



*Prepared for*

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

# **2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT**

## **PLANT HAMMOND ASH POND 2 (AP-2)**

*Prepared by*

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Project Number GW6581E

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### CERTIFICATION STATEMENT

This 2023 Annual Groundwater Monitoring and Corrective Action Report, Plant Hammond – Ash Pond 2 (AP-2) has been prepared in compliance with the United States Environmental Protection Agency Coal Combustion Residual Rule (40 Code of Federal Regulations [CFR] 257 Subpart D), specifically § 257.90(e), and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with Geosyntec Consultants, Inc. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management 391-3-4-.01.



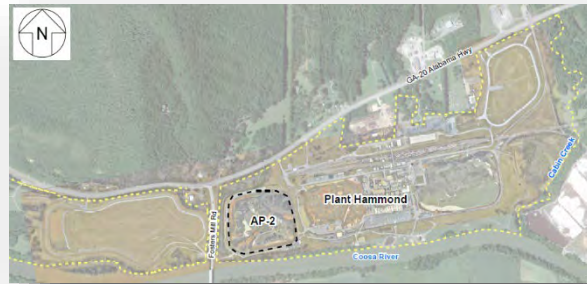
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## SUMMARY

This summary of the *2023 Annual Groundwater Monitoring and Corrective Action Report* provides the status of the groundwater monitoring and corrective action program for the reporting period from January to December 2023 (referred to herein as the “annual reporting period”) at Georgia Power Company’s (Georgia Power’s) Plant Hammond Ash Pond 2 (AP-2) (the Site). This summary was prepared by Geosyntec Consultants, Inc. (Geosyntec) on behalf of Georgia Power to meet the requirements listed in Part A, Section 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. Dewatered ash from AP-2 is excavated and transported to the nearby Huffaker Road facility, a permitted solid waste disposal location owned and operated by Georgia Power. The Site is located on the southwestern portion of the



Plant Hammond and the Site

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

Groundwater at the Site is monitored using a comprehensive monitoring well network that meets federal and state monitoring requirements. Routine sampling and reporting began after the background groundwater conditions were established between May 2016 and May 2017. Based on groundwater conditions at the Site, an assessment monitoring program and assessment of corrective measures program were established in January 2018 and January 2019, respectively.

During the annual reporting period, Geosyntec conducted two groundwater sampling events in January and August 2023 in support of the assessment monitoring program. Groundwater samples were submitted to Pace Analytical Services, LLC, for analysis. Per the federal CCR Rule, groundwater data from the annual assessment monitoring event conducted during the annual reporting period were evaluated in accordance with the

<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

certified statistical methods. That evaluation showed statistically significant values of Appendix III<sup>2</sup> and Appendix IV<sup>3</sup> constituents in excess of established groundwater protection standards (GWPS) in select monitoring wells, as summarized in the table below for the 2023 annual reporting period.

Appendix III Constituent	January 2023	August 2023
Boron	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18
Calcium	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18
Chloride	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18
Sulfate	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18
Total Dissolved Solids	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18	HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18
Appendix IV Constituent <sup>4</sup>	January 2023	August 2023
Cobalt	HGWC-18, MW-33, MW-35	HGWC-18, MW-33, MW-35

Based on a review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program for the annual reporting period, the Site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be posted to Georgia Power’s CCR Rule Compliance website and provided to GA EPD semiannually. A *Draft Remedy Selection Report*, which summarizes the evaluation and proposed selection of a corrective measure, or measures, was submitted to GA EPD on August 31, 2022. Following GA EPD’s approval of the *HGWC-18 Pilot Study Workplan* (Geosyntec, 2023a) and the *MW-33 and 35 Pilot Study Workplan* (Geosyntec, 2023b) on August 24, 2023, a pilot study was initiated at AP-2 in support of the ongoing Remedy Selection process.

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

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

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

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## LIST OF ACRONYMS AND ABBREVIATIONS

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



## 1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Residual Rule (federal CCR Rule) (40 Code of Federal Regulations [CFR] Part 257, Subpart D) and the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10, Geosyntec Consultants, Inc. (Geosyntec) has prepared this *2023 Annual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities conducted at Georgia Power Company (Georgia Power) Plant Hammond (Site) Ash Pond 2 (AP-2) for the reporting period of January through December 2023 (referred to herein as the “annual reporting period”).

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

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

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

## **1.1 Site Description and Background**

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

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

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

## **1.2 Regional Geology and Hydrogeologic Setting**

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

### **1.2.1 Regional and Site Geology**

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

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

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

### **1.2.2 Hydrogeologic Setting**

The uppermost aquifer at AP-2 is a regional groundwater aquifer that occurs primarily in the alluvial, colluvial, and residuum and within the weathered and fractured bedrock. The movement of groundwater in the soil can be characterized as low-to moderate permeability, porous media flow based on hydraulic field testing at the Site (slug testing). The groundwater flow in the shallow underlying bedrock is characterized as fracture flow and is expected to be very low permeability due to the preponderance of shale beneath AP-2. The regional groundwater flow direction is expected to be from north to south; however, the local flow direction beneath AP-2 is predominantly east to west with an additional southerly component. Under post-closure conditions, the groundwater flow direction is anticipated to more closely resemble the regional flow regime (north to south toward the Coosa River). The August 2023 groundwater elevations are generally lower than those of prior monitoring events, likely due to site closure at AP-2.

### **1.3 Groundwater Monitoring Well Network**

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

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

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

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

## 2.0 GROUNDWATER MONITORING ACTIVITIES

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

### 2.1 Monitoring Well Installation and Maintenance

Thirteen piezometers (MW-55 through MW-59, INW-01, INW-02, and PT-01 through PT-06) were installed in June 2023; the locations of these 13 piezometers are shown on **Figure 2**. MW-55 through MW-59 were installed to support high-resolution site characterization. INW-01 and INW-02 were installed as injection points for the pilot study injection activities initiated in September 2023 in support of the ACM program. PT-01 through PT-06 were installed to specifically monitor the performance of the pilot study injections. A well installation report that includes detailed boring and well construction logs for the installation of these piezometers was submitted to GA EPD in October 2023 under separate cover and is provided in **Appendix A**.

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 January and August 2023, the networks were inspected, necessary corrective actions were identified and subsequently completed, as documented in **Appendix B**. This documentation was prepared under the direction of a professional geologist or engineer registered in the State of Georgia.

### 2.2 Assessment Monitoring

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

Pursuant to § 257.96, an ACM was initiated for AP-2 in January 2019. An *Assessment of Corrective Measures Report – Plant Hammond Ash Pond 2 (AP-2)* (ACM Report) was subsequently prepared for AP-2 (Geosyntec, 2019b) and submitted to GA EPD in June

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

In support of the routine assessment monitoring program, the annual assessment monitoring event was conducted in January and August 2023. The wells sampled and the dates the samples were collected at AP-2 during the annual reporting period are summarized in **Table 2**. Details of these events and analytical results are discussed in Section 3.

### **2.3 Additional Groundwater and Surface Water Evaluations**

Supplemental groundwater samples were collected from the entire AP-2 detection and assessment well networks during the August 2023 event and were analyzed for major cations (calcium, magnesium, potassium, and sodium), major anions (chloride, sulfate, and alkalinity [i.e., bicarbonate, carbonate, total]), iron, and manganese. The data were collected in support of evaluating the geochemical composition of the groundwater in conjunction with the ACM activities.

Due to the presence of surface water features immediately downgradient of select wells reporting SSLs, Georgia Power collected surface water samples in January and August 2023 from three locations in the unnamed creek west of AP-2 (AP2-Up, AP2-Mid, AP2-Down) and three locations in the Coosa River, as shown on **Figure 2** (i.e., H+0.25, H+0.35, H+0.75), to horizontally delineate identified SSLs of Appendix IV constituents in groundwater at AP-2. Georgia Power will continue collecting the surface water samples semiannually to support ACM efforts.

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

### **2.4 Assessment of Corrective Measures**

High-resolution site characterizations were completed in February 2023 to characterize and refine proposed in-situ injection treatment areas proximal to HGWC-18 and MW-33/MW-35. Seven direct push technology (DPT) borings were advanced near

HGWC-18 and seven borings near MW-33/MW-35 for the collection of remedial design parameters and screening-level groundwater data. These analytical results were used to determine the locations and depths of pilot study injection and performance monitoring piezometers. The high-resolution site characterization results were summarized in the *HGWC-18 Pilot Study Workplan* (Geosyntec, 2023a) and *MW-33 and MW-35 Pilot Study Workplan* (Geosyntec, 2023b).

To establish pre-injection baseline conditions, groundwater samples were collected from performance monitoring piezometers (INW-01, INW-02, and PT-01 through PT-06) in July and August 2023, prior to initiating injection activities in September 2023. Groundwater samples were analyzed for the complete suite of Appendix III and Appendix IV constituents, and select metals and inorganics necessary to evaluate the geochemistry of the groundwater. Post injection performance monitoring of these piezometers was initiated in mid-September 2023 in accordance with the pilot study workplans. Details of these events and analytical results are discussed in Section 6.

### 3.0 SAMPLING METHODOLOGY AND ANALYSES

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

#### 3.1 Groundwater and Surface Water Level Measurement

A synoptic round of depth-to-groundwater-level measurements were recorded from the AP-2 wells and piezometers during the January and August 2023 assessment monitoring event and used to calculate the corresponding groundwater elevations, which are presented in **Table 3**. The January 2023 groundwater elevations are generally representative of the groundwater elevations reported for prior monitoring events. The August 2023 groundwater elevations are generally lower than those of prior monitoring events, likely due to site closure of AP-2.

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

The groundwater and surface water elevation data were used to prepare a potentiometric surface map for the January and August 2023 gauging event, which is presented on **Figure 3** and **Figure 4**, respectively. Groundwater in the AP-2 area flows under the influence of topography from higher elevations on the northern and eastern side of the Site in a westerly direction beneath AP-2 with a southerly flow component. This groundwater flow pattern is consistent with previous observations.

#### 3.2 Groundwater Gradient and Flow Velocity

The horizontal groundwater hydraulic gradients within the uppermost aquifer beneath AP-2 was calculated using the groundwater elevation data from the January and August 2023 gauging events. A horizontal hydraulic gradient is commonly calculated between two points along the groundwater flow path perpendicular to groundwater elevation contours. Ideally, this flow path originates and concludes with groundwater elevations reported for two wells, but this may not be feasible and still remain perpendicular to the contours. The horizontal hydraulic gradient in this report was calculated between



upgradient and downgradient wells selected to provide the most accurate alignment possible relative to the interpreted groundwater flow path. The horizontal hydraulic gradient was calculated across the central portion of AP-2 between MW-18 and HGWC-17. The supporting calculations are presented in **Table 4**. The general trajectory of the flow path used in the calculations and associated potentiometric contour lines are shown on **Figure 3** and **Figure 4**. The calculated average hydraulic gradient along the westerly flow path lines for the annual reporting period is 0.0075 feet per foot (ft/ft).

