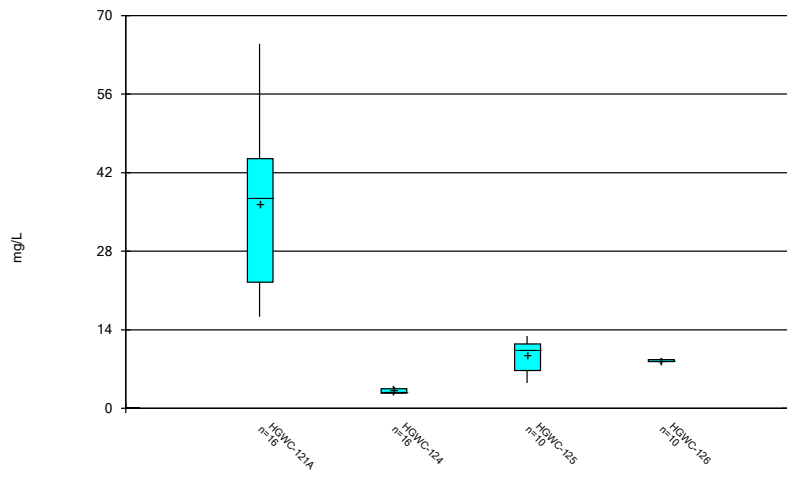
Constituent: Chloride Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



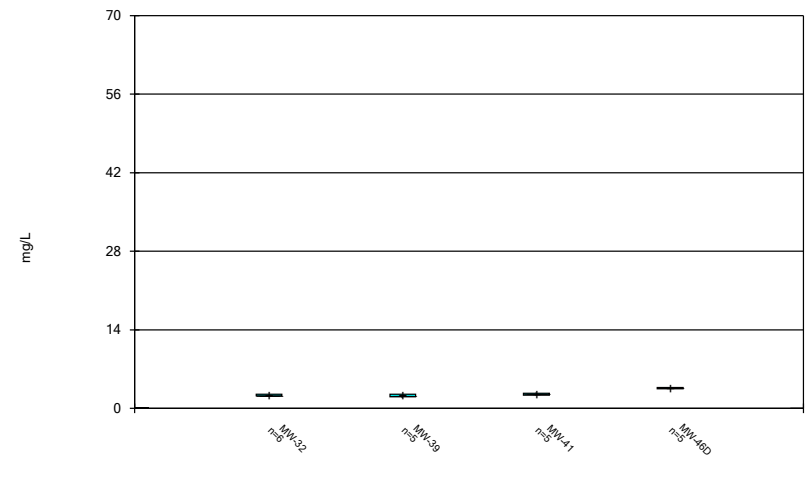
Constituent: Chloride Analysis Run 3/28/2022 9:37 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



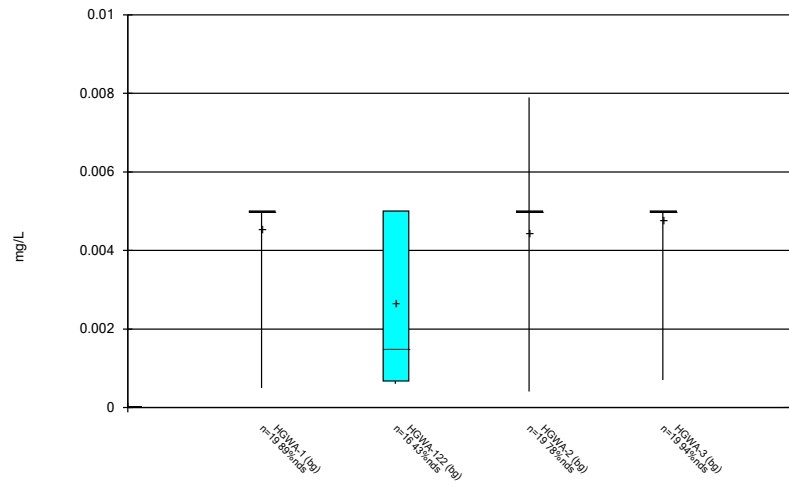
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



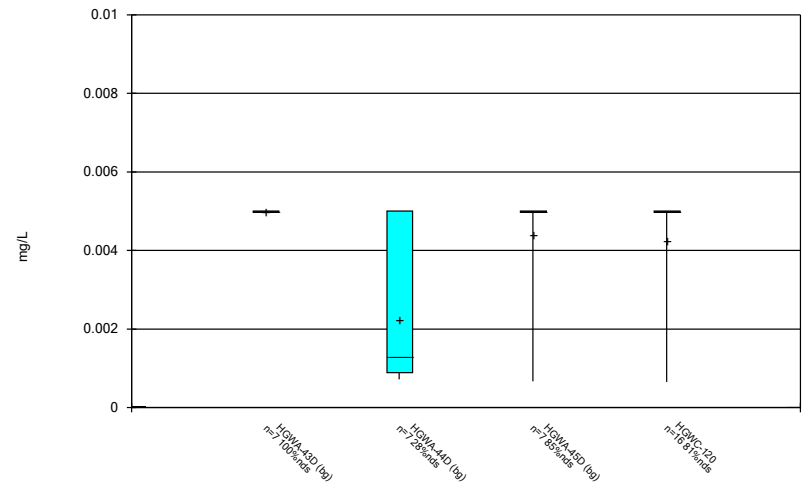
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Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



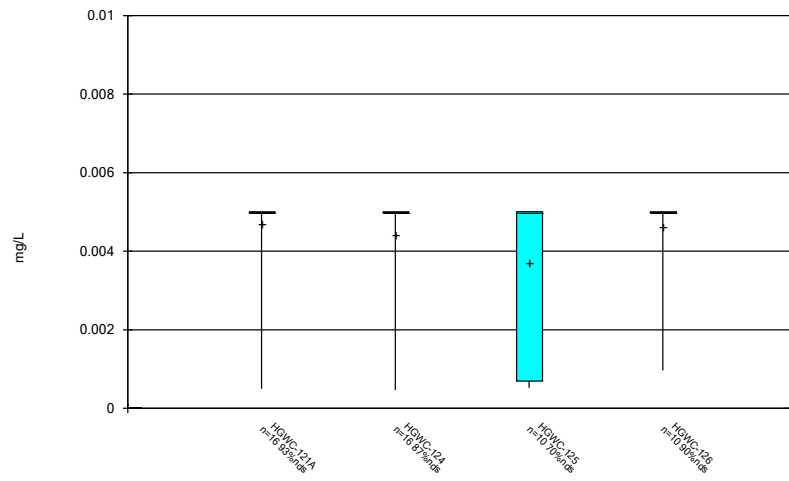
Constituent: Chromium Analysis Run 3/28/2022 9:37 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



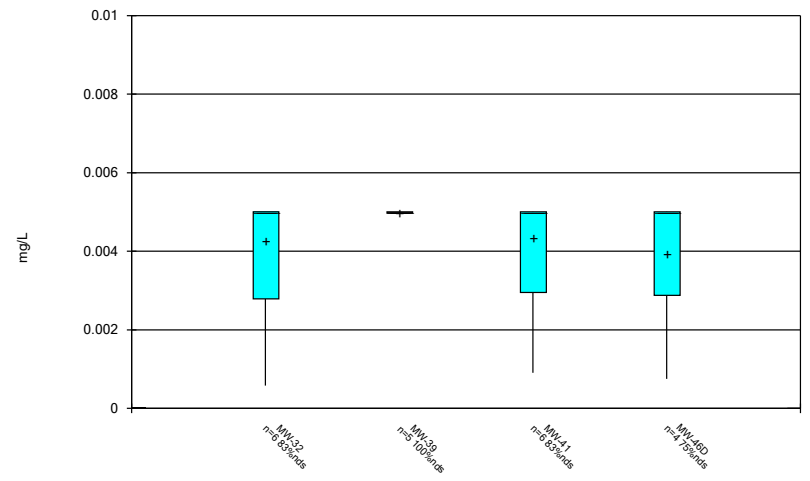
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



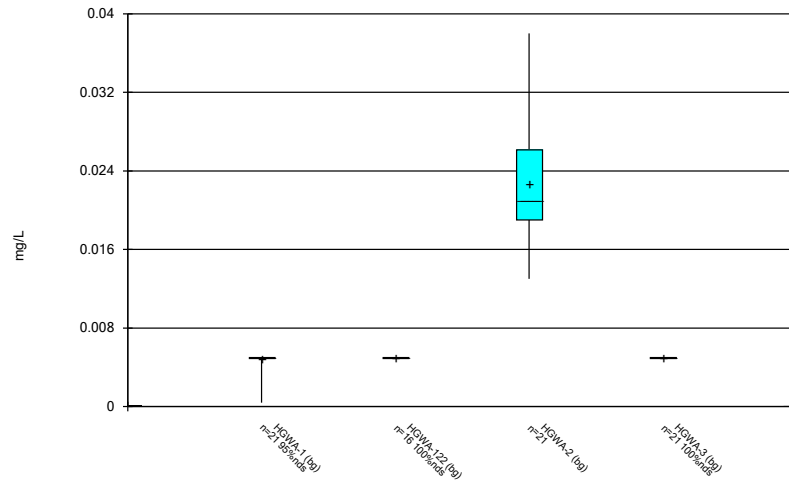
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



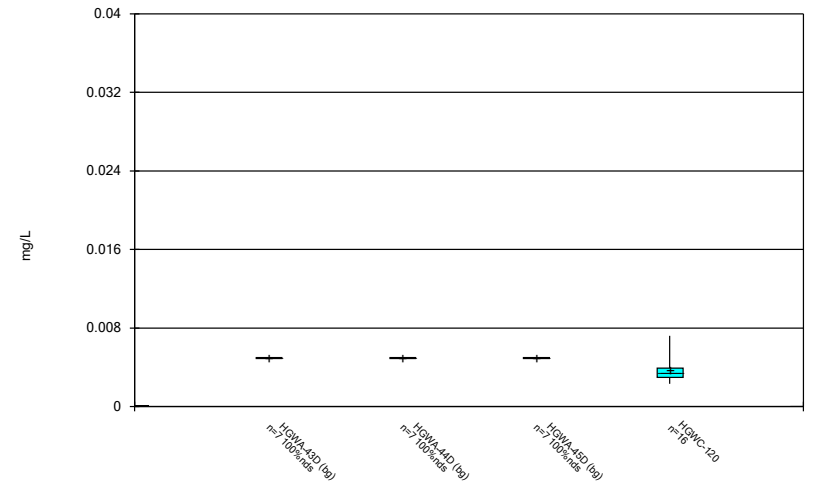
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



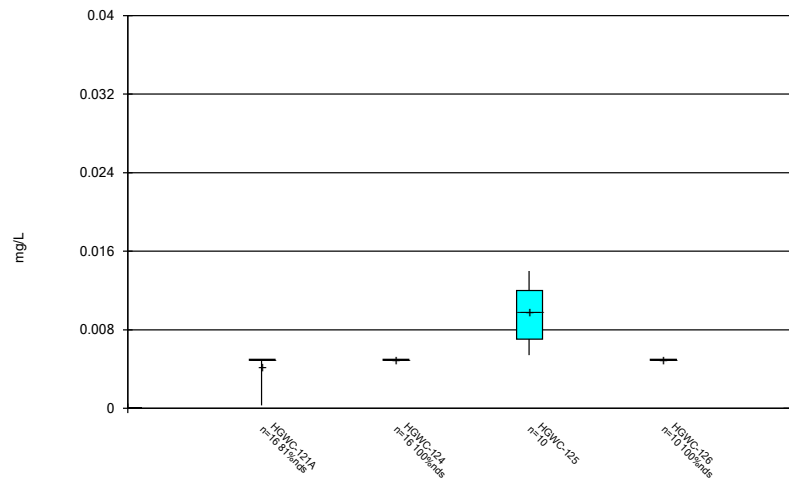
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



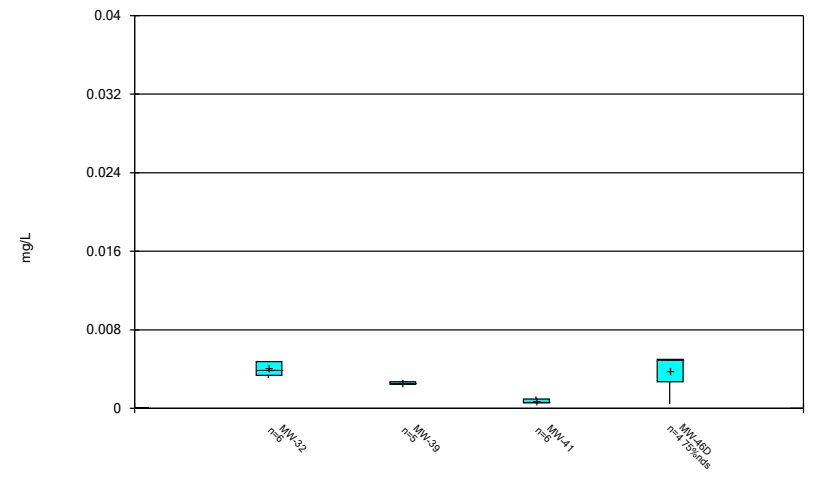
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



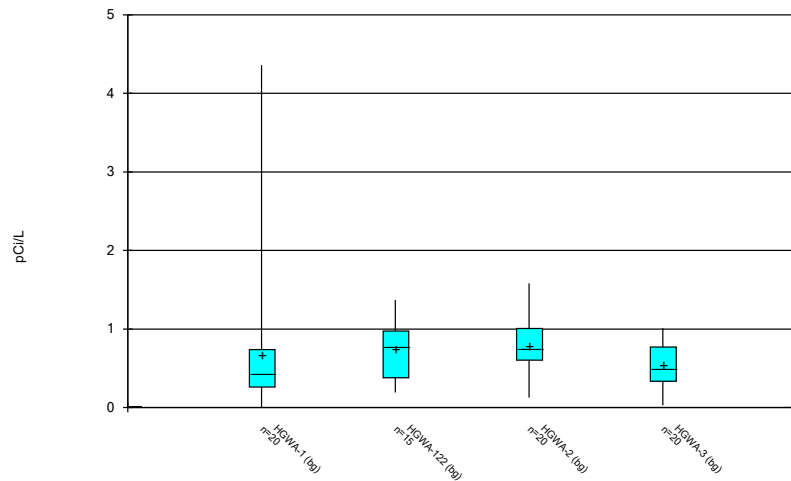
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Box & Whiskers Plot



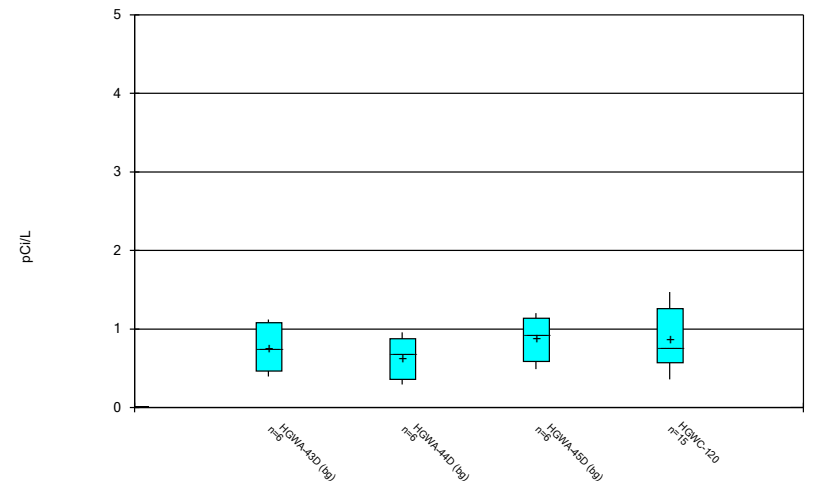
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



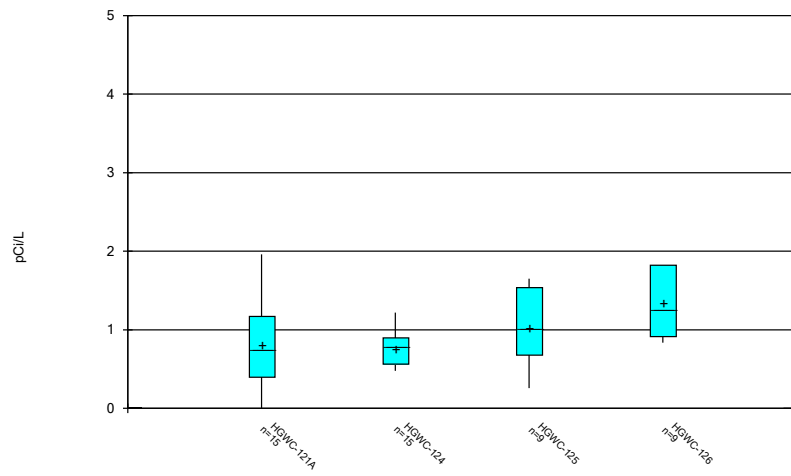
Constituent: Combined Radium 226 + 228 Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



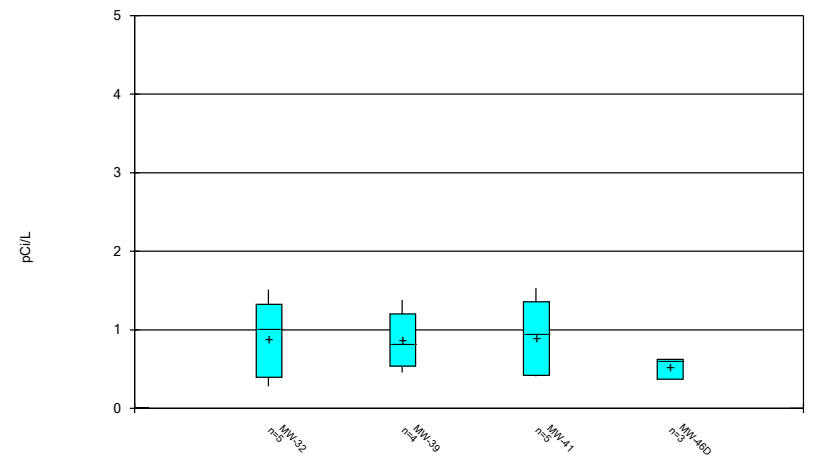
Constituent: Combined Radium 226 + 228 Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



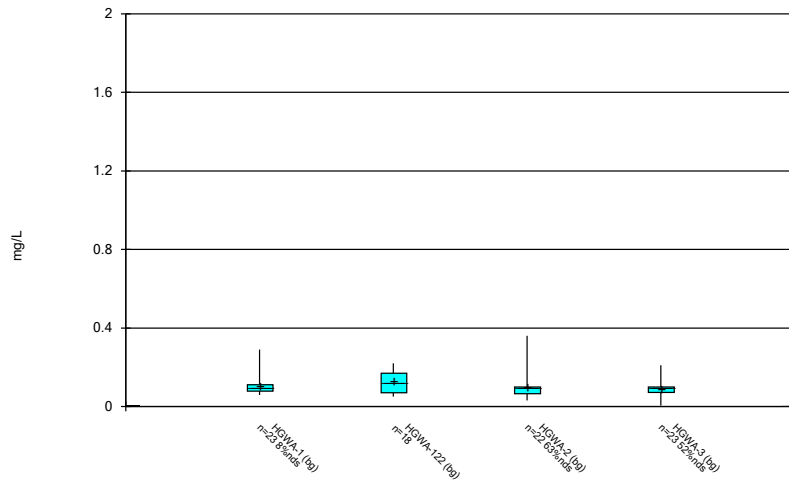
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



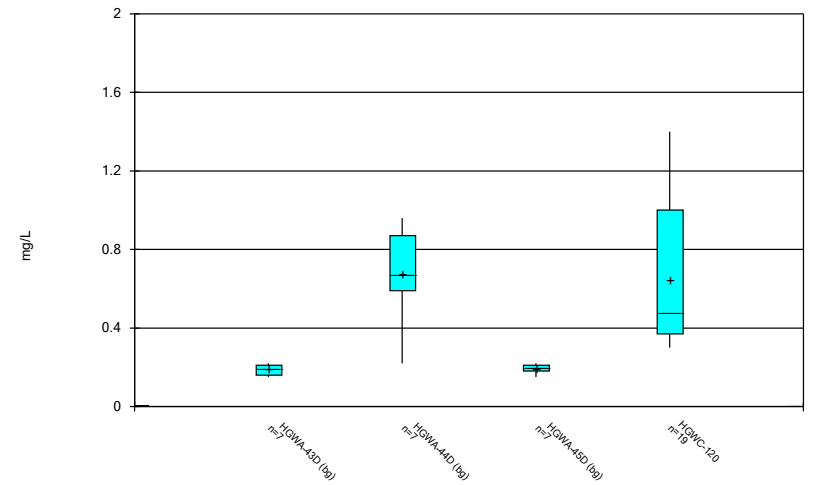
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### Box & Whiskers Plot