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

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

where:

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

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

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

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

$L$  = distance between location 1 and 2

$n_e$  = Effective porosity

The horizontal hydraulic conductivity ( $K_h$ ) measurements were calculated from slug test data collected in AP-2 wells and piezometers. As presented in the HAR Rev 01, results were broadly grouped based on the lithology in which the wells or piezometers were screened. The geometric mean of the  $K_h$  values of the alluvium, colluvium, residuum, and partially weathered shale bedrock were used to represent the overall hydraulic conductivity at AP-2 of  $5.17 \times 10^{-4}$  centimeters per second (cm/sec) (1.47 feet per day [ft/day]) (Geosyntec, 2019c). An effective porosity value of 0.15 was used to represent average lithologic conditions at AP-2, derived based on review of literature (Kresic, 2007), observed site lithology, and professional judgement. Applying these values and the hydraulic gradient, the average groundwater flow velocity underneath AP-2 for the annual reporting period was calculated to be 0.073 ft/day.

### **3.3 Groundwater Sampling Procedures**

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

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

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

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

### **3.4 Laboratory Analyses**

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

### **3.5 Quality Assurance and Quality Control Summary**

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

In addition to collecting QA/QC samples, the data were validated based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and applicable federal guidance documents (USEPA, 2011; USEPA, 2017). Where necessary, the data were qualified with supporting documentation and justifications. The validated data are considered usable for meeting project objectives. The associated data validation reports are provided in **Appendix 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 annual reporting period. The data were analyzed by Groundwater Stats Consulting (GSC); the report generated from the analyses are provided in **Appendix D**.

### 4.1 Statistical Methods

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

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

#### 4.1.1 Appendix III Statistical Methods

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

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

#### 4.1.2 Appendix IV Statistical Methods

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

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

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

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

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

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

## **4.2 Statistical Analyses Results**

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

### **4.2.1 January 2023 Data**

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

Wells with SSLs were further evaluated using the Sen's Slope/Mann Kendall trend test (**Appendix D**). A statistically significant decreasing trend of cobalt was identified in January 2023 in HGWC-18. No statistically significant trends of cobalt were identified for MW-33 and MW-35 for the January 2023 data.

### **4.2.2 August 2023 Data**

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

Wells with SSLs were further evaluated using the Sen's Slope/Mann Kendall trend test (**Appendix D**). A statistically significant decreasing trend of cobalt was identified in August 2023 in HGWC-18. No statistically significant trends of cobalt were identified for MW-33 and MW-35 for the August 2023 data.

### **4.2.3 Summary of Statistical Analyses**

The SSLs identified for the annual reporting period are generally consistent with the 2022 annual reporting period.

## 5.0 NATURE AND EXTENT

Based on the groundwater data presented herein, the cobalt SSLs are horizontally and vertically delineated to below the site specific GWPS (0.038 mg/L) in HGWC-18, MW-33, and MW-35. The groundwater data from the January and August 2023 semiannual assessment monitoring events were used to generate the cobalt iso-concentration maps presented on **Figure 5** and **Figure 6**.

Delineation is determined by confidence intervals (statistical analysis) prepared for the assessment wells (**Appendix D**). On the northwest side of AP- 2, HGWC-18 is vertically delineated by MW-21D. The conceptual site model on the south side of the pond consists of southerly groundwater flow through alluvium toward the Coosa River. MW-33 is vertically delineated by MW-34D upgradient of the river. However, as groundwater nears the Coosa River, it begins to flow upward and join the Coosa River. As such, to properly characterize the deeper groundwater south of MW-34D as it migrates downgradient, MW-51 was installed with a shallower screen interval to not only horizontally delineate cobalt at MW-35 but also to account for the upward movement of groundwater adjacent to the river. Statistical analysis of the MW-51 groundwater data delineates the horizontal extent of the SSLs of cobalt in MW-33 and MW-35 and the vertical extent of cobalt in MW-35 to below the GWPS.

Due to the presence of a surface water feature (unnamed creek) west of AP-2 in the downgradient direction of HGWC-18 (refer to **Figure 2**), installation of additional wells to horizontally characterize this area is infeasible. For this reason, Georgia Power proactively began collecting surface water samples in July 2020. Cobalt was not detected above the laboratory reporting limit (0.0050 mg/L) in surface water samples collected in January or August 2023 from the three locations in the unnamed creek (AP2-Up, AP2-Mid, and AP2-Down) shown on **Figure 2**. No cobalt impacts to surface water have been detected; and therefore, the cobalt SSL observed in HGWC-18 is horizontally delineated.

Surface water samples were also collected from the Coosa River in January and August 2023. Three sampling locations (i.e., H+0.25, H+0.35, H+0.75) are in the vicinity of MW-33 and MW-35 and relevant to conditions at AP-2. These three locations are shown on **Figure 2**. Cobalt was not detected above the laboratory reporting limit (0.0050 mg/L) in any of the Coosa River samples. The surface water data supplements the horizontal and vertical groundwater delineation status provided by MW-51. The January and August

2023 data associated with the unnamed creek and the Coosa River surface water sampling events are presented in **Table 6** and the laboratory reports are included in **Appendix C**.



## 6.0 MONITORING PROGRAM STATUS

### 6.1 Assessment Monitoring Status

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

### 6.2 Assessment of Corrective Measures

A *Draft Remedy Selection Report* was submitted to GA EPD on August 31, 2022 (Geosyntec, 2022), in lieu of the *Semiannual Remedy Selection and Design Progress Reports* (semiannual progress reports) previously included in the appendix of the routine annual groundwater monitoring and corrective action reports. The *Draft Remedy Selection Report* was submitted under separate cover and is currently being reviewed by GA EPD. The report summarizes:

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

In the interim of GA EPD's review of the *Draft Remedy Selection Report*, the state agency issued a letter on September 23, 2022, stating their support for Georgia Power to initiate a pilot study at AP-2 to facilitate further remedy design. In June 2023, Georgia Power submitted to GA EPD both a Pilot Test Notification Form and separate workplans outlining the design and implementation of a pilot study in vicinity of HGWC-18 and MW-33/MW-35 (Geosyntec, 2023a, 2023b). GA EPD's Underground Injection Control

(UIC) Program approved the Pilot Test Notification Form on August 24, 2023. The *Pilot Study Post-Injection Event Report* requested by GA EPD Wastewater Regulatory Program is included in **Appendix E**, and summarizes the well installation activities completed in June 2023, baseline sampling activities completed in July and August 2023, and injection activities completed in September and October 2023 (Geosyntec, 2023d). Additional laboratory reports and field logs associated with post-injection performance monitoring events, and time series data trend plots for the performance monitoring piezometers through November 2023 are included in **Appendix E**. The groundwater analytical results from the pilot study monitoring events are summarized in **Table 8**. Results received after November 2023 will be summarized in the next groundwater monitoring and corrective action report.

### **6.3 Annual Potable Well Survey**

An updated potable well survey of potential groundwater wells within a two-mile radius of AP-2 was conducted in November 2023 and consisted of reviewing federal, state, county records, and online sources. Surveys conducted by Environmental Data Resources (EDR) are included in **Appendix F**. Additional federal, state, county records and online sources outside of the EDR survey were also reviewed. The Floyd County Health Department does not permit or regulate private wells, and therefore had no update to provide for the survey. The findings from the 2023 well survey are consistent with the 2022 well survey (Geosyntec, 2023c).

## 7.0 CONCLUSIONS AND FUTURE ACTIONS

This *2023 Annual Groundwater Monitoring and Corrective Action Report* for Plant Hammond AP-2 was prepared to fulfill the requirements of the federal CCR Rule and GA EPD Rules for Solid Waste Management 391-3-4-.10. Statistical analyses of the groundwater monitoring data for AP-2 for the semiannual reporting period identified the continued presence of SSLs of cobalt in HGWC-18, MW-33, and MW-35. Based on the most current groundwater quality, the SSLs are vertically and horizontally delineated to below the site specific GWPS.

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

## 8.0 REFERENCES

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# TABLES

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

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

Notes:

ft = feet

BTOC = below top of casing

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

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

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

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

Notes:

ft = feet

BTOC = below top of casing

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

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



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

Well ID	Hydraulic Location	January 23 - February 1, 2023	August 8 - 13, 2023	Status of Monitoring Well
Purpose of Sampling Event:		Assessment	Assessment	
<b><i>Detection Monitoring Well</i></b>				
HGWA-1	Upgradient	X	X	Assessment
HGWA-2	Upgradient	X	X	Assessment
HGWA-3	Upgradient	X	X	Assessment
HGWA-4	Upgradient	X	X	Assessment
HGWA-5	Upgradient	X	X	Assessment
HGWA-6	Upgradient	X	X	Assessment
HGWA-42D	Upgradient	X	X	Assessment
HGWA-43D	Upgradient	X	X	Assessment
HGWA-44D	Upgradient	X	X	Assessment
HGWC-14	Downgradient	X	X	Assessment
HGWC-15	Downgradient	X	X	Assessment
HGWC-16	Downgradient	X	X	Assessment
HGWC-17	Downgradient	X	X	Assessment
HGWC-18	Downgradient	X	X	Assessment
<b><i>Assessment Monitoring Well</i></b>				
MW-21D	Downgradient	X	X	Assessment
MW-22	Downgradient	X	X	Assessment
MW-23D	Downgradient	X	X	Assessment
MW-33	Downgradient	X	X	Assessment
MW-34D	Downgradient	X	X	Assessment
MW-35	Downgradient	X	X	Assessment
MW-37D	Downgradient	X	X	Assessment
MW-51	Downgradient	X	X	Assessment

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

Well ID	Top of Casing Elevation <sup>(1)</sup> (ft)	January 23, 2023		August 7, 2023	
		Depth to Water (ft BTOC)	Groundwater Elevation <sup>(1)</sup> (ft)	Depth to Water (ft BTOC)	Groundwater Elevation <sup>(1)</sup> (ft)
<b>Detection Monitoring Well</b>					
HGWA-1	595.21	10.25	584.96	22.06	573.15
HGWA-2	587.92	8.05	579.87	14.68	573.24
HGWA-3	587.74	7.50	580.24	14.44	573.30
HGWA-4	587.60	4.83	582.77	13.64	573.96
HGWA-5	583.24	4.59	578.65	7.14	576.10
HGWA-6	583.38	3.95	579.43	6.45	576.93
HGWA-42D	586.17	9.41	576.76	14.32	571.85
HGWA-43D	595.08	10.23	584.85	21.90	573.18
HGWA-44D	594.79	10.96	583.83	21.54	573.25
HGWC-14	597.25	29.31	567.94	31.36	565.89
HGWC-15	581.49	16.00	565.49	17.92	563.57
HGWC-16	580.02	13.80	566.22	14.70	565.32
HGWC-17	584.30	18.88	565.42	20.00	564.30
HGWC-18	584.18	18.45	565.73	19.30	564.88
<b>Piezometer</b>					
MW-8	586.93	19.14	567.79	20.80	566.13
MW-9	590.95	18.24	572.71	21.25	569.70
MW-12	583.27	19.03	564.24	19.05	564.22
MW-16	574.22	5.60	568.62	6.86	567.36
MW-17	586.78	8.15	578.63	13.50	573.28
MW-18	592.28	14.90	577.38	19.81	572.47
MW-36D	584.10	17.93	566.17	18.83	565.27
MW-52	586.11	7.79	578.32	13.51	572.60
MW-55	582.49	--	--	17.42	565.07
MW-56	573.47	--	--	9.78	563.69
MW-57	574.28	--	--	10.55	563.73
MW-58	575.87	--	--	12.00	563.87
MW-59	592.20	--	--	27.96	564.24
INW-01	573.90	--	--	10.10	563.80
INW-02	580.56	--	--	14.81	565.75
PT-01	574.13	--	--	10.37	563.76
PT-02	574.06	--	--	10.28	563.78
PT-03	574.09	--	--	10.32	563.77
PT-04	580.26	--	--	14.51	565.75
PT-05	580.54	--	--	14.80	565.74
PT-06	580.36	--	--	14.64	565.72
<b>Assessment Monitoring Well</b>					
MW-21D	583.84	17.64	566.20	18.65	565.19
MW-22	578.51	14.13	564.38	14.64	563.87
MW-23D	581.30	17.41	563.89	17.16	564.14
MW-33	593.92	26.18	567.74	28.35	565.57
MW-34D	596.51	31.42	565.09	32.00	564.51
MW-35	574.40	9.54	564.86	10.68	563.72
MW-37D	583.58	17.26	566.32	18.25	565.33
MW-51	574.54	9.88	564.66	10.86	563.68
<b>Surface Water Level Gauge Point</b>					
Coosa River <sup>(2)</sup>	--	--	563.00	--	564.10
Unnamed Creek	580.14 <sup>(3)</sup>	16.48	563.66	15.98	564.16

Notes:

-- = not measured or not applicable

ft = feet

BTOC = below top of casing

(1) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey data dated May 19, 2020, September 10, 2020 (for HGWA-42D, HGWA-43D, and HGWA-44D), September 8, 2021 (for MW-51), April 11, 2022 (for MW-52), and July 17 and August 30, 2023 (for MW-55 through MW-59, INW-01, INW-02, PT-01 through PT-06).

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

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

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

Flow Path Direction <sup>(1)</sup>	January 23, 2023				August 7, 2023				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)	
Westerly Flow Path (MW-18 to HGWC-17)	577.38	565.42	1,350	0.009	572.47	564.30	1350	0.006	0.0075

Flow Path Direction <sup>(1)</sup>	Average for 2023			
	K <sub>h</sub> (ft/d)	n <sub>e</sub>	i (ft/ft)	V (ft/d) <sup>(2)</sup>
Westerly Flow Path (MW-18 to HGWC-17)	1.47	0.15	0.0075	0.073

Notes:

ft = feet

ft/day = feet per day

ft/ft = feet per foot

h<sub>1</sub> and 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-2 and illustrated on Figures 3 and 4 of associated report.

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



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

Well ID:		HGWC-16	HGWC-16	HGWC-17	HGWC-17	HGWC-18	HGWC-18	MW-21D	MW-21D	MW-22	MW-22	MW-23D	MW-23D	MW-33	MW-33	MW-34D	MW-34D	MW-35	MW-35	MW-37D	MW-37D	MW-51	MW-51
Sample Date:		2/1/2023	8/13/2023	1/30/2023	8/13/2023	2/1/2023	8/13/2023	1/27/2023	8/12/2023	1/30/2023	8/13/2023	2/1/2023	8/13/2023	1/27/2023	8/13/2023	1/30/2023	8/12/2023	2/1/2023	8/12/2023	1/30/2023	8/13/2023	2/1/2023	8/12/2023
	Parameter <sup>(1,2,3)</sup>																						
	APPENDIX III	Boron	2.8	2.2	6.8	6.2	5.9	7.7	3.6	2.8	2.4	2.3	3.0	2.7	4.6	6.6	8.0	7.2	8.7	8.4	0.15	0.14	8.3
Calcium		216	187	286	261	288	355	281	167	189	305	294	343	371	418	558	469	503	455	74.6	57.0	492	485
Chloride		112	89.1	154	109	92.7	104	167	76.2	109	101	137	119	83.4	99.0	173	157	189	181	49.2	16.5	158	139
Fluoride		0.053 J	0.053 J	0.097 J	0.081 J	0.21	0.25	0.050 J	<0.050	0.064 J	0.057 J	0.074 J	0.061 J	0.087 J	0.22	0.089 J	0.062 J	0.10	0.077 J	0.092 J	0.11	0.18	0.10
pH		7.15	7.13	6.44	6.46	4.66	4.75	7.31	7.17	5.47	5.54	6.69	6.82	5.61	4.54	6.99	7.06	4.89	5.05	7.56	7.61	6.37	6.60
Sulfate		257	214	451	351	776	895	646	276	445	410	438	379	895	970	1,120	948	1,190	1090	85.2	39.2	1,110	1040
TDS		1,030	861	1,320	1180	1,430	1700	1,420	2200	961	1000	1,320	1280	1,570	1910	2,230	837	2,410	2290	226	258	2,090	2220
APPENDIX IV	Antimony	<0.00078	<0.0012	<0.00078	<0.0012	<0.00078	<0.0012	<0.00078	<0.0012	<0.00078	<0.0012	<0.00078	<0.0012	<0.00078	<0.0012	0.0018 J	<0.0012	0.0018 J	<0.0012	<0.00078	<0.0012	<0.00078	<0.0012
	Arsenic	<0.0022	<0.0037	0.0028 J	<0.0037	0.0036 J	0.0059 J	<0.0022	<0.0037	<0.0022	<0.0037	<0.0022	<0.0037	0.0031 J	0.0059 J	0.0047 J	<0.0037	0.0060	0.0045 J	<0.0022	<0.0037	0.0041 J	<0.0037
	Barium	0.11	0.099	0.030	0.025	0.019	0.026	0.031	0.033	0.014	0.013	0.047	0.041	0.018	0.023	0.040	0.033	0.022	0.021	0.13	0.15	0.033	0.026
	Beryllium	<0.000054	<0.000054	0.000057 J	0.00010 J	0.0020	0.0030	<0.000054	<0.00027	0.000081 J	<0.000054	<0.000054	<0.000054	0.00019 J	0.00099	<0.000054	<0.000054	0.00049 J	0.00041 J	<0.000054	<0.000054	0.00028 J	0.00012 J
	Cadmium	<0.00011	<0.00011	<0.00011	<0.00011	0.0010	0.0017	<0.00011	<0.00011	0.0017	0.0020	0.00012 J	0.00015 J	0.00017 J	0.00020 J	0.00047 J	0.0029	0.0017	0.0012	<0.00011	<0.00011	0.0016	0.00019 J
	Chromium	<0.0055	<0.0011	<0.0011	<0.0011	<0.0055	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0055	<0.0011	<0.0011	<0.0055	<0.0011
	Cobalt	<0.00039	<0.00039	0.011	0.0090	0.11	0.14	<0.00039	<0.00039	0.027	0.0089	0.00081 J	0.00073 J	0.034	0.061	0.0071	0.0058	0.088	0.082	<0.00039	<0.00039	0.021 J	0.022
	Fluoride	0.053 J	0.053 J	0.097 J	0.081 J	0.21	0.25	0.050 J	<0.050	0.064 J	0.057 J	0.074 J	0.061 J	0.087 J	0.22	0.089 J	0.062 J	0.10	0.077 J	0.092 J	0.11	0.18	0.10
	Lead	<0.00089	<0.00012	<0.00089	0.00049 J	<0.00089	0.00075 J	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	<0.00012	<0.00089	0.0011	<0.00089	<0.00012	<0.00089	0.00035 J	<0.00089	<0.00012	<0.00089	<0.00012
	Lithium	0.0036 J	0.0030 J	0.0014 J	0.0018 J	0.0093 J	0.012 J	0.018 J	0.015 J	0.0011 J	0.0014 J	0.0019 J	0.0017 J	<0.00073	0.00077 J	0.0013 J	0.0013 J	0.0034 J	0.0031 J	0.021 J	0.020 J	0.0015 J	0.00098 J
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	0.00084	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	0.028	0.021	<0.00074	<0.00074	0.0041 J	0.0041 J	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	0.0063 J	0.0029 J	<0.00074	<0.00074
	Comb. Radium 226/228	0.757 U	0.281 U	0.500 U	0.678 U	0.871	1.03	0.256 U	0.297 U	0.621 U	0.361 U	0.406 U	0.0608 U	1.44 U	0.773 U	0.689 U	0.676 U	1.24 U	0.897 U	0.309 U	0.308 U	0.820 U	0.484 U
	Selenium	<0.0014	<0.0014	<0.0014	<0.0014	0.0054	0.0085	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	0.015	0.0065	<0.0014	<0.0014	0.0063	0.0058	<0.0014	<0.0014	0.0021 J
Thallium	<0.00018	<0.00018	0.00025 J	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	0.00021 J	0.00022 J	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	
GEOCHEM	Bicarbonate Alkalinity	--	210	--	211	--	<0.50	--	115	--	39.9	--	249	--	<0.50	--	108	--	<0.50	--	162	--	135
	Iron	--	1.4	--	2.2	--	0.038 J	--	6.8	--	0.086	--	0.12	--	0.13	--	0.14	--	0.16	--	0.18	--	1.1
	Magnesium	--	15.6	--	30.0	--	35.8	--	27.6	--	28.8	--	38.5	--	38.6	--	44.3	--	68.9	--	11.8	--	50.4
	Manganese	--	0.049	--	2.3	--	3.4	--	0.40	--	5.7	--	4.4	--	4.4	--	4.2	--	8.1	--	0.029 J	--	8.4
	Potassium	--	0.72	--	2.9	--	10.0	--	0.80	--	1.9	--	11.0	--	11.0	--	10.4	--	7.3	--	0.71	--	7.7
	Sodium	--	10.1	--	13.5	--	10.9	--	10.3	--	12.9	--	10.0	--	10.1	--	11.8	--	12.1	--	14.0	--	19.1
Sulfide	--	<0.022	--	0.032 J	--	<0.022	--	<0.022	--	<0.022	--	<0.022	--	<0.022	--	<0.022	--	<0.022	--	0.036 J	--	<0.022	

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

		Unnamed Creek Sample Locations <sup>(3)</sup>			Coosa River Sample Locations <sup>(3)</sup>			Unnamed Creek Sample Locations <sup>(3)</sup>			Coosa River Sample Locations <sup>(3)</sup>			
Sample ID:		HAM-AP2-Up	HAM-AP2-Mid	HAM-AP2-Down	HAM-H+0.25	HAM-H+0.35	HAM-H+0.75	HAM-AP2-Up	HAM-AP2-Mid	HAM-AP2-Down	HAM-H+0.25	HAM-H+0.35	HAM-H+0.75	
Sample Date:		1/30/2023	1/30/2023	1/30/2023	1/30/2023	1/30/2023	1/30/2023	8/7/2023	8/7/2023	8/7/2023	8/7/2023	8/7/2023	8/7/2023	
Parameter <sup>(1,2)</sup>														
APP. III	Boron	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	
	Calcium	17.4	15.4	14.7	10.5	10.8	10.3	47.7	49.8	17.9	15.7	16.3	16.8	
	Chloride	1.1	1.3	1.2	4.4	4.3	4.3	1.4	1.6	6.3	5.7	5.8	5.9	
	Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	Sulfate	6.3	7.3	7.0	5.8	5.8	6.7	5.2	8.7	18.0	10.3	14.7	13.7	
	TDS	75.0	76.0	96.0	135	57.0	166	156.0	147.0	105.0	79	89.0	91	
APP. IV	Cobalt	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
	Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
GEOCHEM	Bicarbonate Alkalinity	45.7	41.4	38.8	33.1	33.4	33.6	130	131	60.2	58.5	57.2	58.9	
	Total Alkalinity	45.7	41.4	38.8	33.1	33.4	33.6	130	131	60.2	58.5	57.2	58.9	
	Magnesium	2.6	2.0	2.1	2.8	2.7	2.6	5.2	5.6	4.6	4.2	4.3	4.5	
	Potassium	2.2	1.4	1.5	2.8	1.9	1.9	0.77	0.64	2.1	1.9	1.8	2.3	
	Sodium	1.6	1.5	1.5	<5.0	4.1	4.5	1.7	1.8	11.3	7.0	8.8	8.8	

Notes:

-- = Parameter was not analyzed.