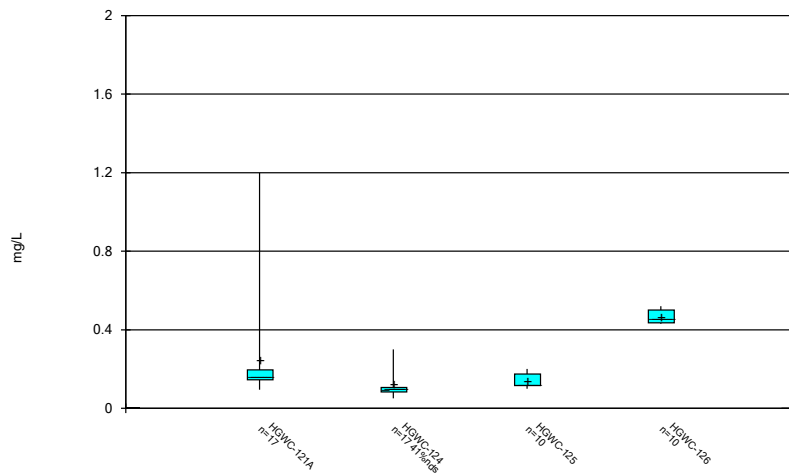
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



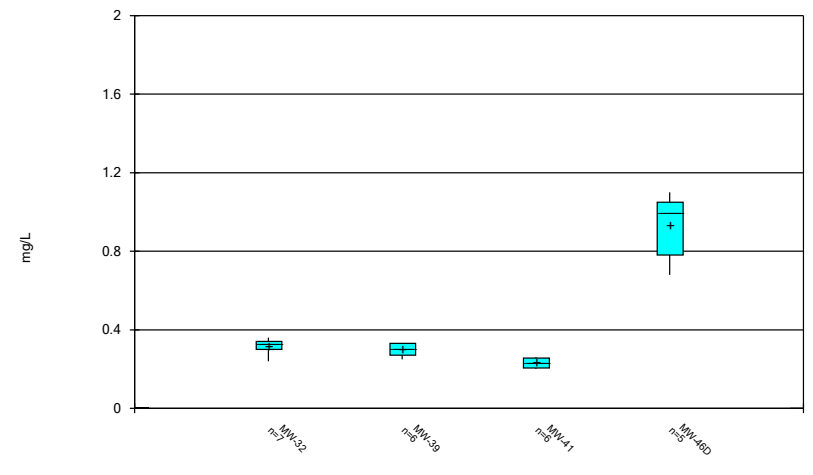
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Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



Constituent: Fluoride Analysis Run 3/28/2022 9:38 AM  
Plant Hammond Client: Southern Company Data: Hammond AP-3

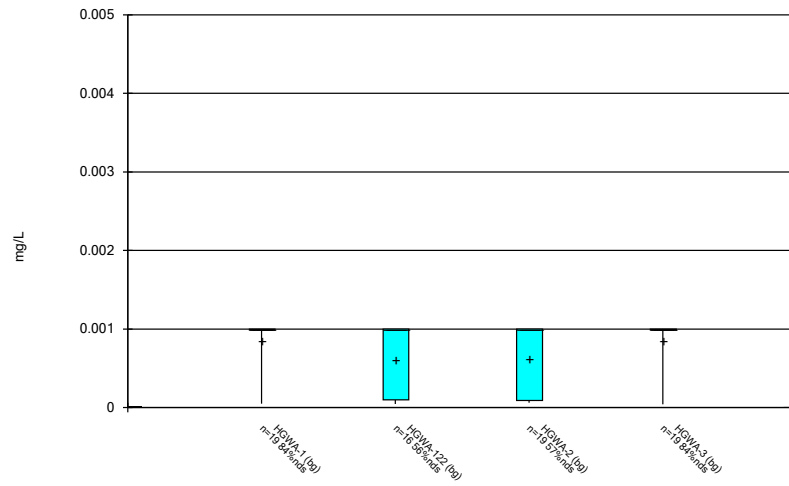
### Box & Whiskers Plot



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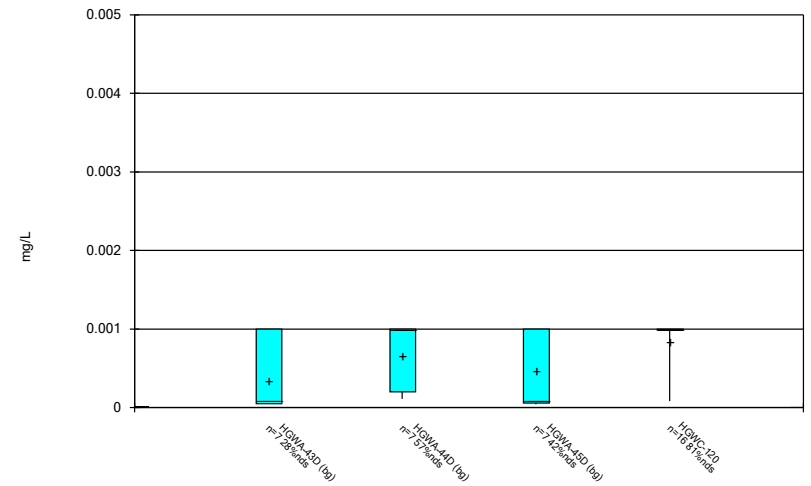


### Box & Whiskers Plot



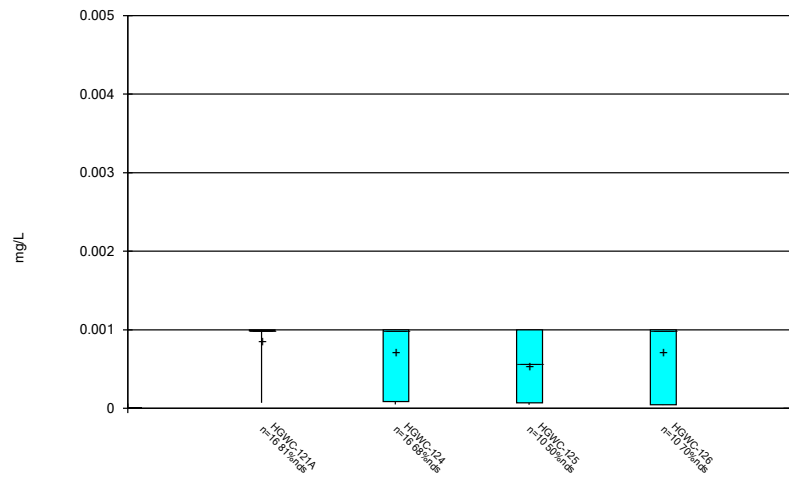
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



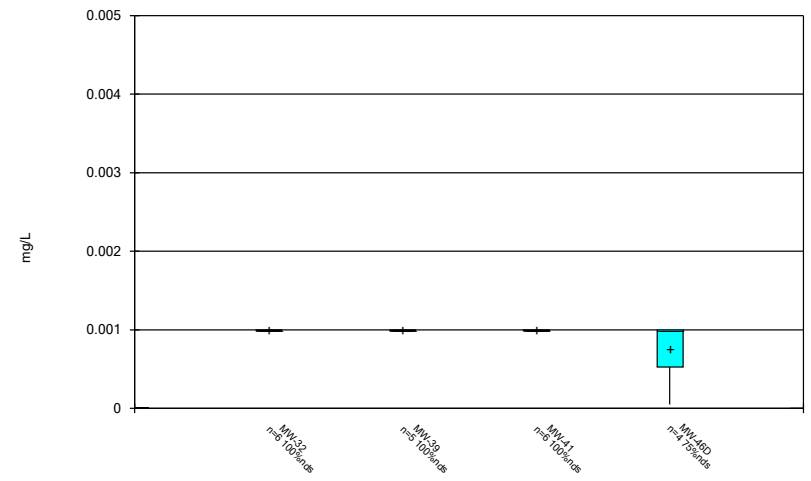
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



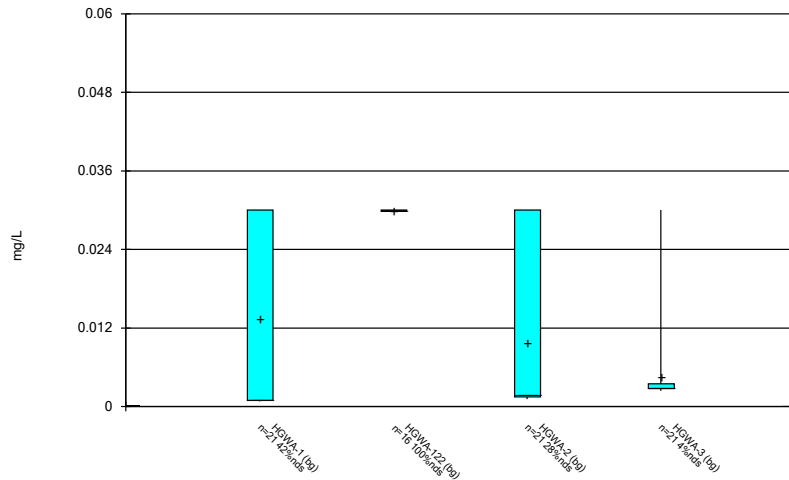
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



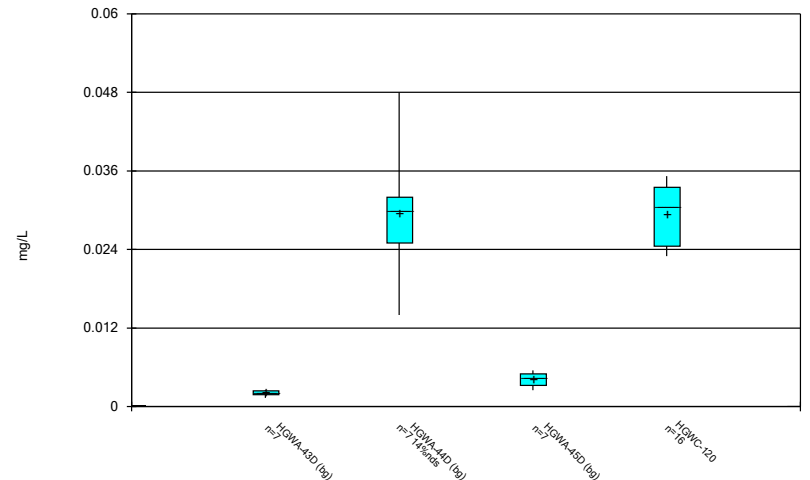
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



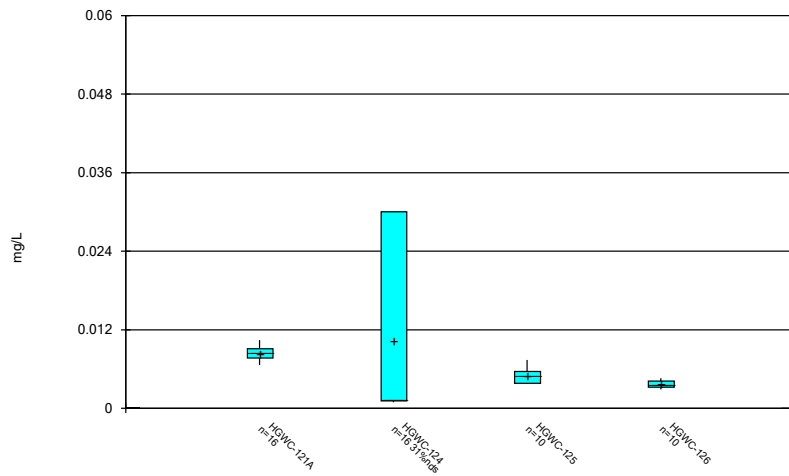
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



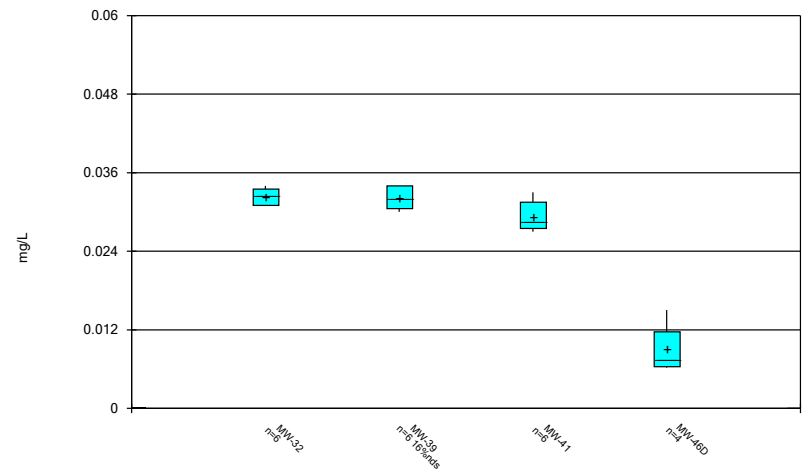
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



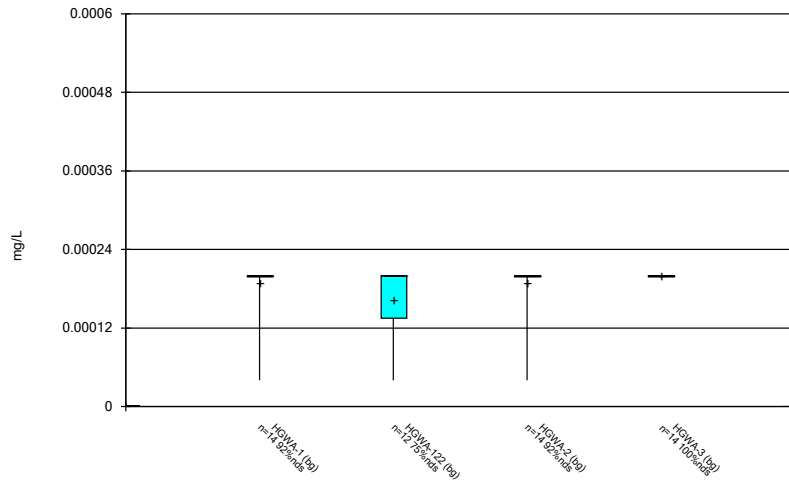
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### Box & Whiskers Plot



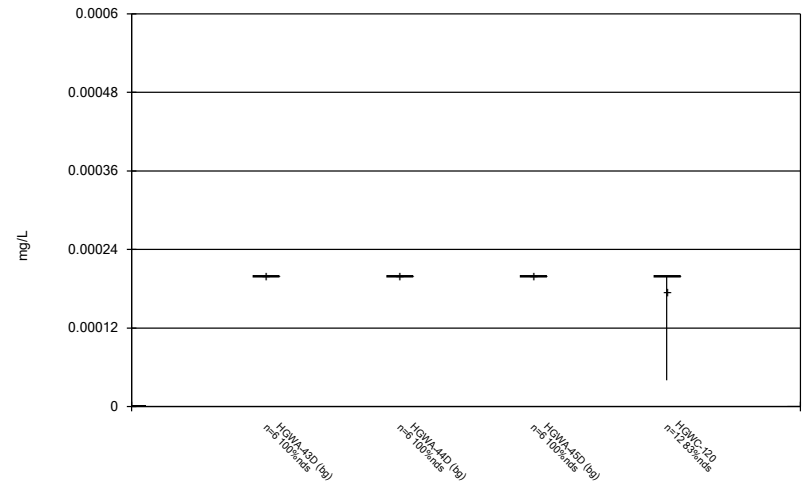
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



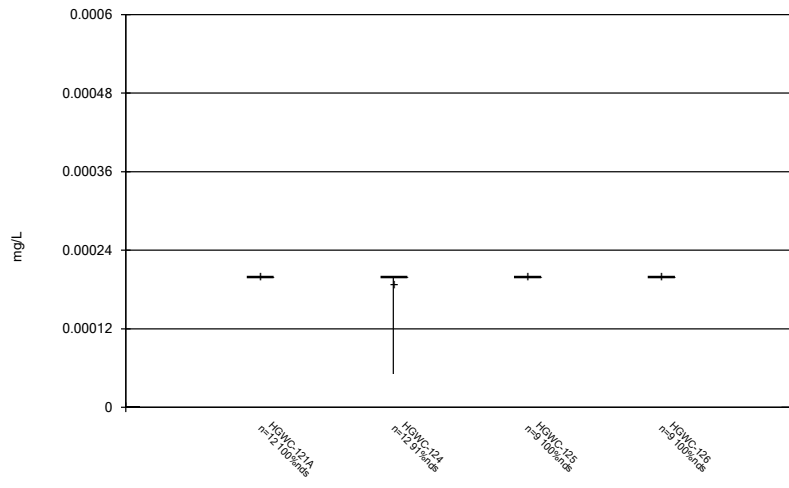
Constituent: Mercury Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



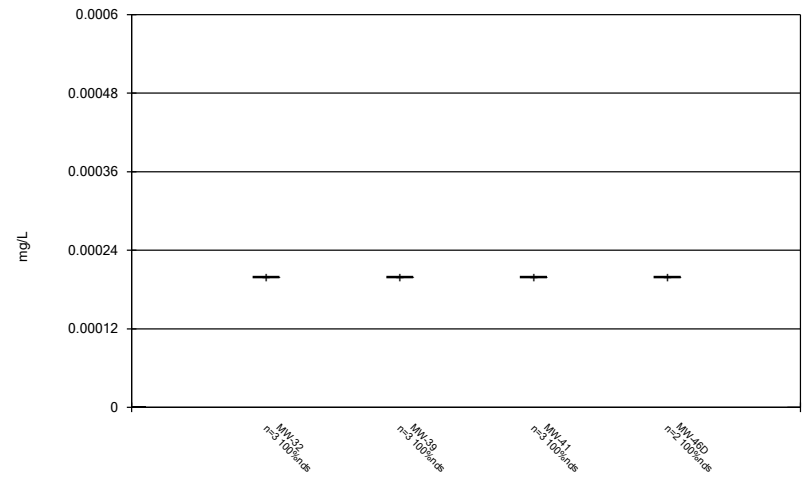
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



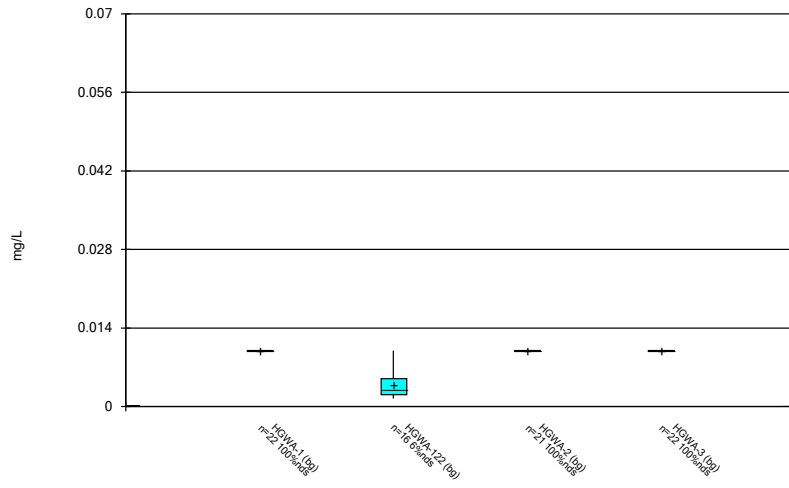
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