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

TDS = Total dissolved solids

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

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

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

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

Analyte	Units	MCL	CCR-Rule Specified <sup>(1)</sup>	Background Limit <sup>(2)</sup>	GWPS <sup>(3)</sup>
Antimony	mg/L	0.006	N/A	0.003	0.006
Arsenic	mg/L	0.01	N/A	0.005	0.01
Barium	mg/L	2	N/A	0.46	2
Beryllium	mg/L	0.004	N/A	0.0005	0.004
Cadmium	mg/L	0.005	N/A	0.0005	0.005
Chromium	mg/L	0.1	N/A	0.0019	0.1
Cobalt	mg/L	N/A	0.006	0.038	0.038
Fluoride	mg/L	4	N/A	1.3	4
Lead	mg/L	N/A	0.015	0.001	0.015
Lithium	mg/L	N/A	0.04	0.064	0.064
Mercury	mg/L	0.002	N/A	0.0002	0.002
Molybdenum	mg/L	N/A	0.1	0.01	0.1
Selenium	mg/L	0.05	N/A	0.005	0.05
Thallium	mg/L	0.002	N/A	0.001	0.002
Combined Radium-226/228	pCi/L	5	N/A	4.36, 1.59	5

Notes:

mg/L = milligrams per liter

pCi/L = picocuries per liter

MCL = Maximum Contaminant Level

CCR = Coal Combustion Residuals

GWPS = Groundwater Protection Standard

N/A = Not Applicable

- (1) On February 22, 2022, the Georgia Environmental Protection Division (GA EPD) adopted the federally promulgated GWPS for cobalt, lithium, lead, and molybdenum.
- (2) The background limits were used when determining the GWPS under 40 CFR 257.95(h) and GA EPD Rule 391-3-4-.10(6)(a). A cell with two values denotes that different background concentrations were calculated per semiannual event, presented in the order of the events.
- (3) Under 40 CFR 257.95(h)(1-3) the GWPS is: (i) the maximum contaminant level (MCL) established under §§141.62 and 141.66 of this title; (ii) where an MCL has not been established a rule-specific GWPS; or (iii) background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

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

Pilot Study Area:		South Area																						
Well ID:	INW-01	INW-01	MW-55	MW-56	MW-57	MW-58	MW-59	PT-01	PT-01	PT-01	PT-01	PT-01	PT-01	PT-01	PT-01	PT-01	PT-02	PT-02	PT-02	PT-02	PT-02	PT-02	PT-02	
Sample Date:	7/19/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	7/18/2023	8/9/2023	9/19/2023	9/26/2023	10/3/2023	10/10/2023	10/24/2023	11/21/2023	7/18/2023	8/9/2023	9/19/2023	9/26/2023	10/3/2023	10/10/2023	10/24/2023	11/21/2023	
Parameter (1,2,3)																								
APPENDIX III	Boron	8.7	8.0	3.1	10.1	8.5	4	9.5	8.1	7.9	0.29	0.76	1.9	1.7	--	--	8.3	8.4	1.1	2.7	3.1	3.6	--	--
	Calcium	397	409	-	-	-	-	-	370	326	19.6	--	--	--	--	--	379	276	54.1	--	--	--	--	--
	Chloride	210	207	-	-	-	-	-	147	141	<0.60	--	--	--	--	--	174	138	9.8	--	--	--	--	--
	Fluoride	0.34	0.19	-	-	-	-	-	0.70	0.56	<0.050	--	--	--	--	--	0.47	0.67	0.17	--	--	--	--	--
	pH (s.u.)	5.18	5.80	6.66	5.09	6.7	5.23	4.44	4.63	4.76	7.73	7.40	7.24	7.10	7.00	6.83	4.97	5.06	7.41	7.19	7.08	7.53	6.91	6.76
	TDS	2000	1890	-	-	-	-	-	1700	1820	5800	--	--	--	--	--	1830	1800	3880	--	--	--	--	--
APPENDIX IV	Antimony	<0.0012	<0.0012	-	-	-	-	-	<0.0012	<0.0012	0.0019 J	--	--	--	--	--	0.0013 J	<0.0012	<0.0012	--	--	--	--	--
	Arsenic	0.0061 J	<0.0037	-	-	-	-	-	0.0075 J	0.0052 J	<0.0037	--	--	--	--	--	0.0063 J	0.0051 J	<0.0037	--	--	--	--	--
	Barium	0.069	0.053	-	-	-	-	-	0.046	0.037	0.061	--	--	--	--	--	0.054	0.045	0.078	--	--	--	--	--
	Beryllium	0.0010	0.00059	-	-	-	-	-	0.0024	0.0021	<0.000054	--	--	--	--	--	0.0016	0.0022	<0.000054	--	--	--	--	--
	Cadmium	0.00059	<0.00011	-	-	-	-	-	0.00099	0.0010	<0.00011	--	--	--	--	--	0.00091	0.00092	<0.00011	--	--	--	--	--
	Chromium	<0.0011	<0.0011	-	-	-	-	-	<0.0011	<0.0011	0.0012 J	--	--	--	--	--	<0.0011	<0.0011	<0.0011	--	--	--	--	--
	Cobalt	0.13	0.11	0.0044 J	0.21	0.03	0.098	0.16	0.11	0.11	0.0011 J	<0.0039	<0.0039	<0.0039	--	--	0.13	0.13	0.0081	0.013 J	0.017	0.015 J	--	--
	Fluoride	0.34	0.19	-	-	-	-	-	0.70	0.56	<0.050	--	--	--	--	--	0.47	0.67	0.17	--	--	--	--	--
	Lead	0.00037 J	<0.00012	-	-	-	-	-	0.00072 J	<0.00060	0.00022 J	--	--	--	--	--	0.00043 J	0.00071 J	<0.00012	--	--	--	--	--
	Lithium	0.0064 J	0.0036 J	-	-	-	-	-	0.0052 J	0.0039 J	<0.00073	--	--	--	--	--	0.0069 J	0.0043 J	0.00098 J	--	--	--	--	--
	Mercury	<0.00013	<0.00013	-	-	-	-	-	0.00023	0.00014 J	<0.00013	--	--	--	--	--	<0.00013	<0.00013	<0.00013	--	--	--	--	--
	Molybdenum	<0.00074	<0.00074	-	-	-	-	-	<0.00074	<0.00074	0.0024 J	--	--	--	--	--	<0.00074	<0.00074	0.0029 J	--	--	--	--	--
Selenium	0.0075	0.011	-	-	-	-	-	0.011	0.020	0.0014 J	--	--	--	--	--	0.0075	0.021	0.0017 J	--	--	--	--	--	
Thallium	<0.00018	<0.00018	-	-	-	-	-	<0.00018	<0.00090	<0.00018	--	--	--	--	--	<0.00018	<0.00090	<0.00018	--	--	--	--	--	
GEOCHEM	Alkalinity (Bicarbonate as CaCO3)	14.9	46.5	-	-	-	-	-	<5.0	<5.0	5400	4800	3920	3770	--	--	5.5	<5.0	4380	3790	2820	2400	--	--
	Alkalinity (Carbonate as CaCO3)	<5.0	<5.0	-	-	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	--
	Alkalinity (total) as CaCO3	14.9	46.5	-	-	-	-	-	<5.0	<5.0	5400	4800	3920	3770	--	--	5.5	<5.0	4380	3790	2820	2400	--	--
	Iron	2.9	12.3	-	-	-	-	-	0.078	<0.025	0.18	--	--	--	--	--	0.44	0.39	0.03 J	--	--	--	--	--
	Magnesium	52.3	58.4	-	-	-	-	-	38.2	39.0	11.5	--	--	--	--	--	44.0	37.2	15.1	--	--	--	--	--
	Manganese	14.4	20.7	-	-	-	-	-	9.6	10.3	0.085	--	--	--	--	--	12.6	11.5	1.8	--	--	--	--	--
	Potassium	5.4	6.2	-	-	-	-	-	5.2	6.5	4.2	--	--	--	--	--	5.2	6.5	5.6	--	--	--	--	--
	Sodium	10.0	12.5	-	-	-	-	-	8.8	10.6	2560	--	--	--	--	--	9.3	9.8	2170	--	--	--	--	--
	Sulfide	<0.022	<0.022	-	-	-	-	-	<0.022	<0.022	<0.022	--	--	--	--	--	<0.022	<0.022	<0.022	--	--	--	--	--
FIELD	Dissolved Oxygen	0.51	0.21	0.30	0.12	0.24	0.44	0.52	0.46	0.26	2.71	0.78	3.07	0.51	0.12	0.13	0.99	0.22	0.20	0.35	0.05	6.53	0.20	0.19
	Oxidation-Reduction Potential (mV)	37.1	-51.9	-67.5	188.4	-63.7	44.3	320.3	131.8	91.2	56.5	65.0	27.5	33.2	-31.5	-111.5	148.3	73.6	-84.2	-94.5	-73.4	-99.8	-122.1	-121.4
	Temperature (°C)	20.49	23.92	23.6	21.55	20.03	19.14	21.84	22.09	21.01	21.03	20.51	21.20	22.62	21.11	19.19	31.50	21.81	22.09	20.10	20.39	23.01	20.79	19.30
	Specific Conductance (µS/cm)	2297.3	2169.4	2083	2429	2410	1525	2356	1953.8	1959.0	7347.0	6747.5	5686.2	5656.1	6566.1	4318.1	2156.2	1992.8	6100.3	5517.8	4622.1	4590.1	4755.2	3659.6
	pH (s.u.)	5.18	5.80	6.66	5.09	6.7	5.23	4.44	4.63	4.76	7.73	7.40	7.24	7.10	7.00	6.83	4.97	5.06	7.41	7.19	7.08	7.53	6.91	6.76
Turbidity (NTU)	3.05	0.42	2.64	2.52	4.91	4.68	2.38	3.21	0.89	4.34	4.22	3.97	2.17	4.70	2.26	3.98	0.40	1.75	1.22	3.56	4.86	3.44	2.45	

Notes:  
 < = Indicates the parameter was not detected above the analytical method detection limit (MDL).  
 °C = degrees Celsius  
 J = Indicates the parameter was estimated and detected between the MDL and the reporting limit (RL).  
 µS/cm = microsiemens per centimeter  
 mV = millivolts  
 NTU = nephelometric turbidity units  
 s.u. = standard units  
 TDS = Total dissolved solids  
 (1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Analysis of combined radium omitted from the pilot study monitoring program. Unless otherwise indicated, parameters are reported in units of milligrams per liter (mg/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-2015, and combined radium 226/228 by EPA Methods 9315/9320.  
 (3) The pH value presented was recorded at the time of sample collection in the field.  
 (4) Baseline characterization samples were collected from July 14-19, and August 9, 2023. Subsequent samples were collected after injections began at AP-2 on September 5, 2023.