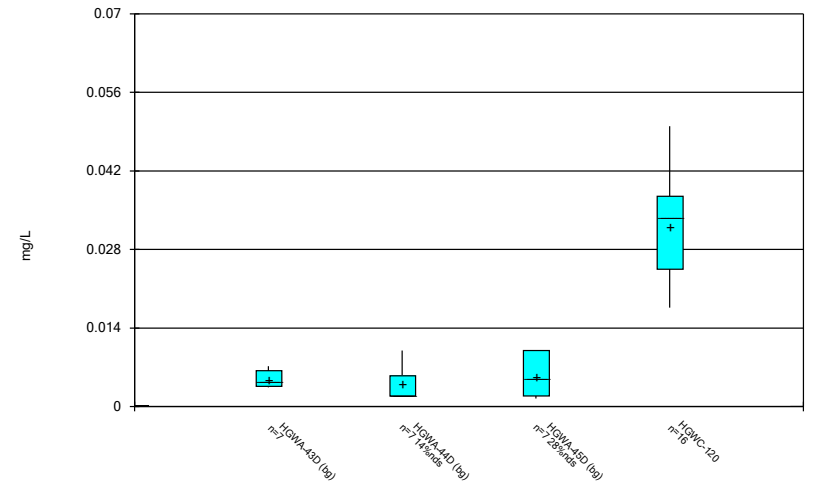
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



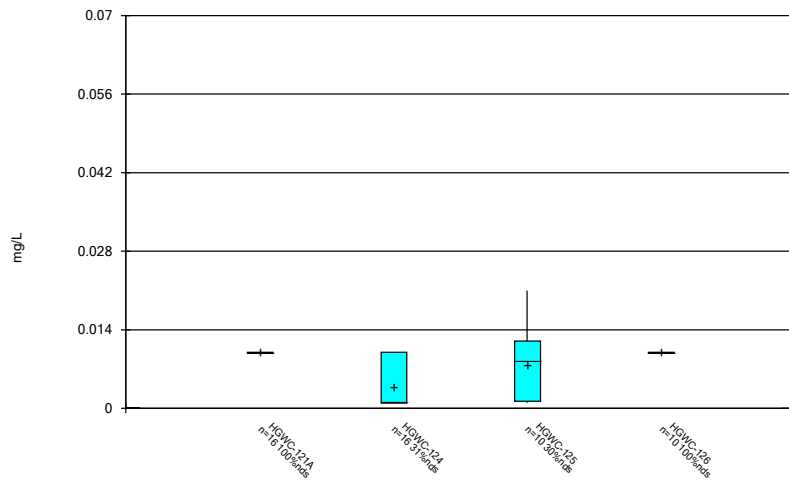
Constituent: Molybdenum Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



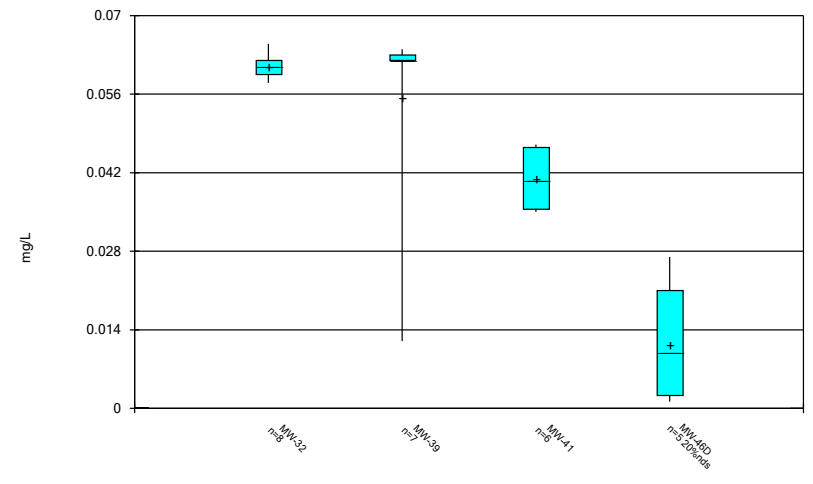
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



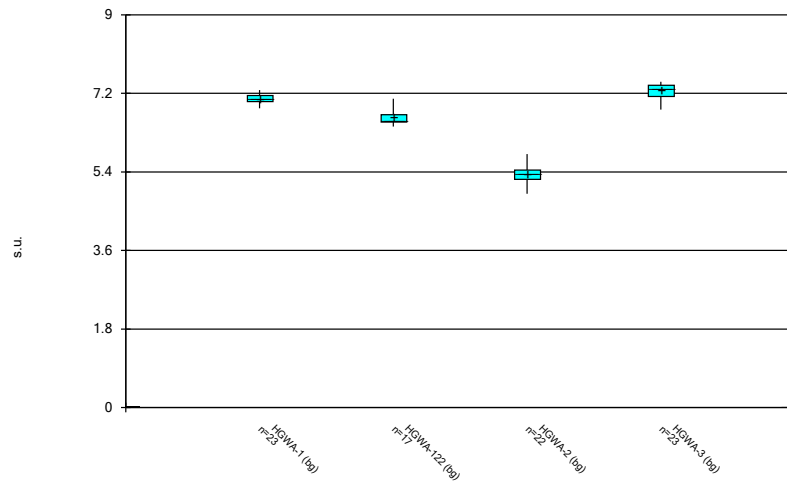
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



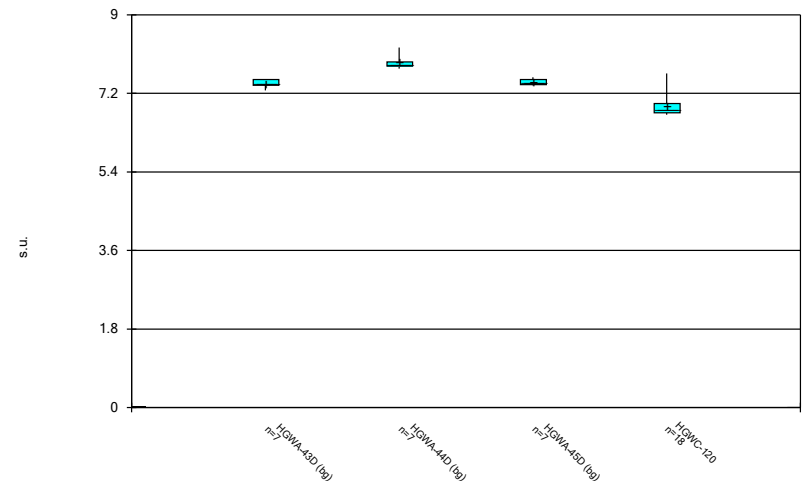
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



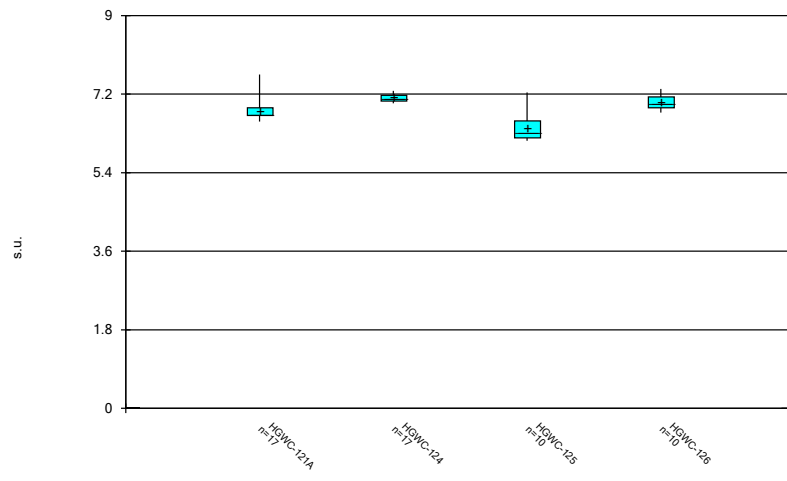
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



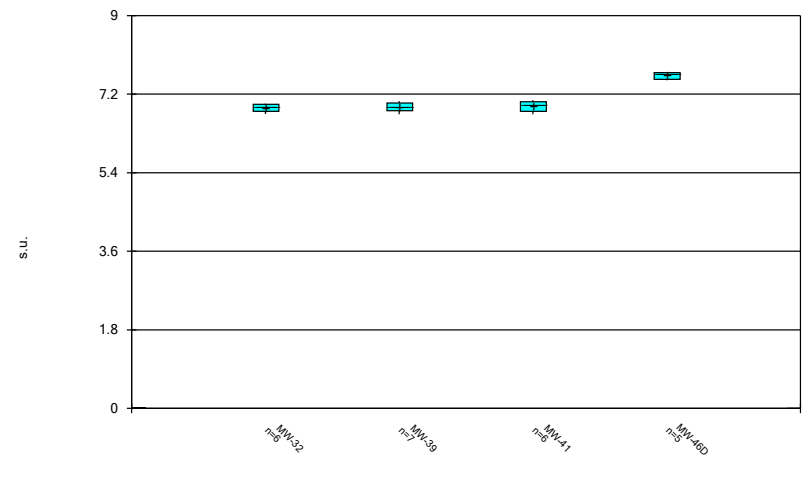
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



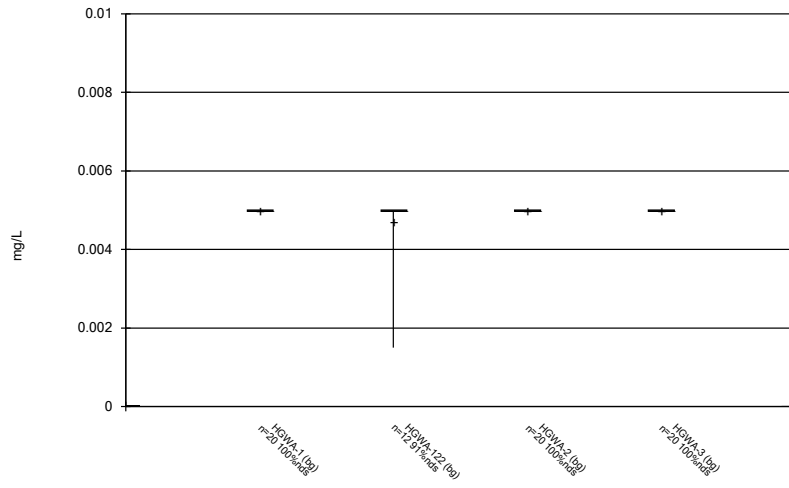
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



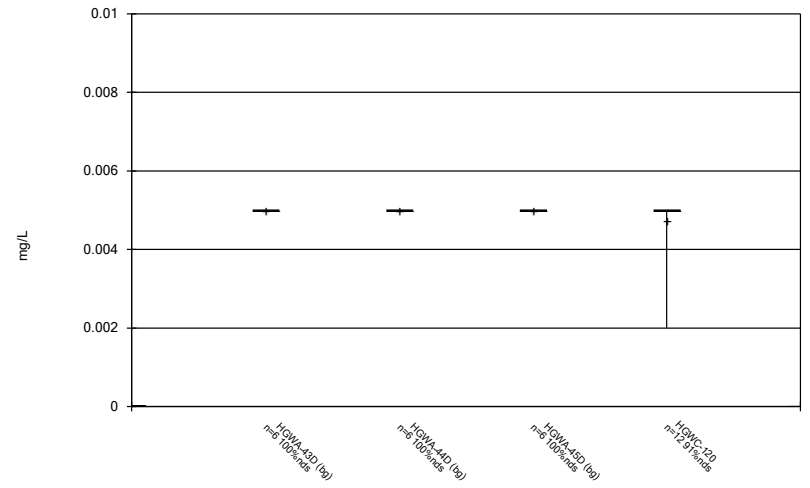
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



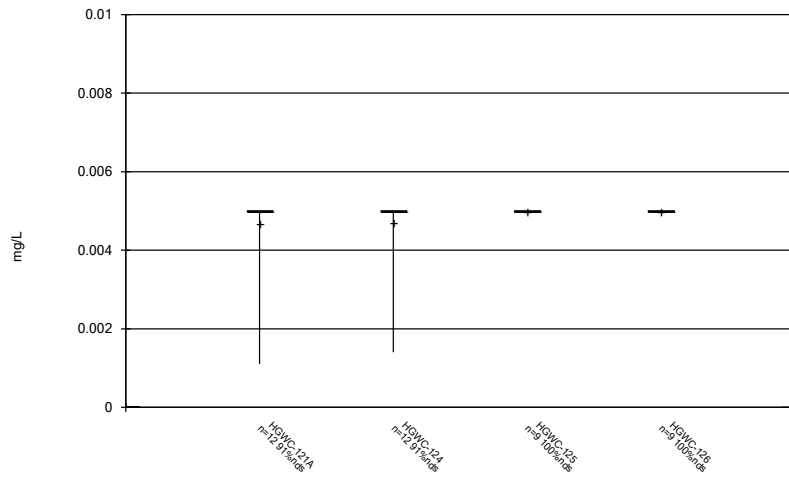
Constituent: Selenium Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



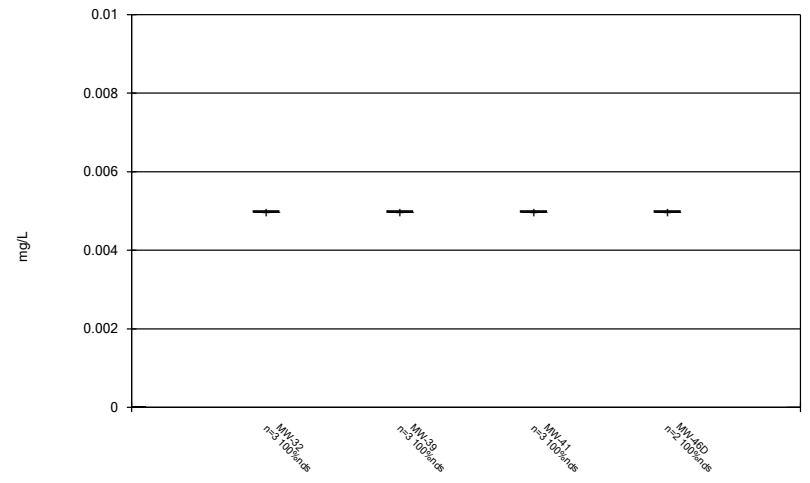
Constituent: Selenium Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



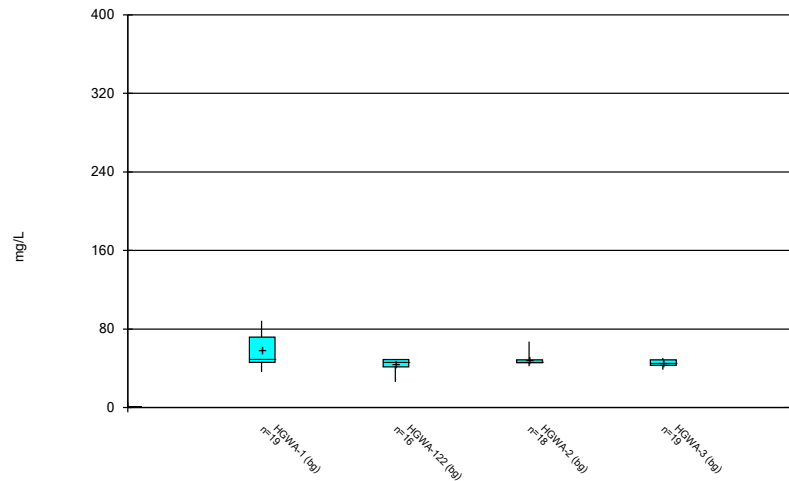
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



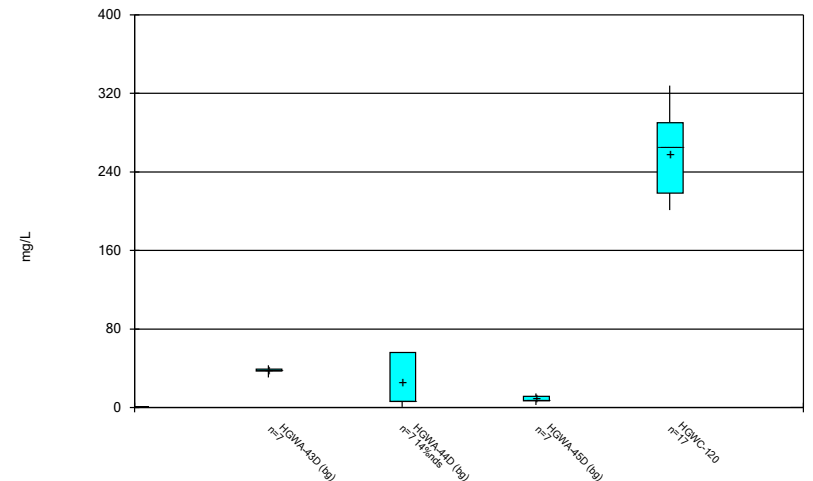
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



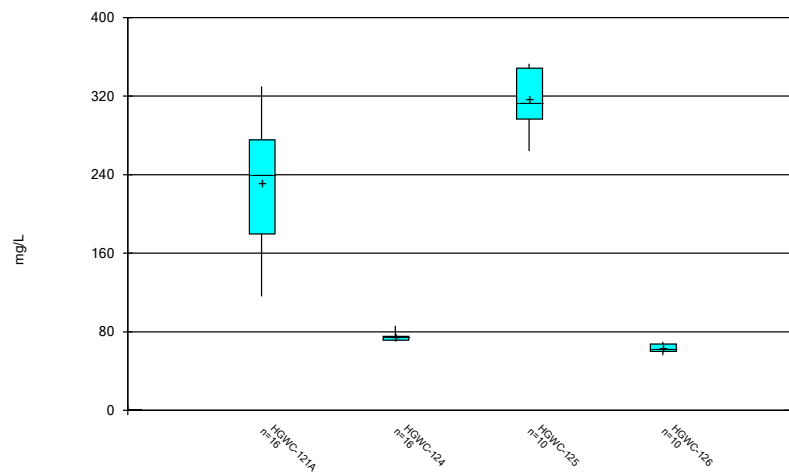
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

Box & Whiskers Plot



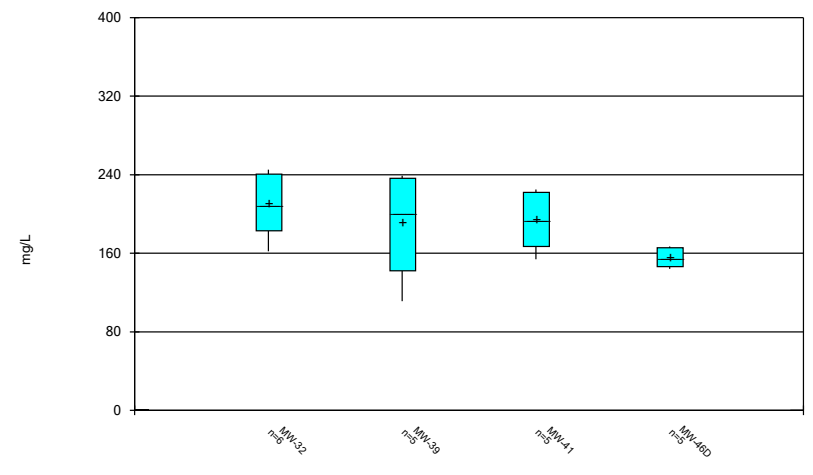
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Box & Whiskers Plot



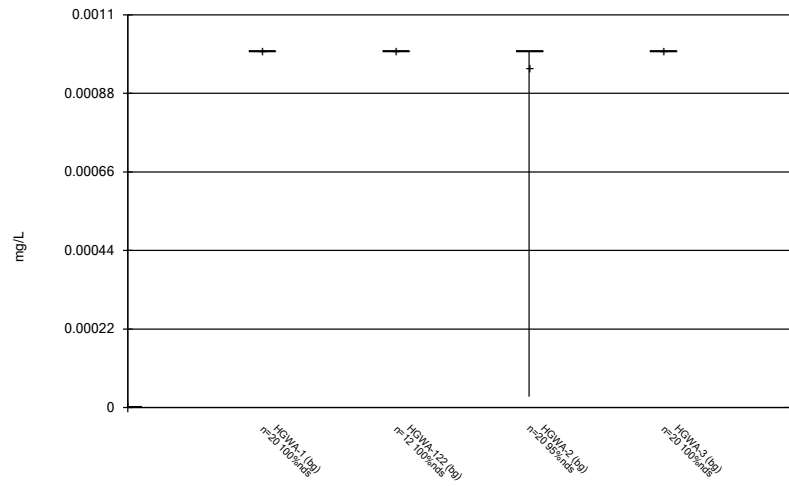
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Box & Whiskers Plot