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

Pilot Study Area:		South Area							
Well ID:		PT-03	PT-03	PT-03	PT-03	PT-03	PT-03	PT-03	PT-03
Sample Date:		7/18/2023	8/9/2023	9/19/2023	9/26/2023	10/3/2023	10/10/2023	10/24/2023	11/21/2023
Parameter <sup>(1,2,3)</sup>									
APPENDIX III	Boron	8.2	8.7	6.9	8.0	7.4	6.8	--	--
	Calcium	382	360	367	--	--	--	--	--
	Chloride	138	113	229	--	--	--	--	--
	Fluoride	0.84	0.77	0.37	--	--	--	--	--
	pH (s.u.)	4.64	4.80	6.61	6.57	6.76	6.64	6.51	5.33
	Sulfate	948	778	788	--	--	--	--	--
	TDS	2690	1750	1950	--	--	--	--	--
APPENDIX IV	Antimony	0.0029 J	<0.0012	<0.0012	--	--	--	--	--
	Arsenic	0.0076 J	0.0056 J	<0.0037	--	--	--	--	--
	Barium	0.025	0.021	0.031	--	--	--	--	--
	Beryllium	0.0026	0.0024	0.00019 J	--	--	--	--	--
	Cadmium	0.00062	0.00055	<0.00011	--	--	--	--	--
	Chromium	0.0011 J	<0.0011	<0.0011	--	--	--	--	--
	Cobalt	0.12	0.11	0.03 J	0.029 J	0.018	0.014 J	--	--
	Fluoride	0.84	0.77	0.37	--	--	--	--	--
	Lead	0.0014	0.0020 J	0.00037 J	--	--	--	--	--
	Lithium	0.0031 J	0.0023 J	0.00088 J	--	--	--	--	--
	Mercury	<0.00013	<0.00013	<0.00013	--	--	--	--	--
	Molybdenum	<0.00074	<0.00074	<0.00074	--	--	--	--	--
	Selenium	0.011	0.021	0.0026 J	--	--	--	--	--
Thallium	0.00021 J	<0.00090	<0.00018	--	--	--	--	--	
GEOCHEM	Alkalinity (Bicarbonate as CaCO3)	<5.0	<5.0	232	197	150	146	--	--
	Alkalinity (Carbonate as CaCO3)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	--
	Alkalinity (total) as CaCO3	<5.0	<5.0	232	197	150	146	--	--
	Iron	0.26	0.59	0.88	--	--	--	--	--
	Magnesium	36.9	35.1	36	--	--	--	--	--
	Manganese	8.2	7.5	6.3	--	--	--	--	--
	Potassium	5.4	6.6	6.2	--	--	--	--	--
	Sodium	11.7	14.7	125	--	--	--	--	--
Sulfide	<0.022	<0.022	<0.022	--	--	--	--	--	
FIELD	Dissolved Oxygen	0.11	0.23	0.60	0.04	0.08	0.12	0.10	0.34
	Oxidation-Reduction Potential (mV)	110.2	54.5	-46.3	-25.8	-26.9	-37.6	-14.4	85.3
	Temperature (°C)	21.13	20.48	19.99	20.07	20.21	19.50	20.62	18.70
	Specific Conductance (µS/cm)	2031.4	1953.0	2201.1	2337.3	2093.5	2040.6	2075.1	2105.1
	pH (s.u.)	4.64	4.80	6.61	6.57	6.76	6.64	6.51	5.33
	Turbidity (NTU)	3.74	0.70	4.59	4.82	4.22	3.58	0.48	1.64

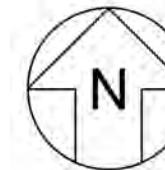
**Table 8**  
Summary of Pilot Study Groundwater Analytical Data  
Plant Hammond AP-2, Floyd County, Georgia

Pilot Study Area:		West Area																	
Well ID:		INW-02	INW-02	PT-04	PT-04	PT-04	PT-04	PT-04	PT-04	PT-04	PT-04	PT-05	PT-05	PT-05	PT-05	PT-05	PT-05	PT-05	PT-05
Sample Date:		7/14/2023	8/9/2023	7/14/2023	8/9/2023	9/19/2023	9/26/2023	10/3/2023	10/10/2023	10/24/2023	11/21/2023	7/14/2023	8/9/2023	9/19/2023	9/26/2023	10/3/2023	10/10/2023	10/24/2023	11/21/2023
Parameter <sup>(1,2,3)</sup>																			
APPENDIX III	Boron	7.1	6.3	7.8	7.8	4.2	6.5	7.1	6.5	--	--	7.5	7.2	2.5	4.6	3.7	3.8	--	--
	Calcium	306	306	297	287	169	--	--	--	--	--	287	370	87.4	--	--	--	--	--
	Chloride	153	135	153	132	107	--	--	--	--	--	166	145	49.5	--	--	--	--	--
	Fluoride	<0.050	<0.050	<0.050	<0.050	0.12	--	--	--	--	--	<0.050	<0.050	0.082 J	--	--	--	--	--
	pH (s.u.)	6.27	6.41	6.30	6.43	6.92	6.84	6.88	4.91	6.83	6.87	6.13	6.36	6.79	6.74	6.93	6.62	6.80	6.90
	Sulfate	532	457	535	458	442	--	--	--	--	--	564	479	230	--	--	--	--	--
TDS	1460	1350	1310	1320	2280	--	--	--	--	--	1520	1480	3010	--	--	--	--	--	
APPENDIX IV	Antimony	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	--	--	--	--	--	<0.0012	<0.0012	<0.0012	--	--	--	--	
	Arsenic	0.0057 J	0.0054 J	0.0077 J	0.0081 J	0.0092 J	--	--	--	--	--	<0.0037	<0.0037	<0.0037	--	--	--	--	
	Barium	0.070	0.042	0.048	0.039	0.072	--	--	--	--	--	0.045	0.040	0.066	--	--	--	--	
	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 J	--	--	--	--	--	<0.00011	<0.00011	0.0003 J	--	--	--	--	
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--	--	--	--	<0.0011	<0.0011	<0.0011	--	--	--	--	
	Cobalt	0.060	0.050	0.058	0.056	0.018	0.022 J	0.026	0.023 J	--	--	0.042	0.039	0.0099	0.011 J	0.0089	0.0097 J	--	
	Fluoride	<0.050	<0.050	<0.050	<0.050	0.12	--	--	--	--	--	<0.050	<0.050	0.082 J	--	--	--	--	
	Lead	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	--	--	--	--	--	<0.00012	<0.00012	0.00015	--	--	--	--	
	Lithium	0.0057 J	0.0038 J	0.0050 J	0.0047 J	0.0055 J	--	--	--	--	--	0.0050 J	0.0049 J	0.0057 J	--	--	--	--	
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	--	--	--	--	--	<0.00013	<0.00013	<0.00013	--	--	--	--	
	Molybdenum	<0.00074	<0.00074	<0.00074	<0.00074	0.0040 J	--	--	--	--	--	<0.00074	<0.00074	0.0034 J	--	--	--	--	
Selenium	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	--	--	--	--	--	<0.0014	<0.0014	<0.0014	--	--	--	--		
Thallium	0.00037 J	0.00045 J	<0.00018	0.00027 J	0.00063 J	--	--	--	--	--	<0.00018	<0.00018	<0.00018	--	--	--	--		
GEOCHEM	Alkalinity (Bicarbonate as CaCO3)	159	166	155	168	1400	1030	966	818	--	--	148	150	2760	2200	2660	2300	--	
	Alkalinity (Carbonate as CaCO3)	<5.0	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	
	Alkalinity (total) as CaCO3	159	166	155	168	1400 J	1030	966	818	--	--	148	150	2760	2200	2660	2300	--	
	Iron	10.7	9.4	16.0	13.2	2.9	--	--	--	--	--	1.2	1.6	0.34	--	--	--	--	
	Magnesium	25.8	27.0	24.1	24.3	14.2	--	--	--	--	--	26.7	26.5	16.0	--	--	--	--	
	Manganese	16.0	13.3	17.8	17.0	6.6	--	--	--	--	--	11.4	10.7	2.7	--	--	--	--	
	Potassium	6.0	6.6	7.2	7.6	12.1	--	--	--	--	--	4.5	5.0	8.1	--	--	--	--	
	Sodium	11.1	12.9	12.2	11.4	586	--	--	--	--	--	10.6	11.8	716	--	--	--	--	
Sulfide	<0.022	<0.022	<0.022	0.031 J	<0.022	--	--	--	--	--	<0.022	<0.022	<0.022	--	--	--	--		
FIELD	Dissolved Oxygen	0.08	0.06	0.08	0.06	0.07	0.12	1.13	5.85	0.18	0.19	0.09	0.07	0.09	0.08	0.04	0.05	0.18	
	Oxidation-Reduction Potential (mV)	-52.1	26.3	-70.5	16.5	-81.5	-74.3	-58.7	22.4	-92.0	-132.1	7.9	82.3	-16.8	-12.0	-1.9	-129.7	-34.6	
	Temperature (°C)	22.77	21.02	21.83	20.65	21.31	22.94	21.76	29.53	21.55	19.87	23.73	21.96	22.49	24.20	21.86	20.06	22.95	
	Specific Conductance (µS/cm)	1711.0	1639.6	1714.9	1655.7	2865.3	2579.5	2475.0	0.45	2466.5	1863.1	1726.7	1710.0	3762.2	3880.0	3743.9	4390.1	3405.3	
	pH (s.u.)	6.27	6.41	6.30	6.43	6.92	6.84	6.88	4.91	6.83	6.87	6.13	6.36	6.79	6.74	6.93	6.62	6.80	
Turbidity (NTU)	1.44	0.00	2.84	0.04	1.76	2.73	1.64	1.20	0.95	4.05	4.76	4.81	4.97	4.98	4.12	3.86	4.86		