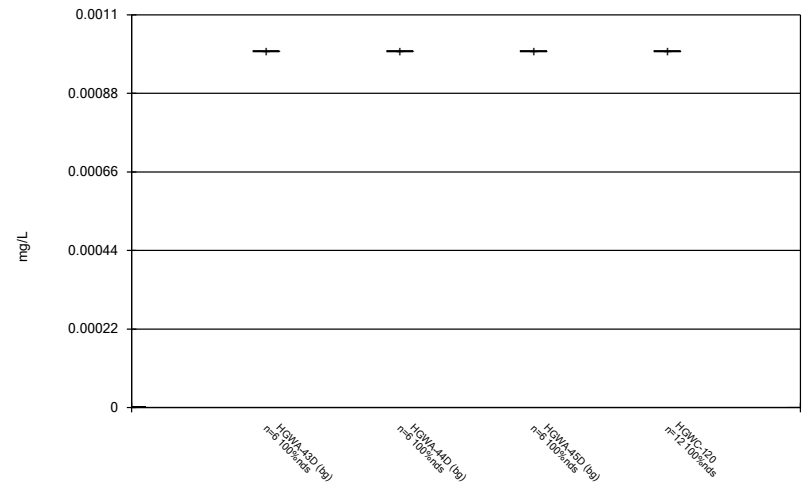
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



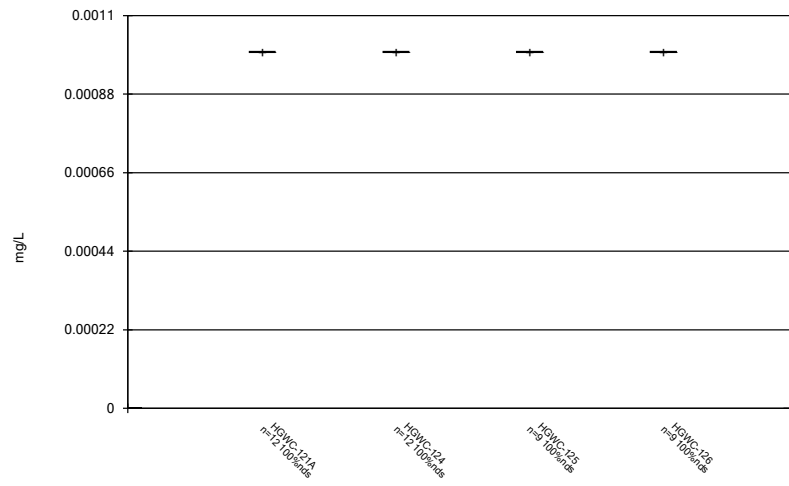
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### Box & Whiskers Plot



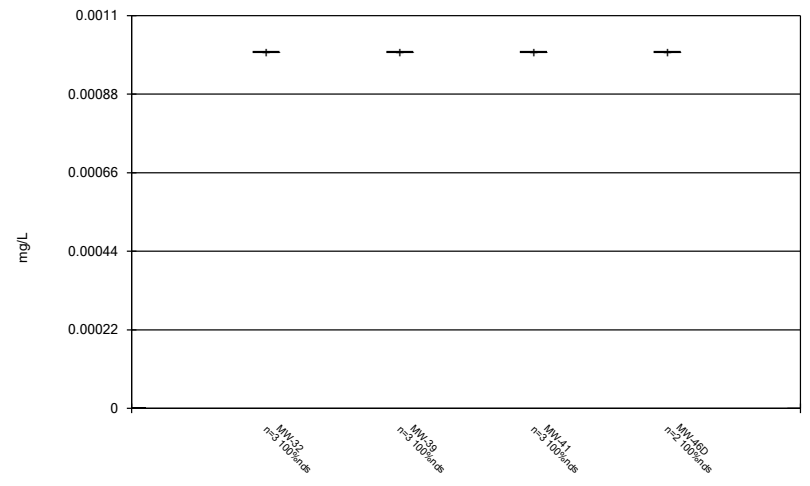
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 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



Constituent: Thallium Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

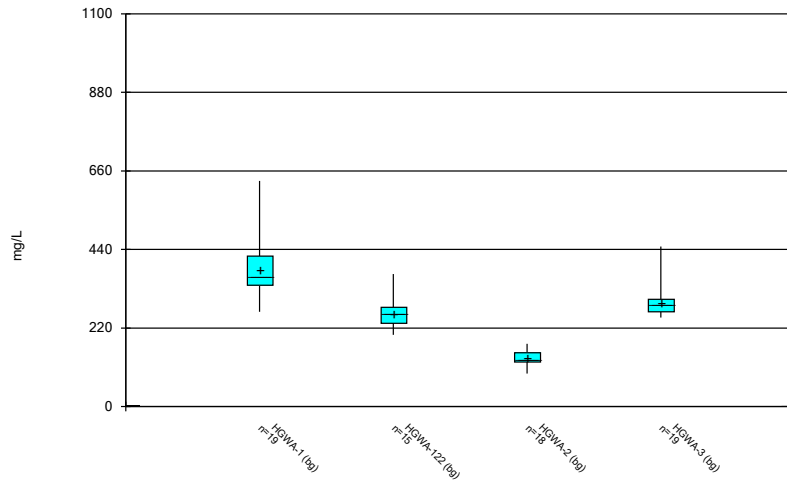
### Box & Whiskers Plot



Constituent: Thallium Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

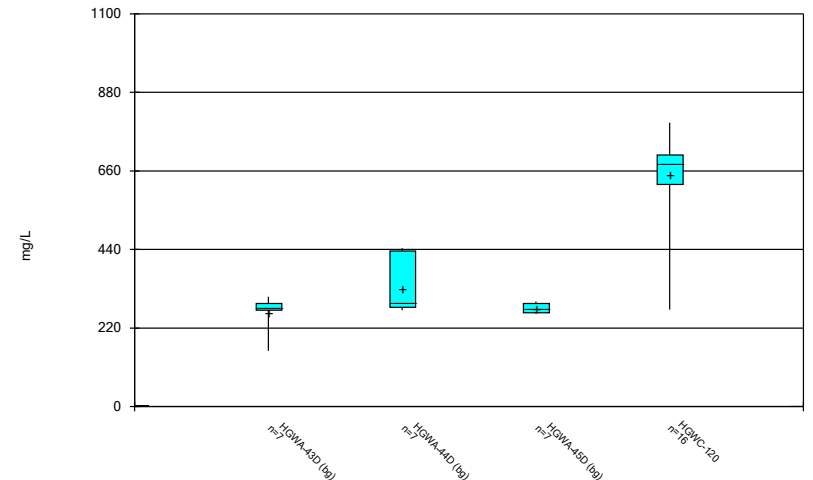


### Box & Whiskers Plot



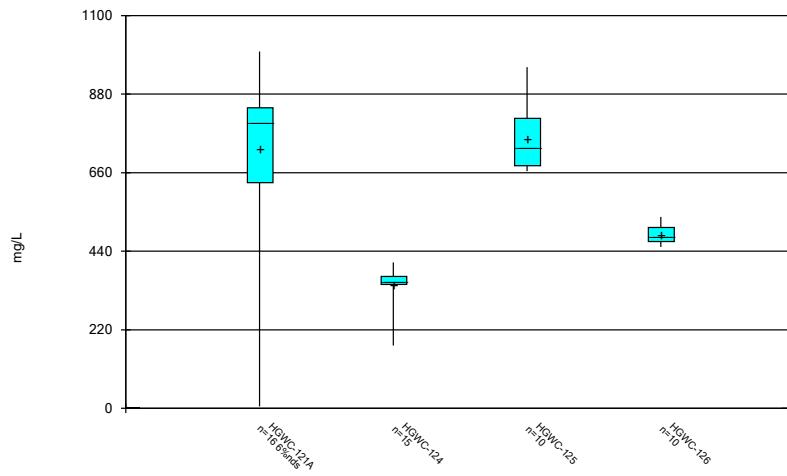
Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



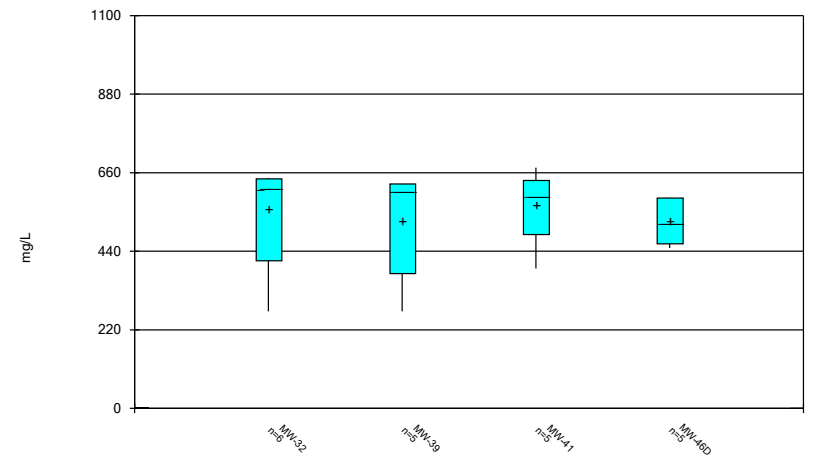
Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:38 AM  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

FIGURE C.

# Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/28/2022, 9:41 AM

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HGWA-122 Total Dissolved Solids (mg/L)

4/2/2019

814 (o)

FIGURE D.

# Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/28/2022, 9:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	N Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-120	0.44	n/a	2/2/2022	0.91	Yes	93	n/a	n/a	4.301	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-121A	0.44	n/a	2/2/2022	1.6	Yes	93	n/a	n/a	4.301	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-125	0.44	n/a	2/3/2022	1.6	Yes	93	n/a	n/a	4.301	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-120	138	n/a	2/2/2022	159	Yes	93	n/a	n/a	0	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-121A	138	n/a	2/2/2022	148	Yes	93	n/a	n/a	0	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-125	138	n/a	2/3/2022	175	Yes	93	n/a	n/a	0	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-126	138	n/a	2/3/2022	157	Yes	93	n/a	n/a	0	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-120	88.2	n/a	2/2/2022	201	Yes	93	n/a	n/a	1.075	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-121A	88.2	n/a	2/2/2022	147	Yes	93	n/a	n/a	1.075	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-125	88.2	n/a	2/3/2022	304	Yes	93	n/a	n/a	1.075	n/a	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-121A	632	n/a	2/2/2022	638	Yes	92	n/a	n/a	0	n/a	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-125	632	n/a	2/3/2022	726	Yes	92	n/a	n/a	0	n/a	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2

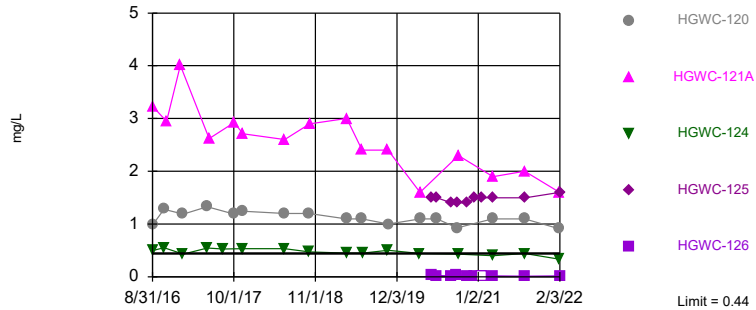
# Interwell Prediction Limits - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 3/28/2022, 9:50 AM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg	N Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform Alpha	Method	
<b>Boron (mg/L)</b>	<b>HGWC-120</b>	<b>0.44</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>0.91</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>4.301</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>HGWC-121A</b>	<b>0.44</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>1.6</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>4.301</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Boron (mg/L)	HGWC-124	0.44	n/a	2/2/2022	0.33	No	93	n/a	n/a	n/a	4.301	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
<b>Boron (mg/L)</b>	<b>HGWC-125</b>	<b>0.44</b>	<b>n/a</b>	<b>2/3/2022</b>	<b>1.6</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>4.301</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Boron (mg/L)	HGWC-126	0.44	n/a	2/3/2022	0.016J	No	93	n/a	n/a	n/a	4.301	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
<b>Calcium (mg/L)</b>	<b>HGWC-120</b>	<b>138</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>159</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium (mg/L)</b>	<b>HGWC-121A</b>	<b>138</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>148</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Calcium (mg/L)	HGWC-124	138	n/a	2/2/2022	95.9	No	93	n/a	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
<b>Calcium (mg/L)</b>	<b>HGWC-125</b>	<b>138</b>	<b>n/a</b>	<b>2/3/2022</b>	<b>175</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Calcium (mg/L)</b>	<b>HGWC-126</b>	<b>138</b>	<b>n/a</b>	<b>2/3/2022</b>	<b>157</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride (mg/L)	HGWC-120	44.8	n/a	2/2/2022	2.5	No	93	n/a	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-121A	44.8	n/a	2/2/2022	16.8	No	93	n/a	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-124	44.8	n/a	2/2/2022	2.6	No	93	n/a	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-125	44.8	n/a	2/3/2022	8.1	No	93	n/a	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-126	44.8	n/a	2/3/2022	8.5	No	93	n/a	n/a	n/a	0	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-120	0.96	n/a	2/2/2022	0.36	No	107	n/a	n/a	n/a	26.17	n/a	n/a	0.000173	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-121A	0.96	n/a	2/2/2022	0.15	No	107	n/a	n/a	n/a	26.17	n/a	n/a	0.000173	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-124	0.96	n/a	2/2/2022	0.1ND	No	107	n/a	n/a	n/a	26.17	n/a	n/a	0.000173	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-125	0.96	n/a	2/3/2022	0.18	No	107	n/a	n/a	n/a	26.17	n/a	n/a	0.000173	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-126	0.96	n/a	2/3/2022	0.51	No	107	n/a	n/a	n/a	26.17	n/a	n/a	0.000173	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-120	8.25	4.9	2/2/2022	7	No	106	n/a	n/a	n/a	0	n/a	n/a	0.0003518	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-121A	8.25	4.9	2/2/2022	6.92	No	106	n/a	n/a	n/a	0	n/a	n/a	0.0003518	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-124	8.25	4.9	2/2/2022	7.28	No	106	n/a	n/a	n/a	0	n/a	n/a	0.0003518	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-125	8.25	4.9	2/3/2022	6.56	No	106	n/a	n/a	n/a	0	n/a	n/a	0.0003518	NP Inter (normality) 1 of 2
pH (s.u.)	HGWC-126	8.25	4.9	2/3/2022	7.01	No	106	n/a	n/a	n/a	0	n/a	n/a	0.0003518	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>HGWC-120</b>	<b>88.2</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>201</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>1.075</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Sulfate (mg/L)</b>	<b>HGWC-121A</b>	<b>88.2</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>147</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>1.075</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	HGWC-124	88.2	n/a	2/2/2022	70.7	No	93	n/a	n/a	n/a	1.075	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
<b>Sulfate (mg/L)</b>	<b>HGWC-125</b>	<b>88.2</b>	<b>n/a</b>	<b>2/3/2022</b>	<b>304</b>	<b>Yes</b>	<b>93</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>1.075</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002244</b>	<b>NP Inter (normality) 1 of 2</b>
Sulfate (mg/L)	HGWC-126	88.2	n/a	2/3/2022	66.8	No	93	n/a	n/a	n/a	1.075	n/a	n/a	0.0002244	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-120	632	n/a	2/2/2022	612	No	92	n/a	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-121A</b>	<b>632</b>	<b>n/a</b>	<b>2/2/2022</b>	<b>638</b>	<b>Yes</b>	<b>92</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002288</b>	<b>NP Inter (normality) 1 of 2</b>
Total Dissolved Solids (mg/L)	HGWC-124	632	n/a	2/2/2022	347	No	92	n/a	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-125</b>	<b>632</b>	<b>n/a</b>	<b>2/3/2022</b>	<b>726</b>	<b>Yes</b>	<b>92</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002288</b>	<b>NP Inter (normality) 1 of 2</b>
Total Dissolved Solids (mg/L)	HGWC-126	632	n/a	2/3/2022	466	No	92	n/a	n/a	n/a	0	n/a	n/a	0.0002288	NP Inter (normality) 1 of 2

Exceeds Limit: HGWC-120, HGWC-121A,  
HGWC-125

Prediction Limit  
Interwell Non-parametric

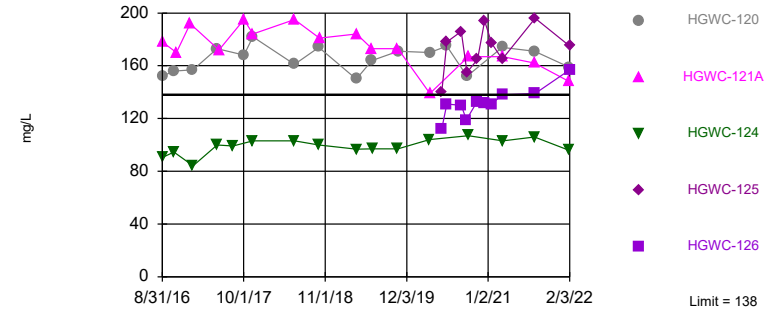


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 93 background values. 4.301% NDs. Annual per-constituent alpha = 0.002241. Individual comparison alpha = 0.0002244 (1 of 2). Comparing 5 points to limit.

Constituent: Boron Analysis Run 3/28/2022 9:46 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Exceeds Limit: HGWC-120, HGWC-121A,  
HGWC-125, HGWC-126

Prediction Limit  
Interwell Non-parametric

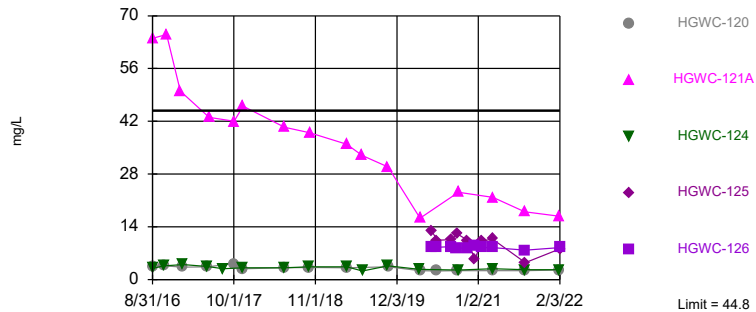


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 93 background values. Annual per-constituent alpha = 0.002241. Individual comparison alpha = 0.0002244 (1 of 2). Comparing 5 points to limit.

Constituent: Calcium Analysis Run 3/28/2022 9:46 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Within Limit

Prediction Limit  
Interwell Non-parametric

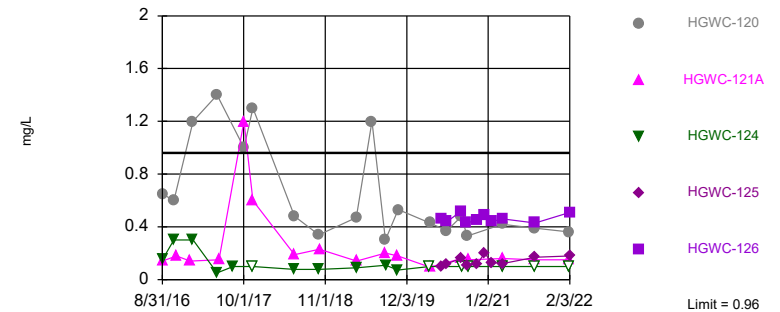


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 93 background values. Annual per-constituent alpha = 0.002241. Individual comparison alpha = 0.0002244 (1 of 2). Comparing 5 points to limit.

Constituent: Chloride Analysis Run 3/28/2022 9:46 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Within Limit

Prediction Limit  
Interwell Non-parametric

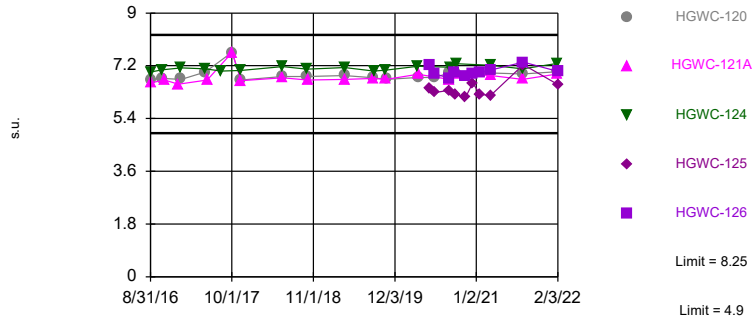


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 107 background values. 26.17% NDs. Annual per-constituent alpha = 0.001728. Individual comparison alpha = 0.000173 (1 of 2). Comparing 5 points to limit.