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

Pilot Study Area:		West Area							
Well ID:		PT-06	PT-06	PT-06	PT-06	PT-06	PT-06	PT-06	PT-06
Sample Date:		7/14/2023	8/9/2023	9/19/2023	9/26/2023	10/3/2023	10/10/2023	10/24/2023	11/21/2023
Parameter <sup>(1,2,3)</sup>									
APPENDIX III	Boron	7.8	7.2	5.8	6.8	7.1	6.9	--	--
	Calcium	319	300	226 J	--	--	--	--	--
	Chloride	156	140	99.0	--	--	--	--	--
	Fluoride	<0.050	<0.050	0.065 J	--	--	--	--	--
	pH (s.u.)	6.09	6.31	6.68	6.61	6.63	6.32	6.74	6.48
	Sulfate	542	473	460	--	--	--	--	--
	TDS	1330	1420	2120	--	--	--	--	--
APPENDIX IV	Antimony	<0.0012	<0.0012	<0.0012	--	--	--	--	--
	Arsenic	<0.0037	<0.0037	<0.018	--	--	--	--	--
	Barium	0.037	0.032	0.052	--	--	--	--	--
	Beryllium	<0.000054	<0.000054	<0.00027	--	--	--	--	--
	Cadmium	<0.00011	0.00025 J	0.00045 J	--	--	--	--	--
	Chromium	<0.0011	<0.0011	<0.0055	--	--	--	--	--
	Cobalt	0.063	0.058	0.029	0.034 J	0.033	0.034 J	--	--
	Fluoride	<0.050	<0.050	0.065	--	--	--	--	--
	Lead	<0.00012	<0.00012	<0.00012	--	--	--	--	--
	Lithium	0.0057 J	0.0055 J	0.0079 J	--	--	--	--	--
	Mercury	<0.00013	<0.00013	<0.00013	--	--	--	--	--
	Molybdenum	<0.00074	<0.00074	0.0024 J	--	--	--	--	--
	Selenium	<0.0014	<0.0014	<0.0068	--	--	--	--	--
Thallium	0.00049 J	0.00064 J	0.0010	--	--	--	--	--	
GEOCHEM	Alkalinity (Bicarbonate as CaCO3)	140	144	1270	1070	863	772	--	--
	Alkalinity (Carbonate as CaCO3)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	--
	Alkalinity (total) as CaCO3	140	144	1270 J	1070	863	772	--	--
	Iron	6.6	5.8	1.2	--	--	--	--	--
	Magnesium	25.6	26.1	17.1	--	--	--	--	--
	Manganese	18.0	17.4	11.5	--	--	--	--	--
	Potassium	6.6	7.3	11.0	--	--	--	--	--
	Sodium	13.6	15.3	682	--	--	--	--	--
Sulfide	<0.022	<0.022	<0.022	--	--	--	--	--	
FIELD	Dissolved Oxygen	0.10	0.02	0.11	0.08	0.04	0.08	1.08	0.32
	Oxidation-Reduction Potential (mV)	-19.2	99.4	3.3	-23.2	-9.0	5.6	-5.9	-73.4
	Temperature (°C)	22.95	21.23	20.56	22.90	21.23	22.41	21.56	19.02
	Specific Conductance (µS/cm)	1683.0	1612.1	2532.1	2699.5	2029.5	2538.1	2159.5	1661.9
	pH (s.u.)	6.09	6.31	6.68	6.61	6.63	6.32	6.74	6.48
	Turbidity (NTU)	2.77	2.30	0.31	0.60	2.65	4.44	2.75	2.57

# FIGURES

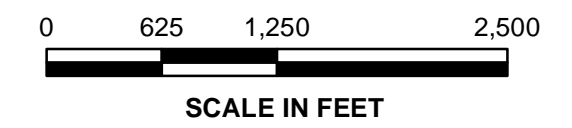


**LEGEND**

Plant Hammond Property Boundary



Note:  
 1. Aerial photograph source: Google Earth Pro, August 2019 and Georgia Power Company, July 2023.



**SITE LOCATION MAP**

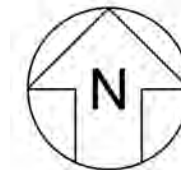
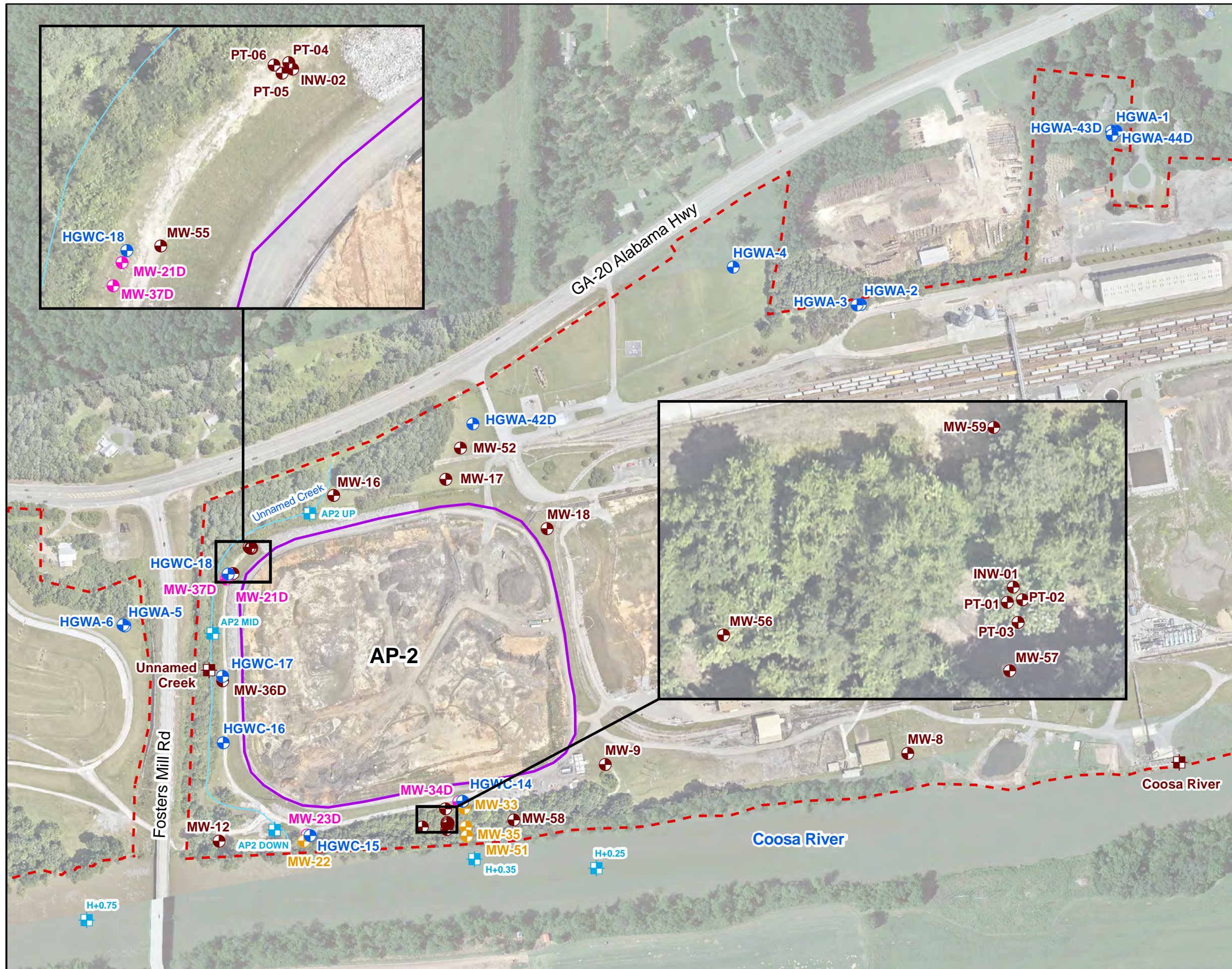
GEORGIA POWER COMPANY  
 PLANT HAMMOND AP-2  
 ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec  
 consultants

KENNESAW, GA    JANUARY 2024

**FIGURE**  
**1**



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

- Notes:
1. Piezometers INW-01, INW-02, MW-55 through MW-59, and PT-01 through PT-06 were installed in support of an Assessment of Corrective Measures (ACM) geochemical injections pilot study and are not included in the routine semiannual sampling of the monitoring well network.
  2. Aerial photograph source: Google Earth Pro, August 2019 and Georgia Power Company, July 2023.



**MONITORING WELL NETWORK AND SAMPLING LOCATION MAP**

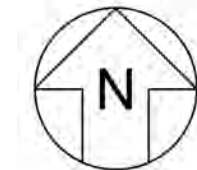
GEORGIA POWER COMPANY  
 PLANT HAMMOND AP-2  
 ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

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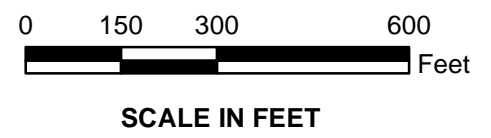
**FIGURE**  
2



- LEGEND**
- Detection Monitoring Well
  - Horizontal Assessment Monitoring Well
  - Vertical Assessment Monitoring Well
  - Piezometer
  - Surface Water Level Gauge Point
  - Groundwater Elevation Iso-Contour (dashed where inferred)
  - Approximate Groundwater Flow Direction
  - Approximate AP-2 Boundary
  - Plant Hammond Property Boundary



- Notes:
1. Water level elevation recorded on January 23, 2023. 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. A double asterisk (\*\*) denotes the water level for the Coosa River was gauged approximately 950 feet upstream of MW-8 at the staff gauge near AP-1.
  4. Aerial photograph source: Google Earth Pro, August 2019, and Georgia Power Company, February 2023.



**POTENTIOMETRIC SURFACE CONTOUR MAP - JANUARY 2023**

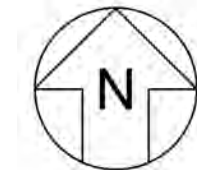
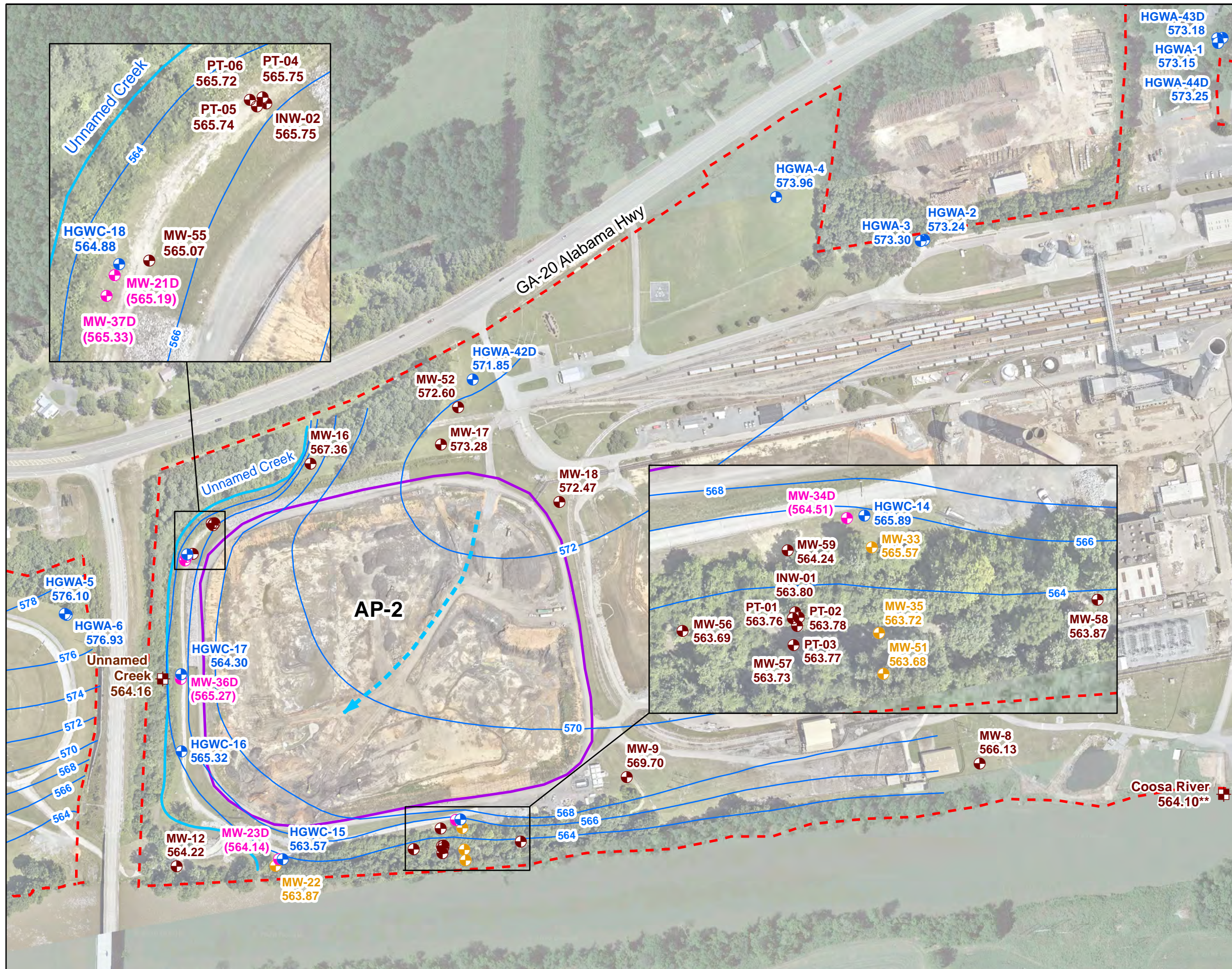
GEORGIA POWER COMPANY  
PLANT HAMMOND AP-2  
ROME, FLOYD COUNTY, GEORGIA

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

**FIGURE 3**

KENNESAW, GA    JANUARY 2024

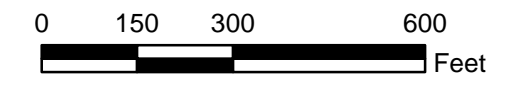


**LEGEND**

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



- Notes:
1. Water level elevation recorded on August 7, 2023. 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. A double asterisk (\*\*) denotes the water level for the Coosa River was gauged approximately 950 feet upstream of MW-8 at the staff gauge near AP-1.
  4. Aerial photograph source: Google Earth Pro, August 2019, and Georgia Power Company, July 2023.



SCALE IN FEET

**POTENTIOMETRIC SURFACE CONTOUR MAP - AUGUST 2023**

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

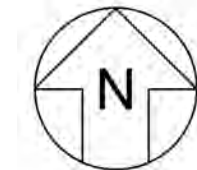
Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA JANUARY 2024

**FIGURE 4**





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

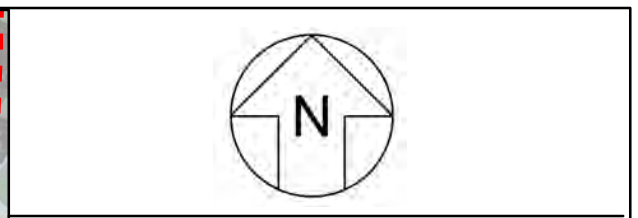
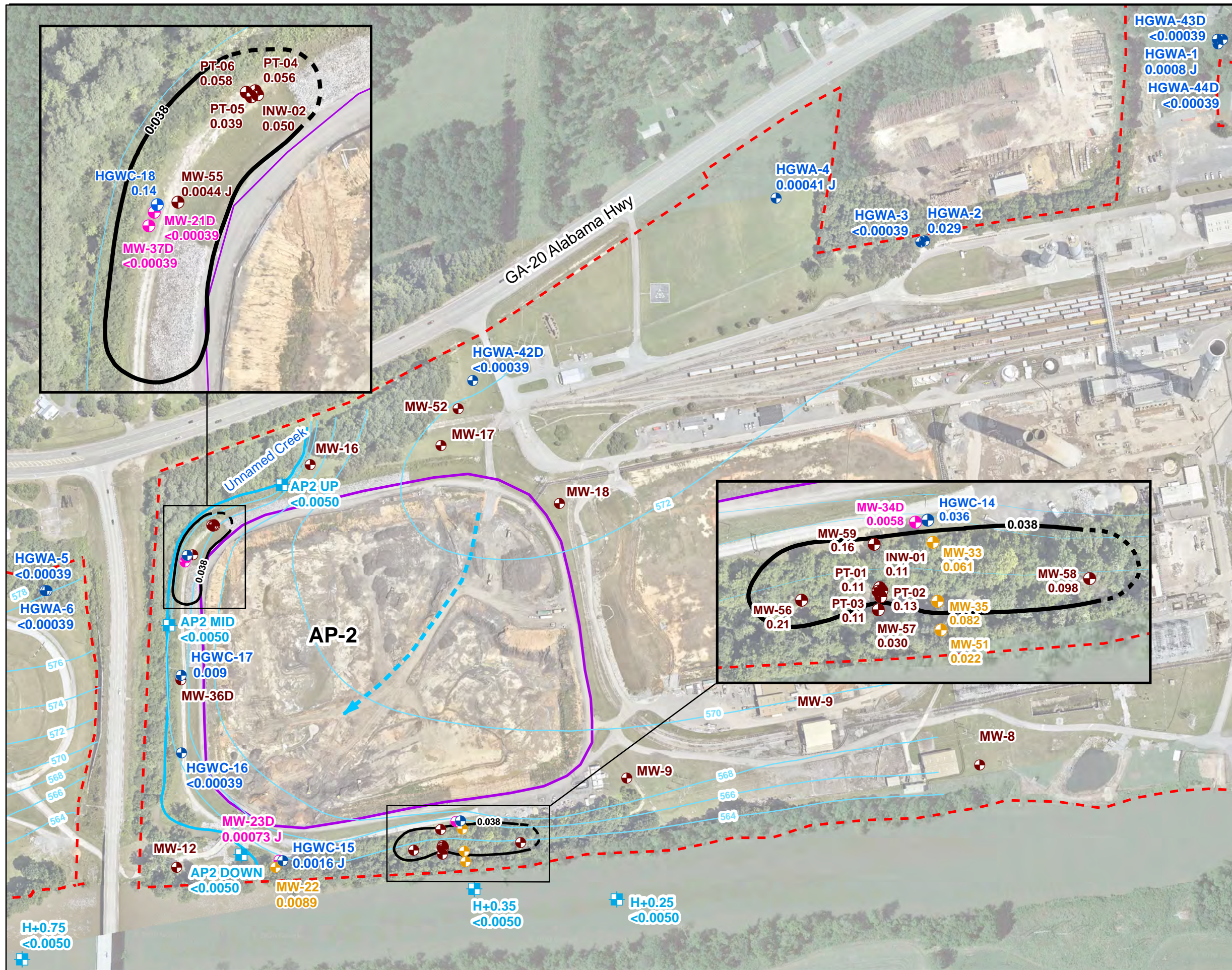
- Notes:**
1. Concentration data from groundwater samples collected during the January/February 2023 semiannual monitoring event. Data reported for wells screened deeper in the aquifer were not used to generate the iso-concentration contour (HGWA-42D, HGWA-43D, HGWA-44D, MW-21D, MW-34D, MW-37D). Concentrations are reported in mg/L.
  2. Water level elevation recorded on January 23, 2023. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
  3. The Groundwater Protection Standard (GWPS) for cobalt is 0.038 mg/L.
  4. Aerial photograph source: Google Earth Pro, August 2019, and Georgia Power Company, February 2023.



**ISO-CONCENTRATION MAP  
COBALT - JANUARY 2023**

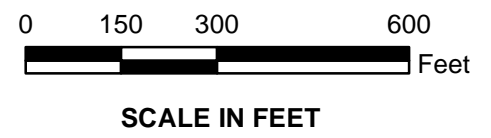
GEORGIA POWER COMPANY  
PLANT HAMMOND AP-2  
ROME, FLOYD COUNTY, GEORGIA

Prepared For:	<b>FIGURE 5</b>
Prepared By:	
KENNESAW, GA	JANUARY 2024



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

- Notes:**
1. Concentration data from groundwater samples collected during the August 2023 semiannual monitoring event. Data reported for wells screened deeper in the aquifer were not used to generate the iso-concentration contour (HGWA-42D, HGWA-43D, HGWA-44D, MW-21D, MW-34D, MW-37D). Concentrations are reported in mg/L.
  2. Water level elevation recorded on August 7, 2023. Elevation provided in feet (ft) referenced to the North American Vertical Datum (NAVD) 88.
  3. The Groundwater Protection Standard (GWPS) for cobalt is 0.038 mg/L.
  4. Piezometers may be sampled as needed for constituent specific site characterization.
  5. Aerial photograph source: Google Earth Pro, August 2019, and Georgia Power Company, July 2023.



**ISO-CONCENTRATION MAP  
COBALT - AUGUST 2023**

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

Prepared For:	<b>FIGURE 6</b>
Prepared By:	
KENNESAW, GA	JANUARY 2024

# APPENDIX A

## Well Design, Installation, and Development Report – Addendum No. 6



*Prepared for*

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

# **WELL DESIGN, INSTALLATION, AND DEVELOPMENT REPORT - ADDENDUM**

**No. 6**

**PLANT HAMMOND ASH POND 2  
(AP-2)**

*Prepared by*

**Geosyntec**   
consultants

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200  
Kennesaw, Georgia 30144

Project Number GW6581E

October 2023



## CERTIFICATION PAGE

I hereby certify that this *Well Design, Installation, and Development Report – Addendum No. 6, Plant Hammond Ash Pond 2 (AP-2)* has been prepared by, or under the direct supervision of, a Qualified Groundwater Scientist with Geosyntec Consultants, Inc. and is in compliance with the United States Environmental Protection Agency Coal Combustion Residual Rule [40 Code of Federal Regulations 257 Subpart D], specifically §257.91(e)(1), and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10.

According to 391-3-4-.01, a Qualified Groundwater Scientist is “a professional engineer or geologist registered to practice in Georgia who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields that enable individuals to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.”



A handwritten signature in blue ink that reads "Christine Hug".