Constituent: Fluoride Analysis Run 3/28/2022 9:46 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Within Limits

Prediction Limit  
Interwell Non-parametric

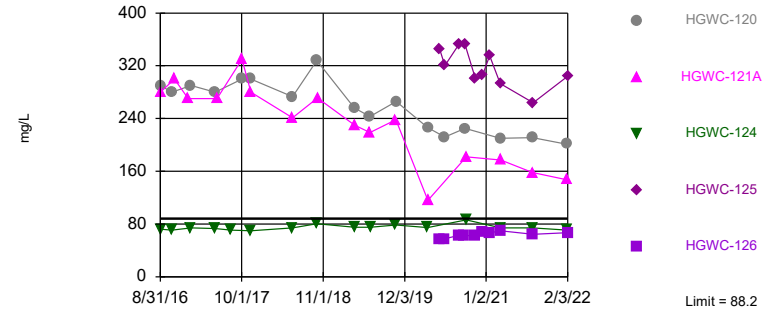


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 106 background values. Annual per-constituent alpha = 0.003515. Individual comparison alpha = 0.0003518 (1 of 2). Comparing 5 points to limit.

Constituent: pH Analysis Run 3/28/2022 9:46 AM 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

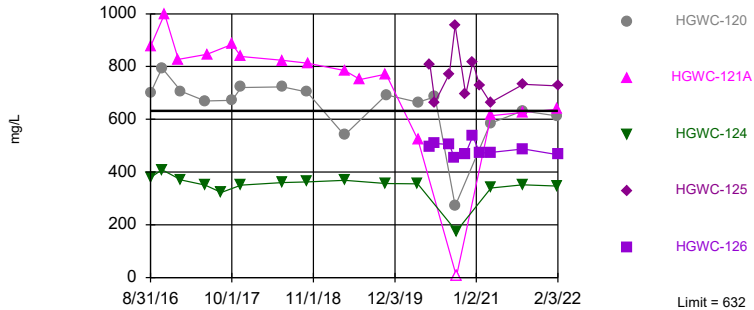


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 93 background values. 1,075% NDs. Annual per-constituent alpha = 0.002241. Individual comparison alpha = 0.0002244 (1 of 2). Comparing 5 points to limit.

Constituent: Sulfate Analysis Run 3/28/2022 9:46 AM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

Exceeds Limit: HGWC-121A, HGWC-125

Prediction Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 92 background values. Annual per-constituent alpha = 0.002286. Individual comparison alpha = 0.0002288 (1 of 2). Comparing 5 points to limit.

Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:46 AM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-3



# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 3/28/2022 9:50 AM 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-121A	HGWC-120	HGWC-124	HGWC-125	HGWC-126
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					3.23	0.981	0.494		
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					2.92	1.19			
10/3/2017	0.0198 (J)	0.0097 (J)	0.0386 (J)						
11/15/2017				0.322	2.71	1.24	0.531		
6/4/2018	0.02 (J)	0.017 (J)	0.036 (J)						
6/5/2018				0.24	2.6	1.2	0.53		
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					3		0.45		
6/17/2019					2.4	1.1			
6/18/2019				0.25			0.45		
9/23/2019	0.021 (J)	0.0081 (J)	0.04 (J)						
10/21/2019				0.25	2.4		0.5		
10/22/2019						1			
3/24/2020				0.1			0.44		
3/25/2020	0.025 (J)	0.0096 (J)	0.039 (J)		1.6	1.1			
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)	0.0071 (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					2.3		0.43		
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)

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 3/28/2022 9:50 AM 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-121A	HGWC-120	HGWC-124	HGWC-125	HGWC-126
1/19/2021									
1/20/2021								1.5	<0.04
3/10/2021	0.015 (J)								
3/11/2021		0.015 (J)	0.056	0.2					
3/12/2021						1.1		1.5	0.016 (J)
3/15/2021					1.9		0.4		
8/11/2021	0.02 (J)								
8/12/2021		<0.04	0.044						
8/13/2021				0.19					
8/16/2021					2	1.1	0.44		
8/19/2021								1.5	0.011 (J)
2/1/2022	0.016 (J)	0.011 (J)	0.056	0.17					
2/2/2022					1.6	0.91	0.33		
2/3/2022								1.6	0.016 (J)

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 3/28/2022 9:50 AM 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 3/28/2022 9:50 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	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			

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 3/28/2022 9:50 AM 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-121A	HGWC-120	HGWC-124	HGWC-125	HGWC-126
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					178	152	90.4		
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					195	168			
10/3/2017	102	76.3	20.2						
11/15/2017				72.8	184	182	103		
6/4/2018	124	73.4	19.1						
6/5/2018				71.4	195	161	103		
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					184		96.7		
6/17/2019					173	164			
6/18/2019				75			97.1		
9/23/2019	118	71	19.5						
10/21/2019				80.8	173		96.9		
10/22/2019						171			
3/24/2020				81.2			104		
3/25/2020	127	89.8	23		139	170			
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	73.1	21.1	75.8					
9/16/2020									
9/18/2020									119
9/21/2020						152		155	
9/25/2020									
9/28/2020					167		107		
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 3/28/2022 9:50 AM 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 3/28/2022 9:50 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	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			







# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 3/28/2022 9:50 AM 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	4.1	4.1	
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 3/28/2022 9:50 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	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			

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 3/28/2022 9:50 AM 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-121A	HGWC-124	HGWC-120	HGWC-125	HGWC-126
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					0.14 (J)	0.15 (J)	0.65		
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					1.2		1		
10/3/2017	0.13 (J)	0.13 (J)	<0.1						
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)	0.072 (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					0.14 (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								0.1 (J)	0.46
6/15/2020							0.37		
6/16/2020	0.071 (J)	<0.1						0.12	0.44
8/24/2020				0.075 (J)					
8/25/2020		<0.1	<0.1					0.16	0.52
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)					



# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 3/28/2022 9:50 AM 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 3/28/2022 9:50 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	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			







# Prediction Limit

Constituent: pH (s.u.) Analysis Run 3/28/2022 9:50 AM 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 3/28/2022 9:50 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	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			

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 3/28/2022 9:50 AM 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-121A	HGWC-120	HGWC-124	HGWC-125	HGWC-126
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					280	290	72		
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					330	300			
10/3/2017	42	48	47						
11/15/2017				49	280	300	70		
6/4/2018	71.8	46.6	47.8						
6/5/2018				48.9	241	273	74		
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					230		75.2		
6/17/2019					219	243			
6/18/2019				44.5			75.3		
9/23/2019	70.2	43.9	47.2						
10/21/2019				45.6	238		78.5		
10/22/2019						266			
3/24/2020				25.9			74.6		
3/25/2020	85.9	50.5	46.3		116	226			
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	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					182		86.2		
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 3/28/2022 9:50 AM 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 3/28/2022 9:50 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	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			



# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/28/2022 9:50 AM 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-121A	HGWC-120	HGWC-124	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					876	700	379		
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					884	672			
10/3/2017	343	300	127						
11/15/2017				261	838	721	350		
6/4/2018	415	266	140						
6/5/2018				276	823	723	360		
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					785		369		
6/17/2019					751				
6/18/2019				233					
9/23/2019	442	268	129						
10/21/2019				296	771		357		
10/22/2019						693			
3/24/2020				278			355		
3/25/2020	496	284	138		521	665			
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					<10		176		
11/10/2020									
11/11/2020									468
11/12/2020							694		
12/15/2020									
12/16/2020							816		536



# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 3/28/2022 9:50 AM 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	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: Total Dissolved Solids (mg/L) Analysis Run 3/28/2022 9:50 AM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	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			

FIGURE E.

# Appendix III Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/28/2022, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-122 (bg)	-0.02654	-73	-58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-2 (bg)	0.002699	99	68	Yes	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-121A	-0.2637	-84	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	2.781	86	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-126	18.7	32	30	Yes	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-122 (bg)	-1.726	-70	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	1.393	83	68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-120	-17.77	-93	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-121A	-27.1	-86	-58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-121A	-57.23	-88	-58	Yes	16	6.25	n/a	n/a	0.01	NP

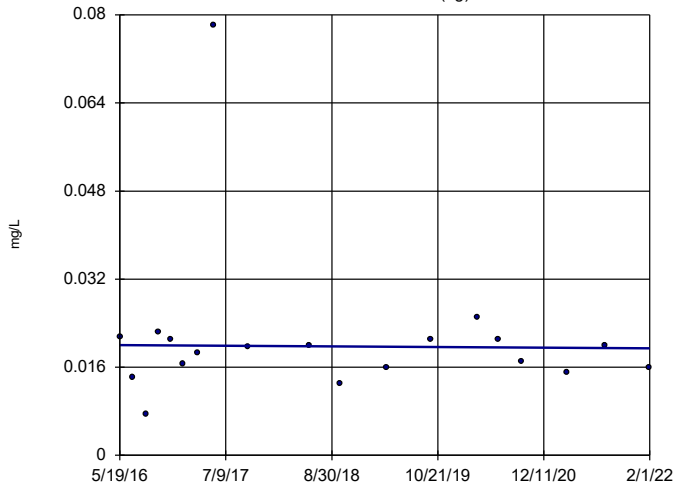
# Appendix III Trend Tests - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 3/28/2022, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.00009951	-10	-74	No	19	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWA-122 (bg)</b>	<b>-0.02654</b>	<b>-73</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>0.002699</b>	<b>99</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWA-3 (bg)	0.00007969	6	74	No	19	15.79	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-120	-0.04174	-63	-63	No	17	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-121A</b>	<b>-0.2637</b>	<b>-84</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-125	0	15	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.687	54	74	No	19	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-122 (bg)	-2.592	-34	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	0.4885	35	68	No	18	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>2.781</b>	<b>86</b>	<b>74</b>	<b>Yes</b>	<b>19</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWC-120	1.408	25	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-121A	-5.958	-56	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-125	15.31	12	30	No	10	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWC-126</b>	<b>18.7</b>	<b>32</b>	<b>30</b>	<b>Yes</b>	<b>10</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWA-1 (bg)	1.77	34	74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-122 (bg)</b>	<b>-1.726</b>	<b>-70</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>1.393</b>	<b>83</b>	<b>68</b>	<b>Yes</b>	<b>18</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWA-3 (bg)	1.106	61	74	No	19	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWC-120</b>	<b>-17.77</b>	<b>-93</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Sulfate (mg/L)</b>	<b>HGWC-121A</b>	<b>-27.1</b>	<b>-86</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWC-125	-44.39	-23	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	1.455	7	74	No	19	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-122 (bg)	-12.97	-39	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	-1.375	-12	-68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	1.051	12	74	No	19	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-121A</b>	<b>-57.23</b>	<b>-88</b>	<b>-58</b>	<b>Yes</b>	<b>16</b>	<b>6.25</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids (mg/L)	HGWC-125	-40.67	-8	-30	No	10	0	n/a	n/a	0.01	NP

### Sen's Slope Estimator

HGWA-1 (bg)

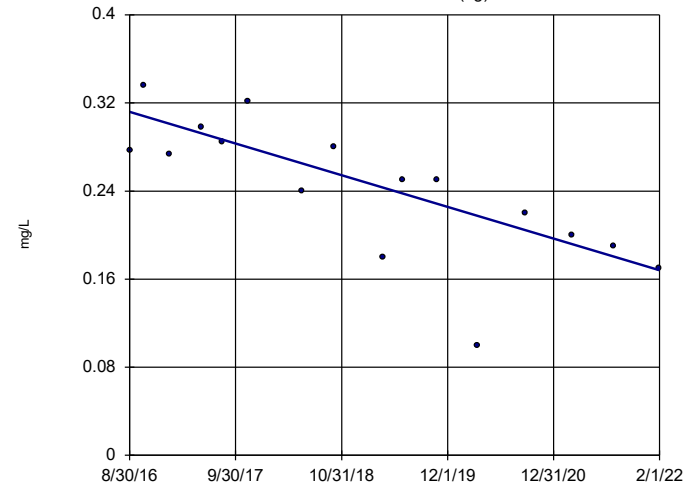


n = 19  
 Slope = -0.00009951  
 units per year.  
 Mann-Kendall  
 statistic = -10  
 critical = -74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-122 (bg)

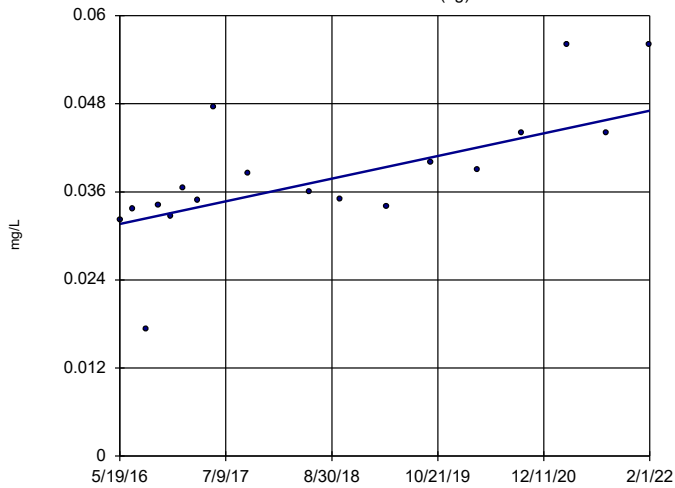


n = 16  
 Slope = -0.02654  
 units per year.  
 Mann-Kendall  
 statistic = -73  
 critical = -58  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-2 (bg)

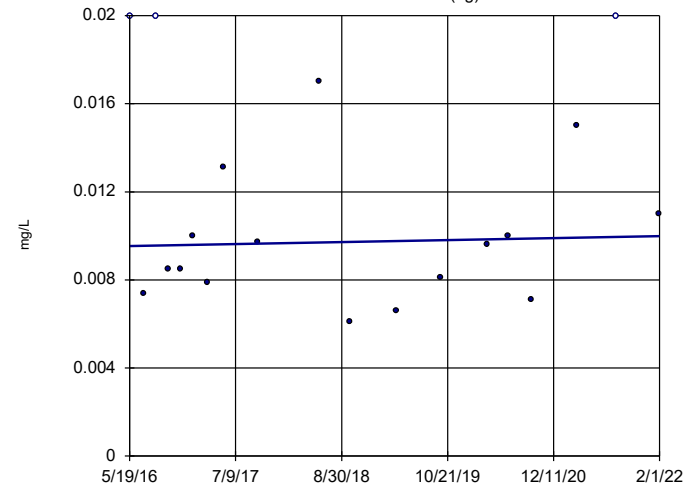


n = 18  
 Slope = 0.002699  
 units per year.  
 Mann-Kendall  
 statistic = 99  
 critical = 68  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-3 (bg)

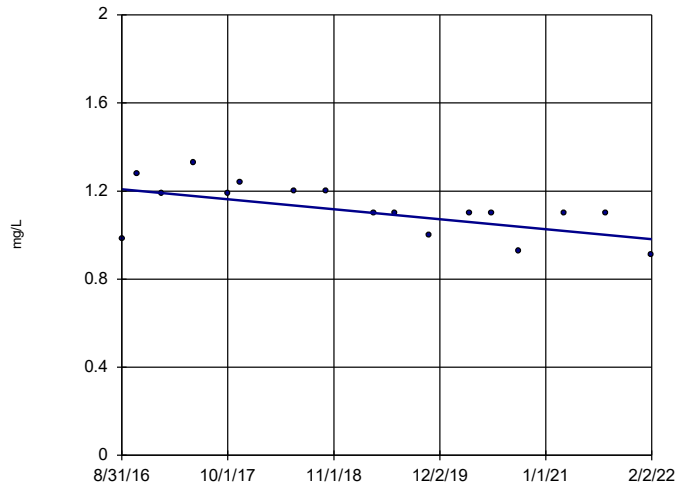


n = 19  
 Slope = 0.00007969  
 units per year.  
 Mann-Kendall  
 statistic = 6  
 critical = 74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3



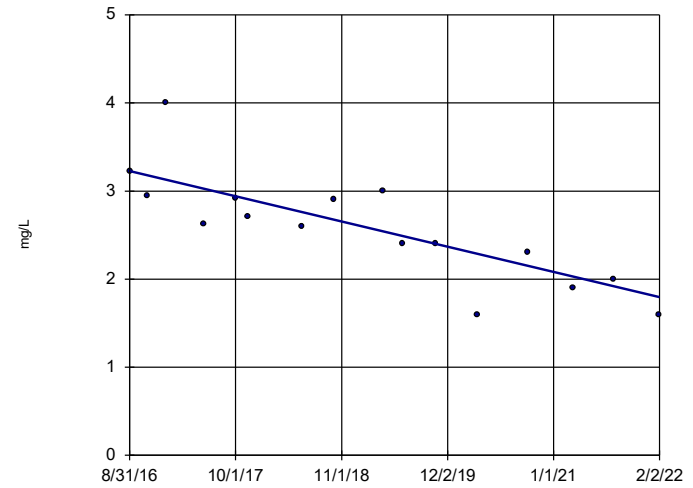
Sen's Slope Estimator  
HGWC-120



n = 17  
Slope = -0.04174  
units per year.  
Mann-Kendall  
statistic = -63  
critical = -63  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

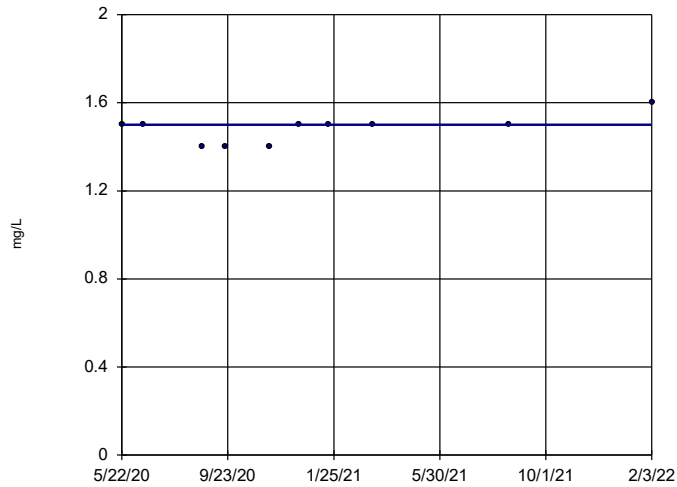
Sen's Slope Estimator  
HGWC-121A



n = 16  
Slope = -0.2637  
units per year.  
Mann-Kendall  
statistic = -84  
critical = -58  
Decreasing trend  
significant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

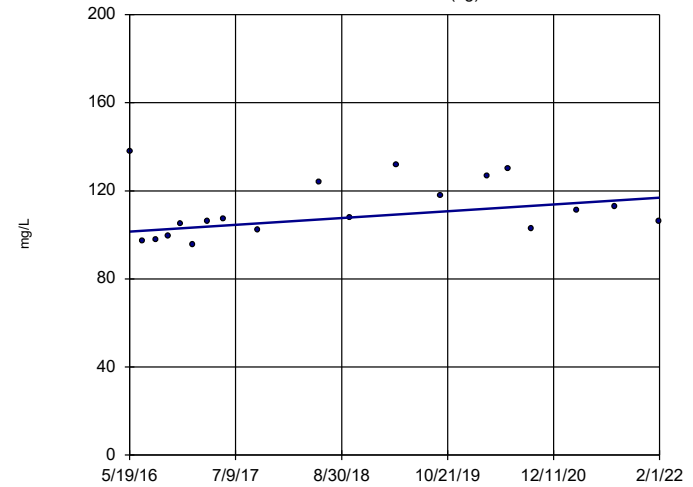
Sen's Slope Estimator  
HGWC-125



n = 10  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 15  
critical = 30  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

Sen's Slope Estimator  
HGWA-1 (bg)

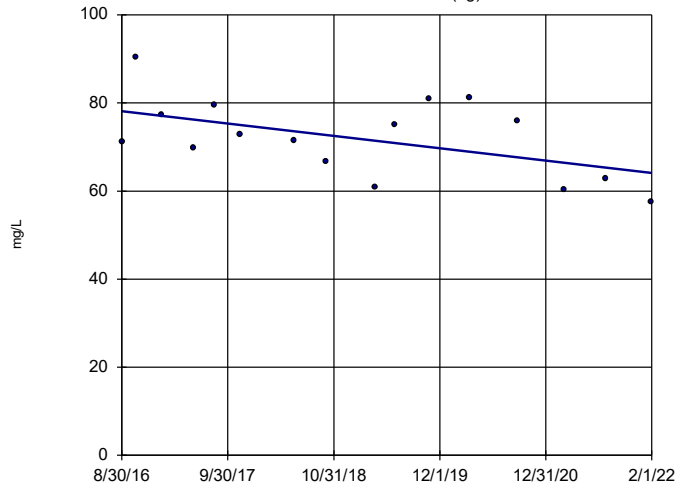


n = 19  
Slope = 2.687  
units per year.  
Mann-Kendall  
statistic = 54  
critical = 74  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Calcium Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-122 (bg)

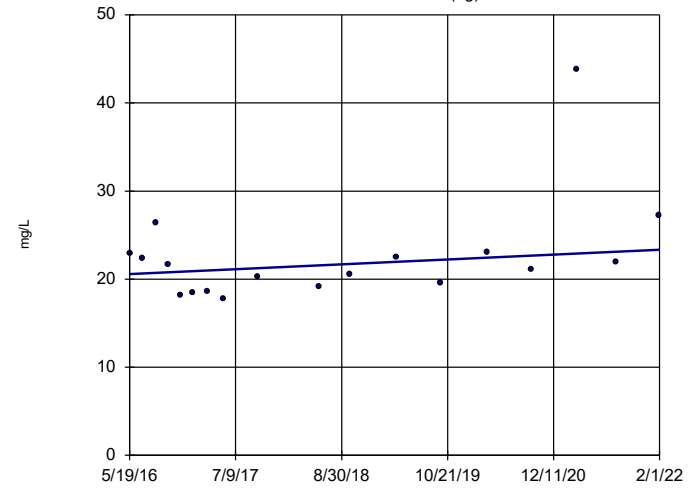


n = 16  
 Slope = -2.592  
 units per year.  
 Mann-Kendall  
 statistic = -34  
 critical = -58  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-2 (bg)

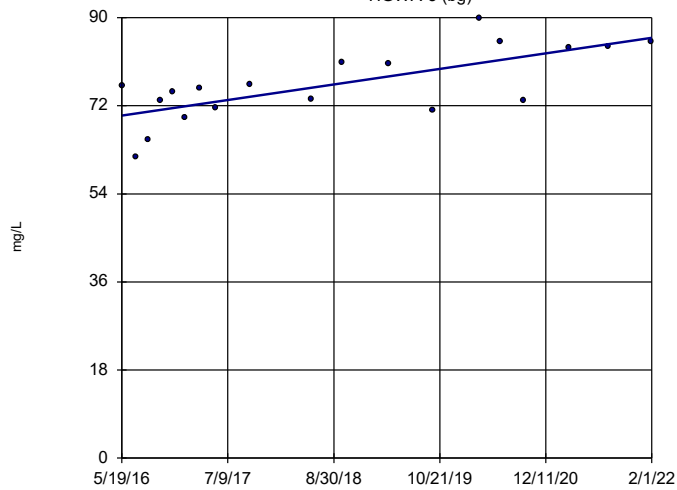


n = 18  
 Slope = 0.4885  
 units per year.  
 Mann-Kendall  
 statistic = 35  
 critical = 68  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-3 (bg)

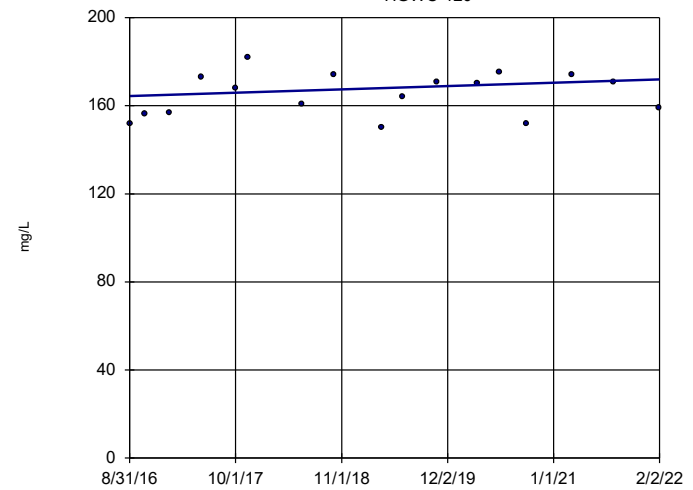


n = 19  
 Slope = 2.781  
 units per year.  
 Mann-Kendall  
 statistic = 86  
 critical = 74  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWC-120

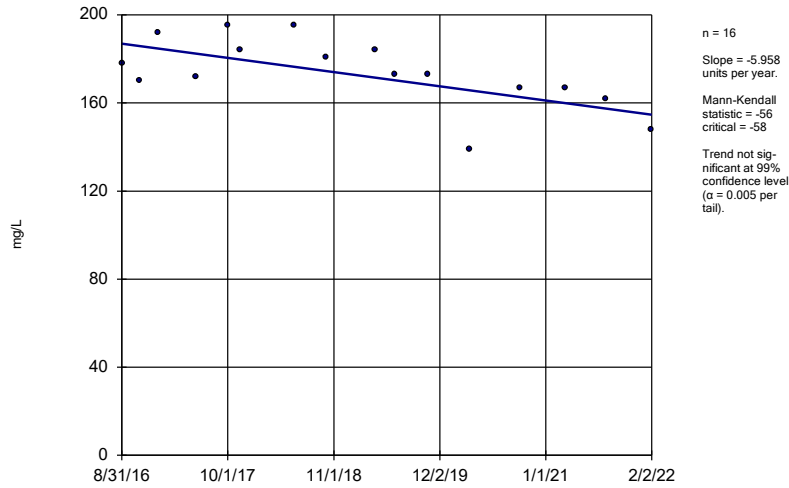


n = 17  
 Slope = 1.408  
 units per year.  
 Mann-Kendall  
 statistic = 25  
 critical = 63  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

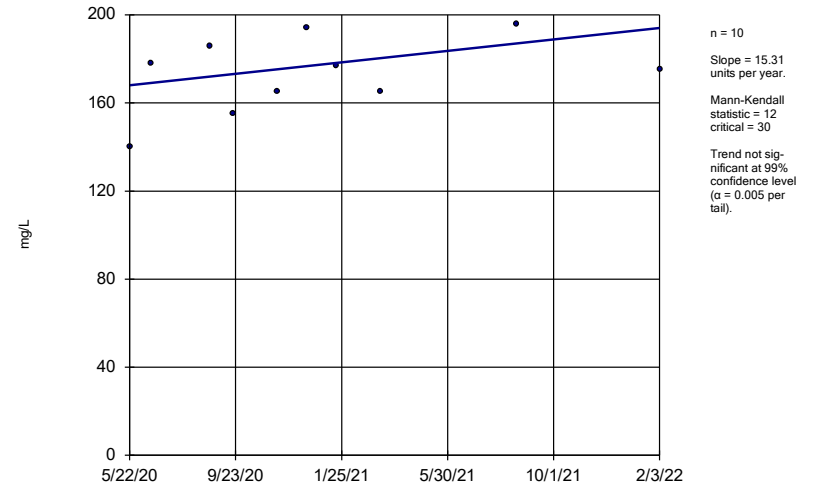
HGWC-121A



Constituent: Calcium Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

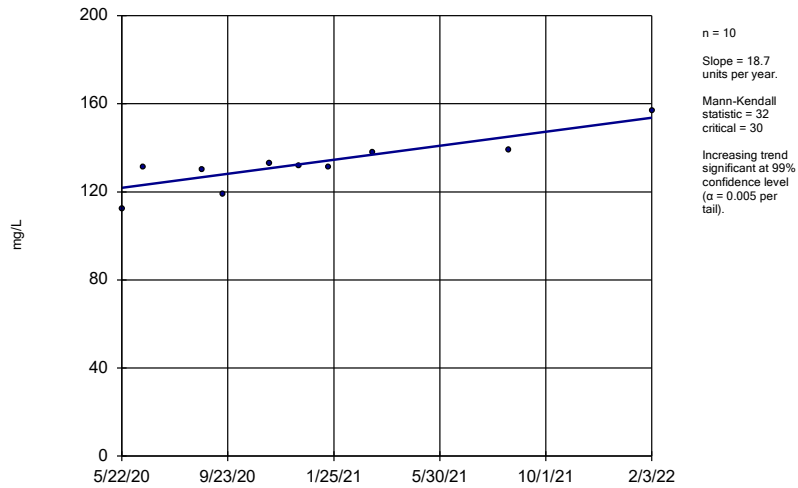
HGWC-125



Constituent: Calcium Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

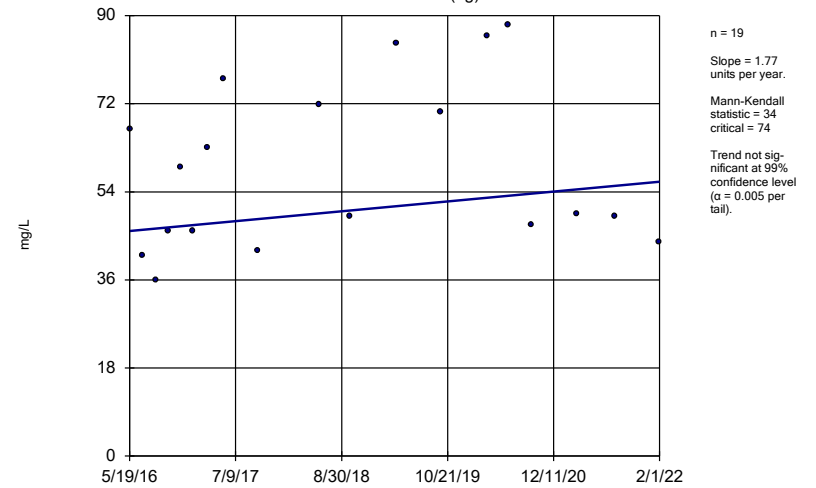
HGWC-126



Constituent: Calcium Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

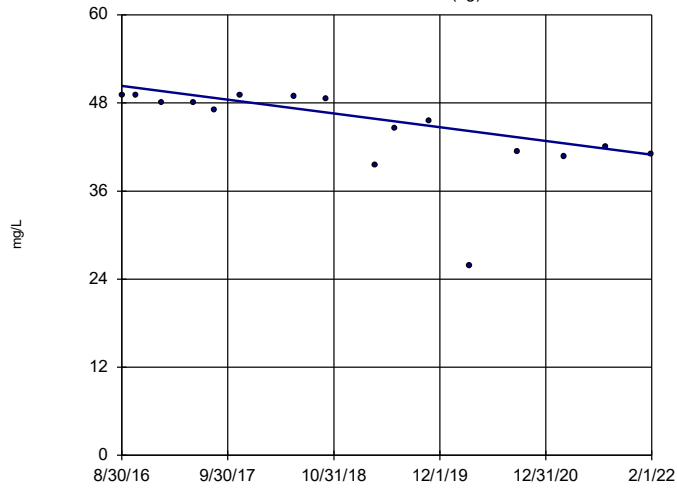
HGWA-1 (bg)



Constituent: Sulfate Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-122 (bg)

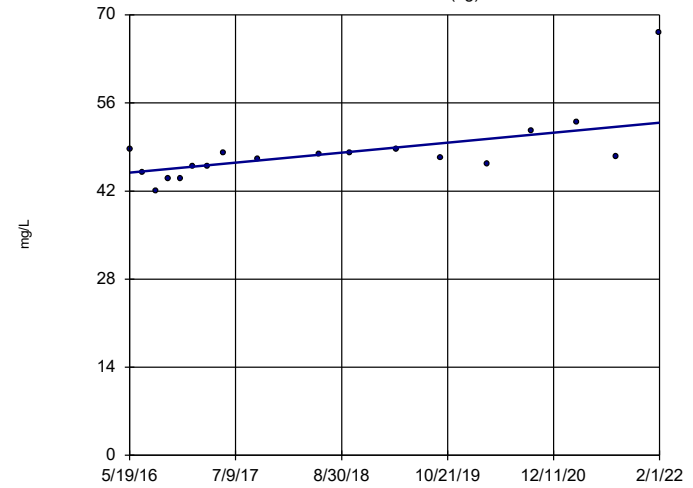


n = 16  
 Slope = -1.726  
 units per year.  
 Mann-Kendall  
 statistic = -70  
 critical = -58  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-2 (bg)

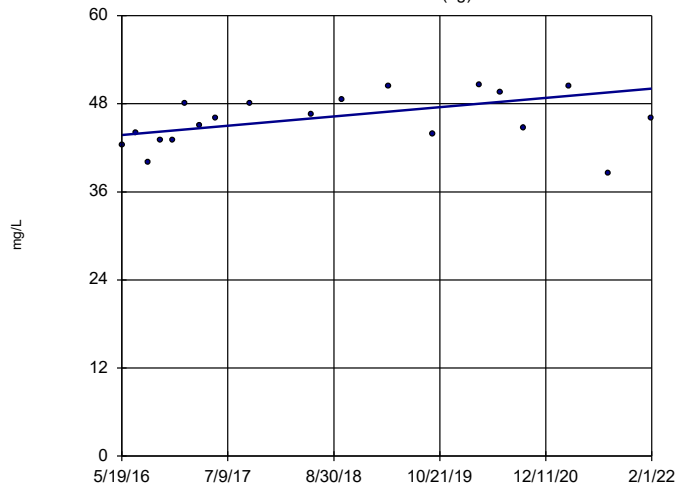


n = 18  
 Slope = 1.393  
 units per year.  
 Mann-Kendall  
 statistic = 83  
 critical = 68  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-3 (bg)

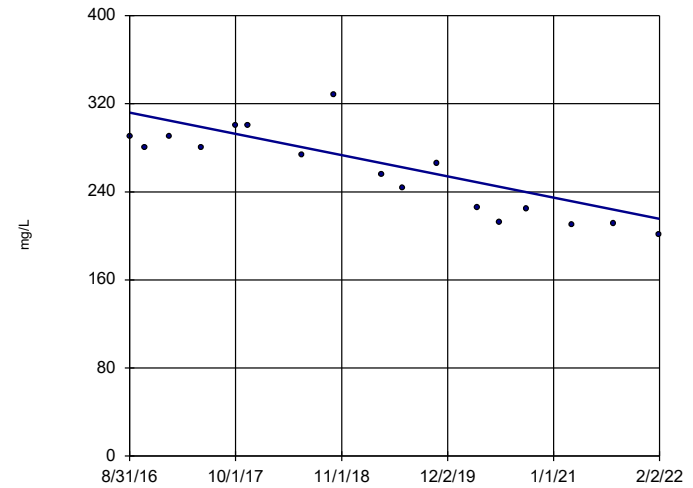


n = 19  
 Slope = 1.106  
 units per year.  
 Mann-Kendall  
 statistic = 61  
 critical = 74  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

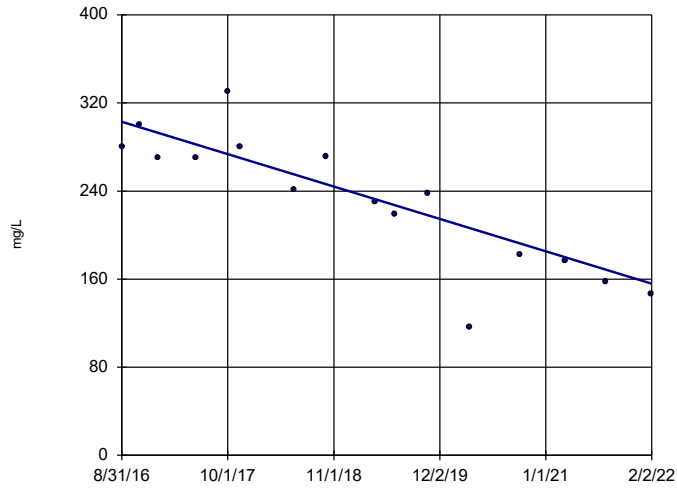
HGWC-120



n = 17  
 Slope = -17.77  
 units per year.  
 Mann-Kendall  
 statistic = -93  
 critical = -63  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

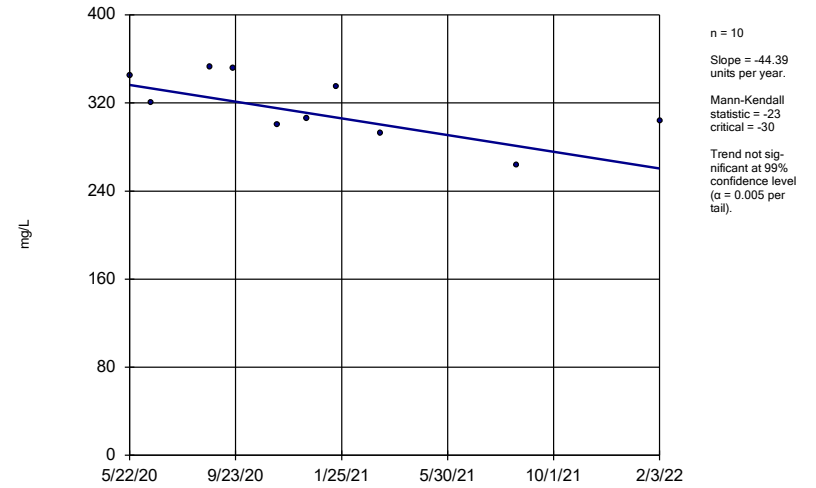
Constituent: Sulfate Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWC-121A



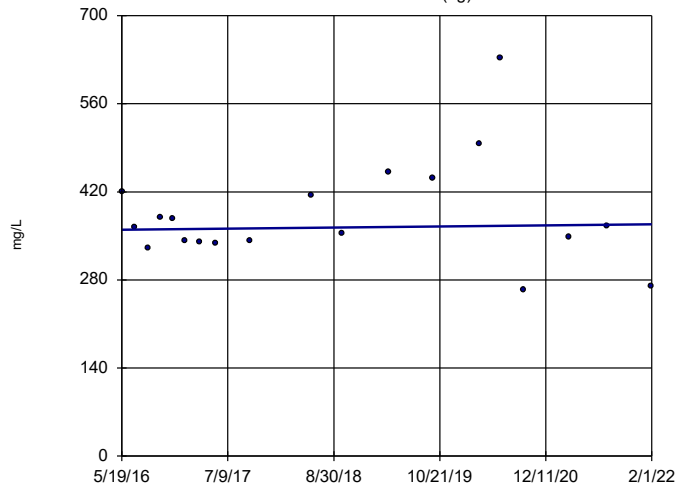
Constituent: Sulfate Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWC-125



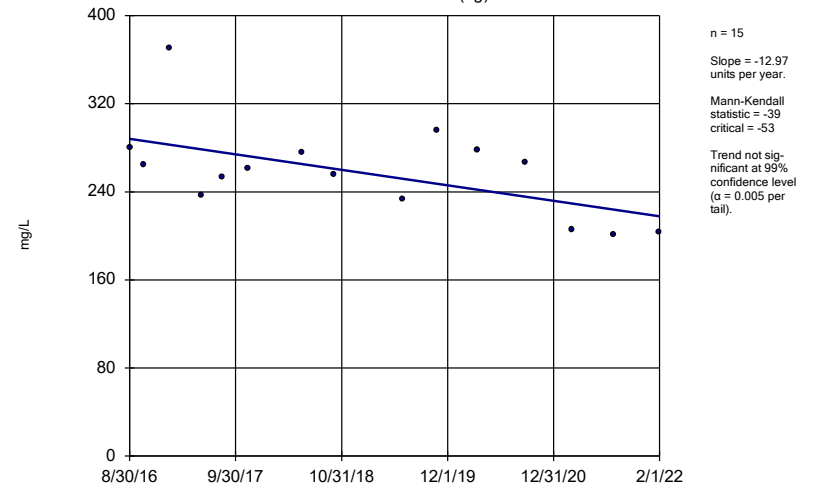
Constituent: Sulfate Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator HGWA-1 (bg)



Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

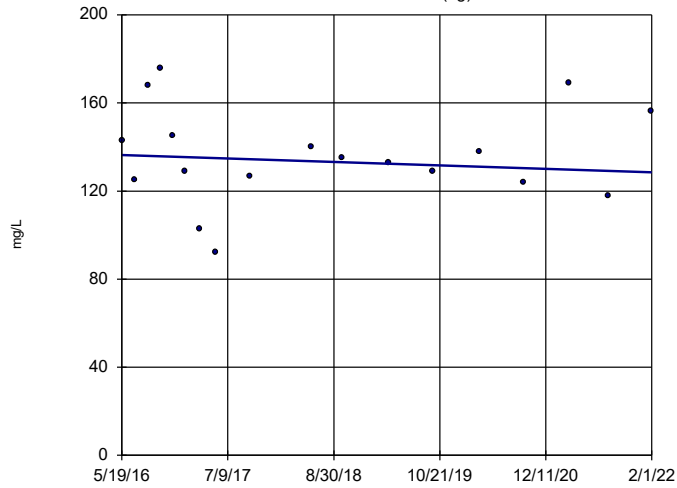
### Sen's Slope Estimator HGWA-122 (bg)



Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-2 (bg)

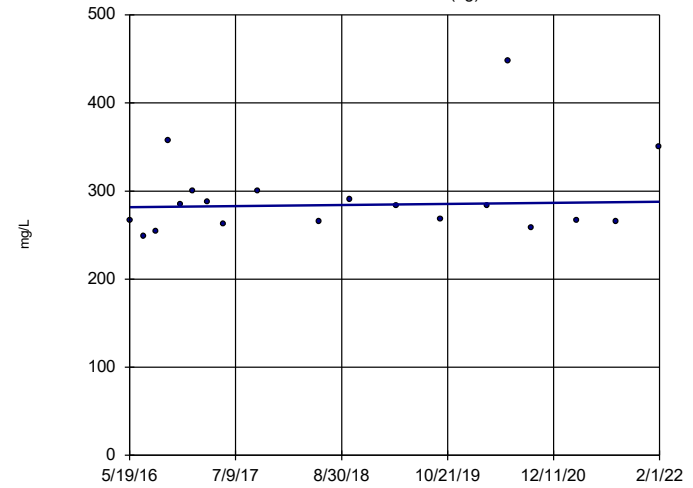


n = 18  
 Slope = -1.375 units per year.  
 Mann-Kendall statistic = -12  
 critical = -68  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWA-3 (bg)

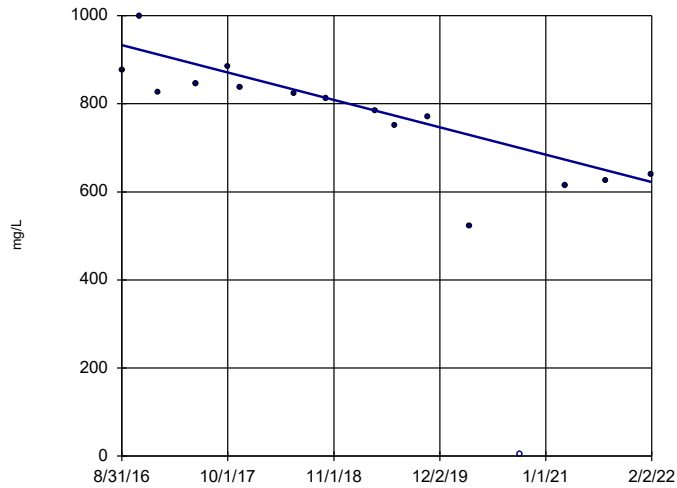


n = 19  
 Slope = 1.051 units per year.  
 Mann-Kendall statistic = 12  
 critical = 74  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWC-121A

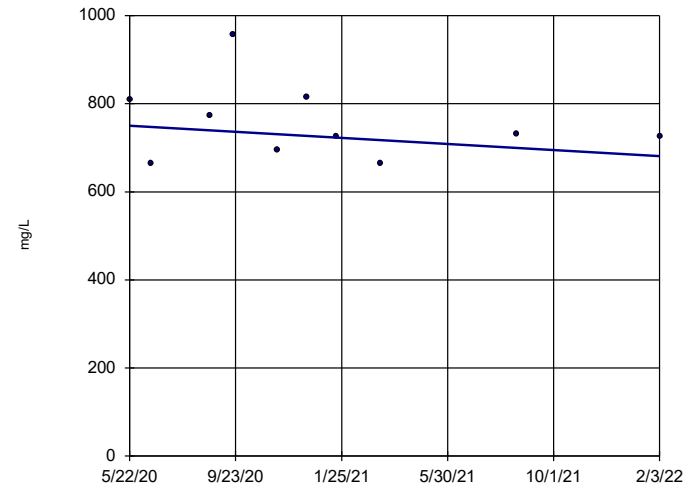


n = 16  
 Slope = -57.23 units per year.  
 Mann-Kendall statistic = -88  
 critical = -58  
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Sen's Slope Estimator

HGWC-125



n = 10  
 Slope = -40.67 units per year.  
 Mann-Kendall statistic = -8  
 critical = -30  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 3/28/2022 9:53 AM View: Trend Tests  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

FIGURE F.

# Upper Tolerance Limits Summary Table

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 3/28/2022, 9:58 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	n/a	92	n/a	n/a	83.7	n/a	n/a	0.008924	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	90	n/a	n/a	67.78	n/a	n/a	0.009888	NP Inter(NDs)
Barium (mg/L)	n/a	0.57	n/a	n/a	n/a	n/a	100	n/a	n/a	1	n/a	n/a	0.005921	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	92	n/a	n/a	82.61	n/a	n/a	0.008924	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	90	n/a	n/a	88.89	n/a	n/a	0.009888	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0079	n/a	n/a	n/a	n/a	94	n/a	n/a	76.6	n/a	n/a	0.008054	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.038	n/a	n/a	n/a	n/a	100	n/a	n/a	78	n/a	n/a	0.005921	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	4.36	n/a	n/a	n/a	n/a	93	n/a	n/a	0	n/a	n/a	0.008478	NP Inter(normality)
Fluoride (mg/L)	n/a	0.96	n/a	n/a	n/a	n/a	107	n/a	n/a	26.17	n/a	n/a	0.004135	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	94	n/a	n/a	64.89	n/a	n/a	0.008054	NP Inter(NDs)
Lithium (mg/L)	n/a	0.048	n/a	n/a	n/a	n/a	100	n/a	n/a	33	n/a	n/a	0.005921	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	n/a	72	n/a	n/a	93.06	n/a	n/a	0.02489	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a	102	n/a	n/a	67.65	n/a	n/a	0.005343	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	90	n/a	n/a	98.89	n/a	n/a	0.009888	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	90	n/a	n/a	98.89	n/a	n/a	0.009888	NP Inter(NDs)



FIGURE G.

<b>PLANT HAMMOND AP-3 GWPS</b>				
<b>Constituent Name</b>	<b>MCL</b>	<b>CCR-Rule Specified</b>	<b>Background Limit</b>	<b>GWPS</b>
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		0.57	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		4.36	5
Fluoride, Total (mg/L)	4		0.96	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.048	0.048
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

*\*GWPS = Groundwater Protection Standard*

FIGURE H.

# Confidence Intervals - All Results (No Significant)

Plant Hammond    Client: Southern Company    Data: Hammond AP-3    Printed 3/28/2022, 10:05 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	14	0.002914	0.0003207	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-125	0.003	0.00061	0.006	No	10	0.002508	0.001038	80	None	No	0.011	NP (NDs)
Antimony (mg/L)	HGWC-126	0.003	0.00043	0.006	No	10	0.002483	0.00109	80	None	No	0.011	NP (NDs)
Antimony (mg/L)	MW-32	0.003	0.00035	0.006	No	5	0.00247	0.001185	80	None	No	0.031	NP (NDs)
Antimony (mg/L)	MW-46D	0.003	0.00041	0.006	No	4	0.002353	0.001295	75	None	No	0.0625	NP (NDs)
Arsenic (mg/L)	HGWC-120	0.005	0.001	0.01	No	12	0.003417	0.001967	58.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-121A	0.005	0.0014	0.01	No	12	0.004067	0.001691	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-124	0.005	0.0006	0.01	No	12	0.004633	0.00127	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-125	0.005	0.00081	0.01	No	9	0.003934	0.001715	66.67	None	No	0.002	NP (NDs)
Arsenic (mg/L)	HGWC-126	0.005	0.00071	0.01	No	9	0.003802	0.00187	66.67	None	No	0.002	NP (NDs)
Barium (mg/L)	HGWC-120	0.05196	0.04641	2	No	16	0.04919	0.004264	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-121A	0.08132	0.06512	2	No	16	0.07322	0.01245	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-124	0.0731	0.06744	2	No	16	0.07027	0.004354	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-125	0.04653	0.04187	2	No	10	0.0442	0.002616	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-126	0.2582	0.2258	2	No	10	0.242	0.01814	0	None	No	0.01	Param.
Barium (mg/L)	MW-32	0.06043	0.05157	2	No	6	0.056	0.003225	0	None	No	0.01	Param.
Barium (mg/L)	MW-39	0.06018	0.05782	2	No	5	0.059	0.0007071	0	None	No	0.01	Param.
Barium (mg/L)	MW-41	0.07396	0.06204	2	No	6	0.068	0.004336	0	None	No	0.01	Param.
Barium (mg/L)	MW-46D	0.0458	0.0147	2	No	4	0.03025	0.00685	0	None	No	0.01	Param.
Chromium (mg/L)	HGWC-120	0.005	0.0015	0.1	No	16	0.004242	0.001639	81.25	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-121A	0.005	0.0005	0.1	No	16	0.004719	0.001125	93.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-124	0.005	0.00051	0.1	No	16	0.004436	0.001542	87.5	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-125	0.005	0.00058	0.1	No	10	0.003691	0.002109	70	None	No	0.011	NP (NDs)
Chromium (mg/L)	HGWC-126	0.005	0.005	0.1	No	10	0.004596	0.001278	90	None	No	0.011	NP (NDs)
Chromium (mg/L)	MW-32	0.005	0.00058	0.1	No	6	0.004263	0.001804	83.33	None	No	0.0155	NP (NDs)
Chromium (mg/L)	MW-41	0.005	0.0009	0.1	No	6	0.004317	0.001674	83.33	None	No	0.0155	NP (NDs)
Chromium (mg/L)	MW-46D	0.005	0.00075	0.1	No	4	0.003937	0.002125	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	HGWC-120	0.004251	0.0029	0.038	No	16	0.003631	0.001185	0	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	HGWC-121A	0.005	0.0005	0.038	No	16	0.004131	0.001868	81.25	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-125	0.01232	0.007244	0.038	No	10	0.00978	0.002843	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-32	0.004988	0.003079	0.038	No	6	0.004033	0.0006947	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-39	0.002829	0.002331	0.038	No	5	0.00258	0.0001483	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-41	0.0012	0.00056	0.038	No	6	0.0007183	0.0002409	0	None	No	0.0155	NP (normality)
Cobalt (mg/L)	MW-46D	0.005	0.00041	0.038	No	4	0.003852	0.002295	75	None	No	0.0625	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	HGWC-120	1.114	0.6303	5	No	15	0.8721	0.3569	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-121A	1.168	0.4489	5	No	15	0.8085	0.5306	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-124	0.9139	0.6097	5	No	15	0.7618	0.2244	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-125	1.488	0.5696	5	No	9	1.029	0.4756	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-126	1.739	0.9309	5	No	9	1.334	0.4194	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-32	1.718	0.06275	5	No	5	0.8904	0.4939	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-39	1.811	-0.07373	5	No	4	0.8688	0.4151	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-41	1.712	0.08726	5	No	5	0.8994	0.4847	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-120	1	0.36	4	No	19	0.6447	0.3705	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-121A	0.2	0.14	4	No	17	0.2479	0.269	0	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-124	0.11	0.05	4	No	17	0.09871	0.08077	41.18	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-125	0.1712	0.1108	4	No	10	0.141	0.03381	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-126	0.4922	0.4338	4	No	10	0.463	0.03268	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-32	0.363	0.2713	4	No	7	0.3171	0.03861	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-39	0.3446	0.2587	4	No	6	0.3017	0.03125	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-41	0.2635	0.1998	4	No	6	0.2317	0.02317	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-46D	1.202	0.6622	4	No	5	0.932	0.161	0	None	No	0.01	Param.

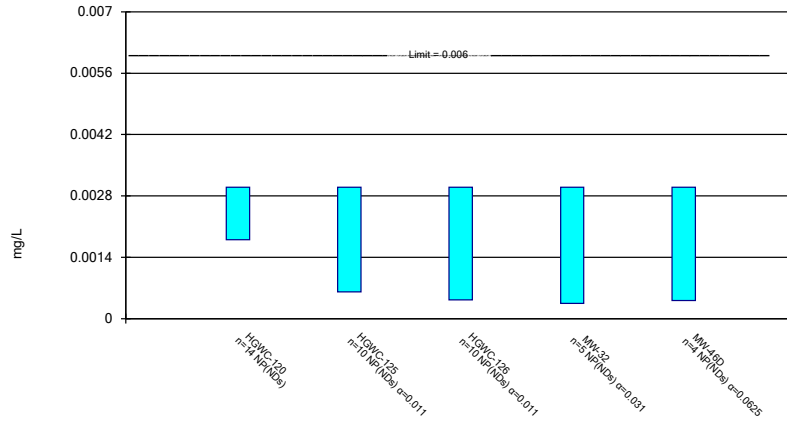
# Confidence Intervals - All Results (No Significant)

Plant Hammond Client: Southern Company Data: Hammond AP-3 Printed 3/28/2022, 10:05 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	HGWC-120	0.001	0.0002	0.015	No	16	0.0008356	0.0003542	81.25	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-121A	0.001	0.00036	0.015	No	16	0.0008488	0.0003297	81.25	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-124	0.001	0.000075	0.015	No	16	0.0007092	0.0004456	68.75	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-125	0.001	0.000047	0.015	No	10	0.0005453	0.0004802	50	None	No	0.011	NP (normality)
Lead (mg/L)	HGWC-126	0.001	0.000045	0.015	No	10	0.0007133	0.0004616	70	None	No	0.011	NP (NDs)
Lead (mg/L)	MW-46D	0.001	0.000048	0.015	No	4	0.000762	0.000476	75	None	No	0.0625	NP (NDs)
Lithium (mg/L)	HGWC-120	0.0337	0.024	0.048	No	16	0.02941	0.004779	0	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-121A	0.00906	0.007765	0.048	No	16	0.008413	0.0009959	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-124	0.015	0.001	0.048	No	16	0.005451	0.00665	31.25	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-125	0.005939	0.003841	0.048	No	10	0.00489	0.001176	0	None	No	0.01	Param.
Lithium (mg/L)	HGWC-126	0.004185	0.003215	0.048	No	10	0.0037	0.0005437	0	None	No	0.01	Param.
Lithium (mg/L)	MW-32	0.034	0.03067	0.048	No	6	0.03233	0.001211	0	None	No	0.01	Param.
Lithium (mg/L)	MW-39	0.03331	0.0292	0.048	No	6	0.02967	0.007285	16.67	Kaplan-Meier	x^5	0.01	Param.
Lithium (mg/L)	MW-41	0.0321	0.02623	0.048	No	6	0.02917	0.002137	0	None	No	0.01	Param.
Lithium (mg/L)	MW-46D	0.01834	-0.0002851	0.048	No	4	0.009025	0.004101	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-120	0.0002	0.00007	0.002	No	12	0.0001758	0.0000568	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	HGWC-124	0.0002	0.000051	0.002	No	12	0.0001876	0.00004301	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	HGWC-120	0.03786	0.02612	0.1	No	16	0.03199	0.009023	0	None	No	0.01	Param.
Molybdenum (mg/L)	HGWC-124	0.005	0.00091	0.1	No	16	0.002296	0.001889	31.25	None	No	0.01	NP (normality)
Molybdenum (mg/L)	HGWC-125	0.009423	0.0007648	0.1	No	10	0.006189	0.006505	30	Kaplan-Meier	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-32	0.06327	0.05873	0.1	No	8	0.061	0.002138	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-39	0.064	0.012	0.1	No	7	0.05529	0.0191	0	None	No	0.008	NP (normality)
Molybdenum (mg/L)	MW-41	0.04775	0.03391	0.1	No	6	0.04083	0.005037	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-46D	0.02646	-0.00696	0.1	No	5	0.0103	0.01073	20	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	HGWC-120	0.005	0.002	0.05	No	12	0.00475	0.000866	91.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-121A	0.005	0.0011	0.05	No	12	0.004675	0.001126	91.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-124	0.005	0.0014	0.05	No	12	0.0047	0.001039	91.67	None	No	0.01	NP (NDs)

### Non-Parametric Confidence Interval

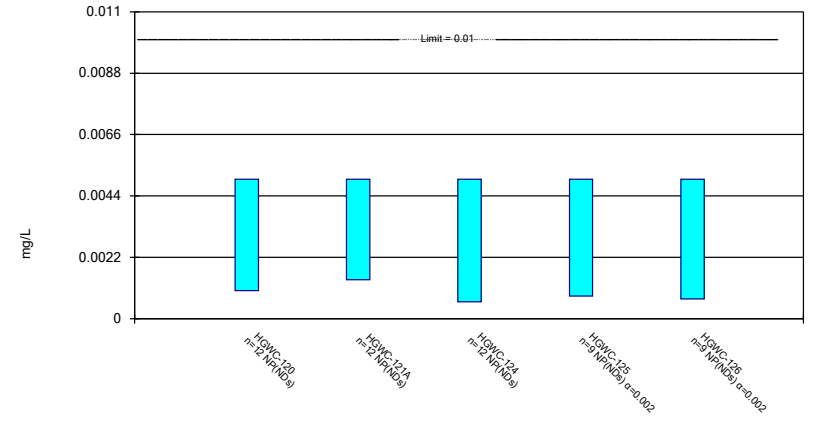
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Antimony Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

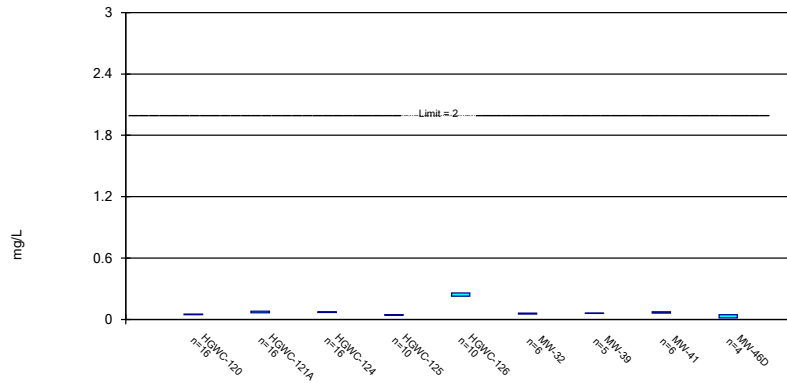
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Arsenic Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

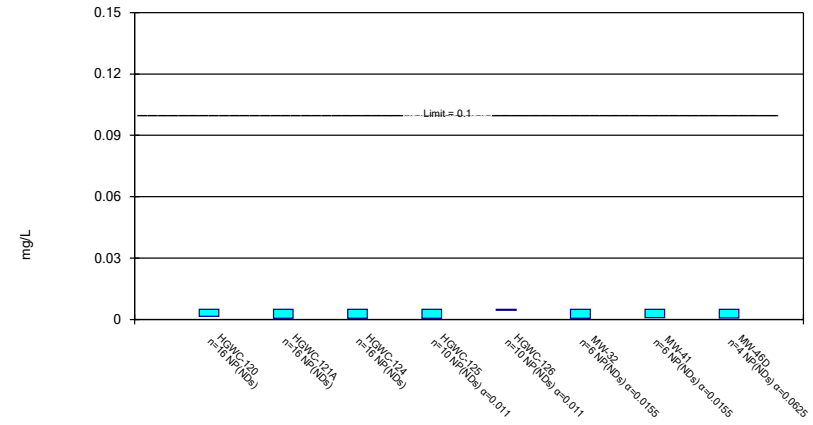
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

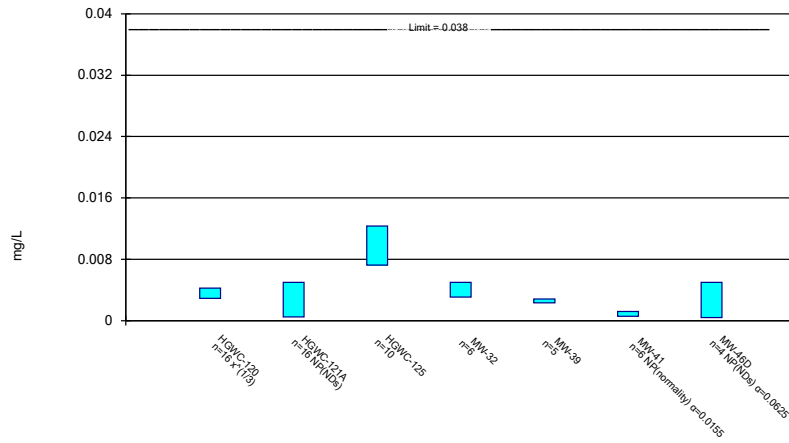
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

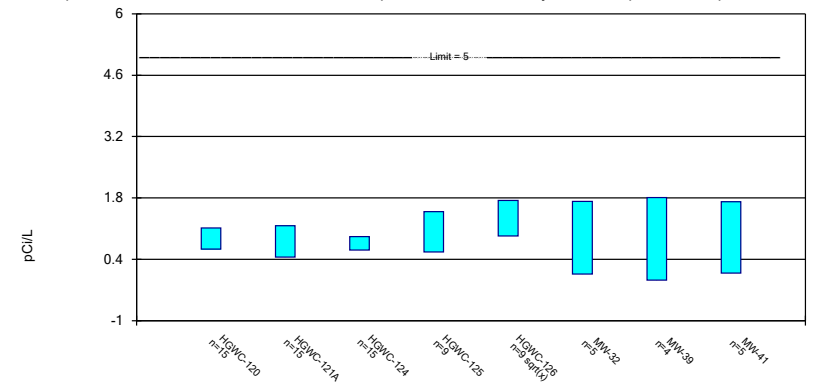
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric Confidence Interval

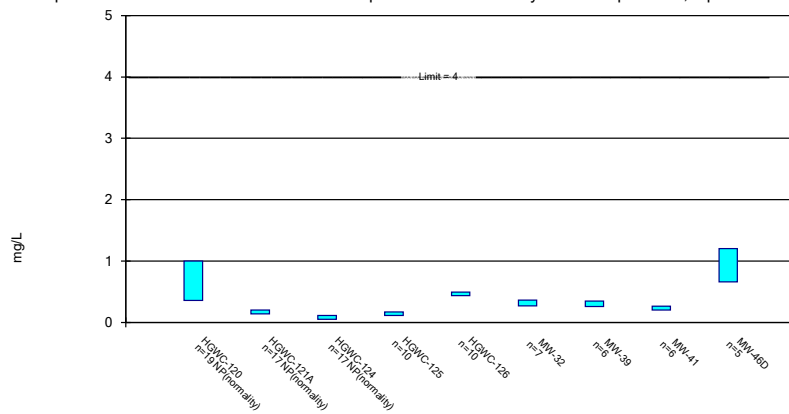
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

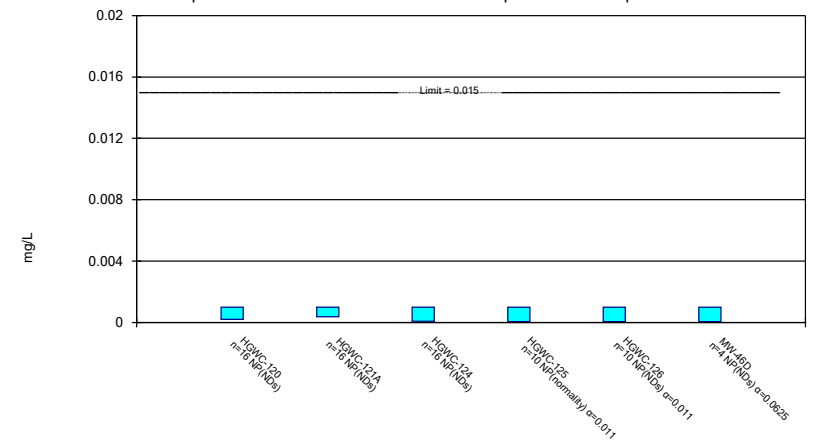
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

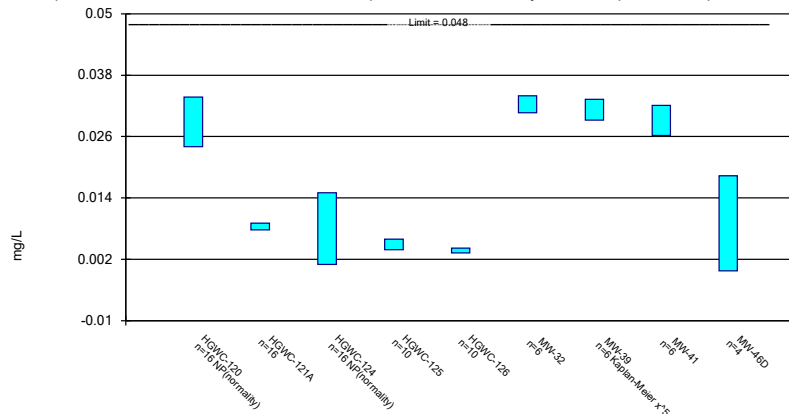
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Lead Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

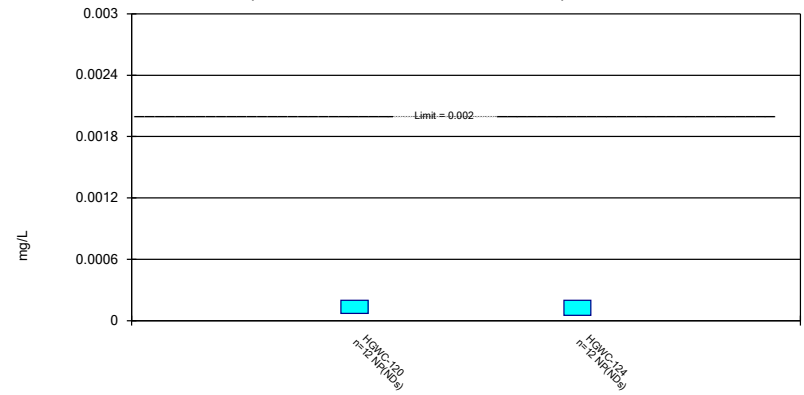
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

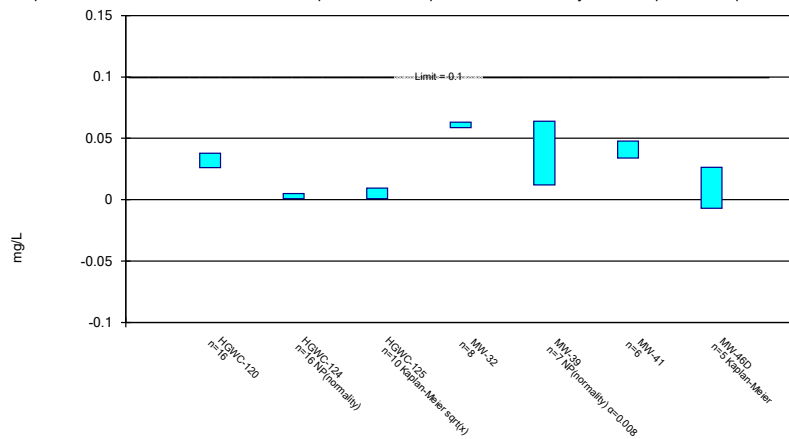
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Parametric and Non-Parametric (NP) Confidence Interval

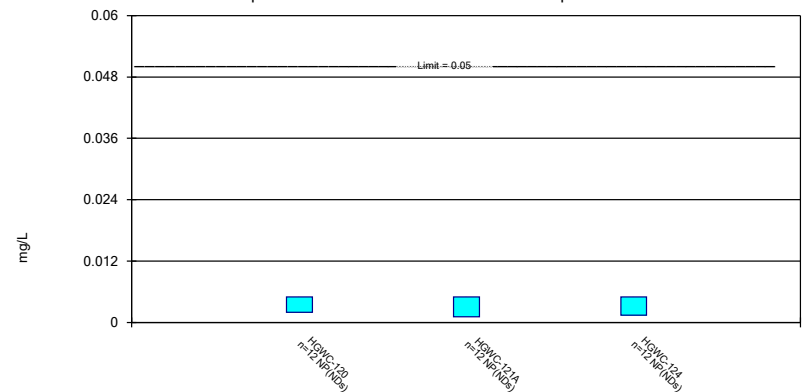
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 3/28/2022 10:03 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3



# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-125	HGWC-126	MW-32	MW-46D
8/31/2016	<0.003				
10/26/2016	<0.003				
1/27/2017	<0.003				
5/25/2017	<0.003				
10/2/2017	<0.003				
11/15/2017	<0.003				
6/5/2018	<0.003				
10/2/2018	<0.003				
8/22/2019	<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			0.00035 (J)	
9/18/2020			<0.003		
9/21/2020	<0.003	<0.003			
9/25/2020					<0.003
9/28/2020				<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)		0.00041 (J)
3/15/2021				<0.003	
8/16/2021	<0.003				<0.003
8/18/2021				<0.003	
8/19/2021		<0.003	<0.003		
2/2/2022	<0.003				
2/3/2022		<0.003	<0.003	<0.003	<0.003
Mean	0.002914	0.002508	0.002483	0.00247	0.002353
Std. Dev.	0.0003207	0.001038	0.00109	0.001185	0.001295
Upper Lim.	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.0018	0.00061	0.00043	0.00035	0.00041

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV

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)
Mean	0.003417	0.004067	0.004633	0.003934	0.003802
Std. Dev.	0.001967	0.001691	0.00127	0.001715	0.00187
Upper Lim.	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.001	0.0014	0.0006	0.00081	0.00071

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126	MW-32	MW-39	MW-41	MW-46D
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				0.062			
5/22/2020				0.048	0.24				
6/15/2020								0.074	
6/16/2020				0.049	0.24				
8/25/2020				0.045	0.23				
8/26/2020	0.041	0.057				0.055	0.059	0.066	
8/27/2020			0.062						
9/18/2020					0.21				
9/21/2020	0.046			0.042					
9/25/2020									0.04
9/28/2020		0.056	0.071			0.053	0.058	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				0.03
3/15/2021		0.059	0.071			0.057	0.059	0.063	
8/16/2021	0.052	0.06	0.069						0.026
8/18/2021						0.054	0.06	0.064	
8/19/2021				0.044	0.27				
2/2/2022	0.054	0.064	0.072				0.059	0.07	
2/3/2022				0.043	0.24	0.055			0.025
Mean	0.04919	0.07322	0.07027	0.0442	0.242	0.056	0.059	0.068	0.03025
Std. Dev.	0.004264	0.01245	0.004354	0.002616	0.01814	0.003225	0.0007071	0.004336	0.00685
Upper Lim.	0.05196	0.08132	0.0731	0.04653	0.2582	0.06043	0.06018	0.07396	0.0458
Lower Lim.	0.04641	0.06512	0.06744	0.04187	0.2258	0.05157	0.05782	0.06204	0.0147

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126	MW-32	MW-41	MW-46D
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)				<0.005		
5/22/2020				0.00058 (J)	<0.005			
6/15/2020							<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				<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								0.00075 (J)
9/28/2020		<0.005	<0.005			0.00058 (J)	<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			<0.005
3/15/2021		<0.005	<0.005			<0.005	0.0009 (J)	
8/16/2021	<0.005	<0.005	<0.005					<0.005
8/18/2021						<0.005	<0.005	
8/19/2021				<0.005	<0.005			
2/2/2022	<0.005	<0.005	<0.005				<0.005	
2/3/2022				<0.005	<0.005	<0.005		<0.005
Mean	0.004242	0.004719	0.004436	0.003691	0.004596	0.004263	0.004317	0.003937
Std. Dev.	0.001639	0.001125	0.001542	0.002109	0.001278	0.001804	0.001674	0.002125
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0015	0.0005	0.00051	0.00058	0.005	0.00058	0.0009	0.00075

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-125	MW-32	MW-39	MW-41	MW-46D
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		0.0031 (J)			
5/22/2020			0.01				
6/15/2020						0.0012 (J)	
6/16/2020			0.0096				
8/25/2020			0.0087				
8/26/2020	0.0023 (J)	<0.005		0.0048 (J)	0.0026 (J)	0.00068 (J)	
9/21/2020	0.0041 (J)		0.012				
9/25/2020							0.00041 (J)
9/28/2020		<0.005		0.0047 (J)	0.0026 (J)	0.00066 (J)	
11/12/2020			0.012				
12/16/2020			0.0055				
1/20/2021			0.012				
3/12/2021	0.0027 (J)		0.014				<0.005
3/15/2021		<0.005		0.0044 (J)	0.0024 (J)	0.00057 (J)	
8/16/2021	0.0037 (J)	<0.005					<0.005
8/18/2021				0.0036 (J)	0.0025 (J)	0.00064 (J)	
8/19/2021			0.0054				
2/2/2022	0.0072	<0.005			0.0028 (J)	0.00056 (J)	
2/3/2022			0.0086	0.0036 (J)			<0.005
Mean	0.003631	0.004131	0.00978	0.004033	0.00258	0.0007183	0.003852
Std. Dev.	0.001185	0.001868	0.002843	0.0006947	0.0001483	0.0002409	0.002295
Upper Lim.	0.004251	0.005	0.01232	0.004988	0.002829	0.0012	0.005
Lower Lim.	0.0029	0.0005	0.007244	0.003079	0.002331	0.00056	0.00041

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126	MW-32	MW-39	MW-41
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)				1.51		
5/22/2020				1.1 (U)	1.82			
6/15/2020								0.948 (U)
6/16/2020				1.62	1.82			
8/25/2020				1.65	1.82			
8/26/2020	0.357 (U)	1.96				0.281 (U)	1.38	1.53
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)			1.01 (U)	1.02 (U)	0.409 (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)					
8/18/2021						1.14	0.619 (U)	1.18
8/19/2021				0.721 (U)	1.11			
2/2/2022	0.816 (U)	0.254 (U)	0.564 (U)				0.456 (U)	0.43 (U)
2/3/2022				0.257 (U)	1.51	0.511 (U)		
Mean	0.8721	0.8085	0.7618	1.029	1.334	0.8904	0.8688	0.8994
Std. Dev.	0.3569	0.5306	0.2244	0.4756	0.4194	0.4939	0.4151	0.4847
Upper Lim.	1.114	1.168	0.9139	1.488	1.739	1.718	1.811	1.712
Lower Lim.	0.6303	0.4489	0.6097	0.5696	0.9309	0.06275	-0.07373	0.08726

# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126	MW-32	MW-39	MW-41	MW-46D
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								
1/3/2020						0.36			
3/24/2020			<0.1						
3/25/2020	0.43	0.095 (J)				0.34			
3/27/2020							0.29		
5/22/2020				0.1 (J)	0.46				
6/15/2020	0.37							0.21	
6/16/2020				0.12	0.44				
8/25/2020				0.16	0.52				
8/26/2020	0.48	0.16				0.33	0.32	0.24	
8/27/2020			<0.1						
9/18/2020					0.43				
9/21/2020	0.33			0.11					
9/25/2020									0.68
9/28/2020		0.15	<0.1			0.33	0.33	0.25	
11/11/2020					0.45				1
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				0.88
3/15/2021		0.16	<0.1			0.3	0.33	0.26	
8/16/2021	0.39	0.15	<0.1						1
8/18/2021						0.24	0.25	0.2	
8/19/2021				0.17	0.43				
2/2/2022	0.36	0.15	<0.1				0.29	0.23	
2/3/2022				0.18	0.51	0.32			1.1
Mean	0.6447	0.2479	0.09871	0.141	0.463	0.3171	0.3017	0.2317	0.932
Std. Dev.	0.3705	0.269	0.08077	0.03381	0.03268	0.03861	0.03125	0.02317	0.161
Upper Lim.	1	0.2	0.11	0.1712	0.4922	0.363	0.3446	0.2635	1.202
Lower Lim.	0.36	0.14	0.05	0.1108	0.4338	0.2713	0.2587	0.1998	0.6622

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126	MW-46D
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						4.8E-05 (J)
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)	<0.001
3/15/2021		0.00015 (J)	<0.001			
8/16/2021	<0.001	<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	<0.001
Mean	0.0008356	0.0008488	0.0007092	0.0005453	0.0007133	0.000762
Std. Dev.	0.0003542	0.0003297	0.0004456	0.0004802	0.0004616	0.000476
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.0002	0.00036	7.5E-05	4.7E-05	4.5E-05	4.8E-05



# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-121A	HGWC-124	HGWC-125	HGWC-126	MW-32	MW-39	MW-41	MW-46D
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)				0.034			
3/27/2020							<0.03		
5/22/2020				0.0052 (J)	0.0046 (J)				
6/15/2020								0.028 (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)				0.031	0.031	0.027 (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									0.015 (J)
9/28/2020		0.0076 (J)	0.0011 (J)			0.032	0.034	0.028 (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)				0.0084 (J)
3/15/2021		0.0077 (J)	0.001 (J)			0.033	0.032	0.03 (J)	
8/16/2021	0.025 (J)	0.0075 (J)	0.0011 (J)						0.0062 (J)
8/18/2021						0.031	0.032	0.029 (J)	
8/19/2021				0.0074 (J)	0.0032 (J)				
2/2/2022	0.025 (J)	0.0082 (J)	0.0012 (J)				0.034	0.033	
2/3/2022				0.0057 (J)	0.0038 (J)	0.033			0.0065 (J)
Mean	0.02941	0.008413	0.005451	0.00489	0.0037	0.03233	0.02967	0.02917	0.009025
Std. Dev.	0.004779	0.0009959	0.00665	0.001176	0.0005437	0.001211	0.007285	0.002137	0.004101
Upper Lim.	0.0337	0.00906	0.015	0.005939	0.004185	0.034	0.03331	0.0321	0.01834
Lower Lim.	0.024	0.007765	0.001	0.003841	0.003215	0.03067	0.0292	0.02623	-0.0002851

# Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV  
Plant Hammond Client: Southern Company Data: Hammond AP-3

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	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
Mean	0.0001758	0.0001876
Std. Dev.	5.68E-05	4.301E-05
Upper Lim.	0.0002	0.0002
Lower Lim.	7E-05	5.1E-05

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV  
 Plant Hammond Client: Southern Company Data: Hammond AP-3

	HGWC-120	HGWC-124	HGWC-125	MW-32	MW-39	MW-41	MW-46D
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						
1/3/2020				0.06			
1/22/2020				0.059			
3/24/2020		0.001 (J)					
3/25/2020	0.034			0.062			
3/27/2020					0.012		
4/24/2020					0.062		
5/22/2020			<0.01				
6/15/2020						0.035	
6/16/2020			<0.01				
8/25/2020			0.00099 (J)				
8/26/2020	0.05			0.065	0.064	0.039	
8/27/2020		0.00091 (J)					
9/21/2020	0.043		<0.01				
9/25/2020							0.027
9/28/2020		0.0009 (J)		0.062	0.062	0.036	
11/11/2020							0.015
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)				0.0033 (J)
3/15/2021		0.00092 (J)		0.061	0.062	0.046	
8/16/2021	0.035	0.00091 (J)					0.0012 (J)
8/18/2021				0.061	0.063	0.042	
8/19/2021			0.021				
2/2/2022	0.034	0.001 (J)			0.062	0.047	
2/3/2022			0.0067 (J)	0.058			<0.01
Mean	0.03199	0.002296	0.006189	0.061	0.05529	0.04083	0.0103
Std. Dev.	0.009023	0.001889	0.006505	0.002138	0.0191	0.005037	0.01073
Upper Lim.	0.03786	0.005	0.009423	0.06327	0.064	0.04775	0.02646
Lower Lim.	0.02612	0.00091	0.0007648	0.05873	0.012	0.03391	-0.00696

# Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 3/28/2022 10:05 AM View: Appendix IV

Plant Hammond Client: Southern Company Data: Hammond AP-3

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	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
Mean	0.00475	0.004675	0.0047
Std. Dev.	0.000866	0.001126	0.001039
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.002	0.0011	0.0014