Christine Hug P.G.  
Georgia Professional Engineer No. 36641  
*Project Manager*  
*Geosyntec Consultants*

October 3, 2023

Date

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## LIST OF ACRONYMS

AP	Ash Pond
ASTM	American Society for Testing and Materials
CCR	coal combustion residual
CFR	Code of Federal Regulations
CFS	Civil Field Services
DO	dissolved oxygen
GA EPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
NAD	North America Datum
NAVD	North American Vertical Datum
NSF	National Sanitation Foundation
ORP	oxygen reduction potential
PVC	polyvinyl chloride
SCS	Southern Company Services
TOC	top of casing
US EPA	United States Environmental Protection Agency

## 1. INTRODUCTION

This report provides details regarding the design, installation, and development of 13 (thirteen) piezometers<sup>1</sup> (PT-01 through PT-06, MW-55 through MW-59, and INW-01 and INW-02) to supplement the current groundwater monitoring system at Georgia Power Company (Georgia Power) Plant Hammond (Site) Ash Pond 2 (AP-2). The report was prepared as an addendum to previously submitted well design, installation, development and decommissioning reports issued for the Site (ERM, 2017, Geosyntec, 2019, 2020a, 2020b, 2021, and 2022), and meets the requirements promulgated in the United States Environmental Protection Agency (US EPA) coal combustion residual (CCR) rule [40 Code of Federal Regulations (CFR) Part 257, Subpart D], specifically 40 CFR §257.91(e)(1) and Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10.

Plant Hammond is located in Floyd County, approximately 10 miles west of Rome, Georgia. The current groundwater monitoring system at AP-2 includes a network of detection monitoring wells, assessment monitoring wells, and piezometers. The locations of these wells and piezometers are shown on **Figure 1**.

MW-55 through MW-59 were installed to characterize site conditions. INW-01 and INW-02 were installed as injection points for the pilot study injections in support of the Assessment of Corrective Measures program. PT-01 through PT-06 were installed to specifically monitor the performance of the pilot study injections.

---

<sup>1</sup> For the purposes of this report, unless otherwise specified, the term “well” will be used interchangeably with “piezometer”.



## 2. DRILLING AND WELL INSTALLATION

Well installation and development activities were performed according to accepted industry standards and following guidelines within the Manual for Groundwater Monitoring (GA EPD, 1991). Well drilling, installation, and surface completion activities were performed by Cascade Drilling, Inc of Midland, North Carolina. In accordance with the Georgia Water Well Standards Act, the driller was required to have an insurance bond on file with the State of Georgia at the time of drilling. A copy of this bond is provided in **Appendix A**. A geologist under the supervision of a professional geologist (PG) registered to practice in the State of Georgia, both of whom are employed with Geosyntec Consultants (Geosyntec), documented the drilling and installation efforts to record observations, soil and rock descriptions, subsurface stratigraphy, water elevations, and other field activities. Geosyntec was also responsible for the development of the newly installed wells.

The locations of the new piezometers are shown on **Figure 1**. Well construction details are provided in **Table 1**; boring and well construction logs are included in **Appendix B**.

### 2.1 Drilling Method

The boreholes were advanced using rotosonic drilling techniques with continuous core collection. Terra Sonic compact crawler size track mounted rig with a 6-inch sonic drill rod was used to install the wells. Care was taken so that the drilling methods did not introduce contamination of the groundwater from surface activities. Drilling equipment was cleaned prior to mobilizing to the site.

### 2.2 Screened Interval

Details regarding the well screened intervals are provided in **Table 1**. The wells are screened in the uppermost water bearing unit of the Site. Screened elevations across the new wells range from approximately 566.78 to 545.18 feet (referenced to the North American Vertical Datum of 1988). All wells were constructed with a 10 foot well screen segment.

### 2.3 Well Casings and Screens

The wells were constructed of 2-inch inner diameter Schedule 40 polyvinyl chloride (PVC) casing with flush-threaded fittings. The wells were installed with a 10-foot nominal length pre-packed dual-wall well screen with 0.010-inch slots. The casing and

pre-packed screens arrived pre-cleaned and packaged by the manufacturer. The pre-packed well screens were constructed onsite by packing sand between slotted PVC and the well screen. Well construction materials are sufficiently durable to resist chemical and physical degradation and do not interfere with the quality of groundwater samples. Casing and screen are flush-threaded. Solvent or glue was not used to construct the well. A threaded bottom cap was attached to the bottom of each well screen. The PVC products used were American Society for Testing and Materials (ASTM) and National Sanitation Foundation (NSF) rated. Well screen interval details are provided in **Table 1**.

#### **2.4 Well Intake Design**

The wells were designed and constructed to: (1) allow sufficient groundwater flow to the well for sampling; (2) minimize the passage of formation materials (turbidity) into the well; and (3) ensure sufficient structural integrity to prevent collapse of the well. The annular space between the face of the formation and the screens was filled to minimize passage of formation materials into the well. A filter pack of clean, well-rounded, quartz sand was installed in each well. The 0.01-inch slot size was selected to minimize the inflow of formation material without impairing influent groundwater flow.

#### **2.5 Filter Pack**

Highly Pure Quartzite of Consolidated Aggregates Co. silica sand filter pack was used as the appropriate gradation for the wells. The filter pack material meets the ASTM D5092 uniformity coefficient specification of 2.5 or less, with a uniformity coefficient of 1.6.

Filter pack material was placed within the pre-packed dual-wall well screens and in the annular space between the outside of the pre-pack screen and borehole wall to ensure an adequate thickness of filter pack material between the wells and the formation. Placement of the filter pack between the borehole wall and PVC was placed via gravity-pouring. Filter pack material placed in the annular space outside of the well screens extended approximately 2 feet above the top of screens. No bridging occurred during filter pack placement at any of the well locations.

Upon placement of the filter pack, the wells were pumped with a submersible pump to assure settlement of the filter pack. The top of filter pack depth was measured following pumping to ensure appropriate extension of filter sand above the screens. The depth of top of filter pack was measured and recorded on the well construction logs provided in **Appendix B**.

## **2.6 Annular Seal**

A minimum of two feet of bentonite chips (PelPlug uncoated 3/8-inch bentonite pellets) were placed immediately above the filter pack by gravity-pouring into the annular space and hydrated per manufacture's specifications. A tremie pipe was used to probe the annular space to ensure that no bridging occurred. The bentonite was hydrated with potable water for a duration meeting the manufacture's specifications prior to grouting the remaining annulus.

The annulus above the bentonite seal was grouted with AquaGuard bentonite grout placed via tremie pipe and direct pour methods from the top of the bentonite seal. During grouting, care was taken to assure that the bentonite seal was not disturbed by locating the base of the tremie pipe approximately 2 feet above the bentonite seal and injecting grout at low pressure/velocity. A cement apron 4-feet by 4-feet by 4-inches was poured around the protective risers at wells MW-56 through MW-59, PT-01 through PT-03, and INW-01. A cement apron 2-feet by 2-feet by 4-inches was poured around flush mount wells MW-55, PT-04 through PT-09, and INW-02. The pads were mounded slightly outward to direct surface drainage away from the well.

## **2.7 Cap and Protective Casing**

The well risers at MW-56 through MW-59, PT-01 through PT-03, and INW-01 were fitted with a locking cap and a lockable cover. A one-quarter inch vent hole was drilled into the PVC riser pipe to provide an avenue for the escape of gas. A weep hole was drilled in the outer protective casing near the bottom above the concrete pad. Pea gravel was placed inside the protective casing between the riser pipe and the outer casing. The wells were clearly marked with the proper well identification number on the stand-up casing. The lockable cover guards the casing from damage and the locking caps serve as a security device to prevent well tampering. Bollards were installed around the four corners of the concrete pads to protect the wells at MW-56 through MW-59, and around the well cluster of PT-01 through PT-03 and INW-01.

MW-55, PT-04 through PT-09, and INW-02 were installed with flush-mounted well vaults and watertight flush-mounted well covers. The wells were clearly marked with the proper well identification number on a secured aluminum well tag on the manhole covers.

Construction details are documented on the well construction logs provided in **Appendix B**.

### 3. WELL DEVELOPMENT

The wells were developed using a combination of surging and pumping to (1) restore the natural hydraulic conductivity of the formation, and (2) to remove fine-grained sediment to ensure low-turbidity groundwater samples. The wells were alternately surged and purged until visually clear of particulates. Turbidity, pH, temperature, conductivity, oxidation-reduction potential (ORP), and dissolved oxygen (DO) measurements were recorded to ensure that each well was fully developed. The well development field forms are included in **Appendix C**.

#### 4. SURVEY

Upon completion of the well installations, select horizontal locations and vertical elevations were surveyed by a Georgia-licensed surveyor. The top of the PVC well casing [top of casing (TOC) elevation] and the survey pin installed at the well pad were surveyed to within 0.5-foot horizontal accuracy and to 0.01-foot vertical accuracy. The horizontal location (i.e., northings and eastings) was recorded in feet relative to the North America Datum of 1983 (NAD) with the vertical elevation recorded in feet relative to the North American Vertical Datum of 1988. Certified survey data are provided in the well construction table (**Table 1**). A copy of the certified well survey data for the new wells are provided in **Appendix D**.

## 5. REFERENCES

- Environmental Resources Management (ERM), 2017. *Well Design, Installation, Development, and Decommissioning Report – Plant Hammond Ash Ponds 1 and 2*. October 2017.
- Georgia Environmental Protection Division (GA EPD), Georgia Department of Natural Resources, 1991. *Manual for Groundwater Monitoring*. September 1991.
- Geosyntec Consultants, 2019. Well Design, Installation and Development Report – Addendum, Plant Hammond Ash Ponds 1 and 2 (AP-1 and AP-2). June 2019.
- Geosyntec Consultants, 2020a. Well Design, Installation and Development Report – Addendum No 2, Plant Hammond Ash Pond 2. July 2020.
- Geosyntec Consultants, 2020b. Well Design, Installation and Development Report – Addendum No 3, Plant Hammond Ash Pond 2. November 2020.
- Geosyntec Consultants, 2021. Well Design, Installation and Development Report – Addendum No 4, Plant Hammond Ash Pond 2. September 2021.
- Geosyntec Consultants, 2022. Well Design, Installation and Development Report – Addendum No 5, Plant Hammond Ash Pond 2. June 2022.
- United States Environmental Protection Agency. 2015a. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. 40 CFR Parts 257 and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule. [EPA-HQ-RCRA-2009-0640; FRL-9919-44-OSWER]. RIN-2050-AE81, April 2015

# TABLE

**Table 1**  
 Summary of Well Construction Details  
 Plant Hammond AP-2, Floyd County, Georgia

Well ID	Purpose	Well Completion	Installation Date	Northing <sup>(1)</sup>	Easting <sup>(1)</sup>	Ground Surface Elevation <sup>(2)</sup> (ft)	Top of Casing Elevation <sup>(2)</sup> (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Well Depth (ft bgs) <sup>(3)</sup>
PT-01	Piezometer	Protective Riser	6/17/2023	1547916.85	1938348.81	571.14	574.13	561.24	551.24	20.20
PT-02	Piezometer	Protective Riser	6/16/2023	1547917.68	1938353.52	571.10	574.06	561.10	551.10	20.30
PT-03	Piezometer	Protective Riser	6/17/2023	1547910.57	1938352.13	571.10	574.09	559.10	549.10	22.30
PT-04	Piezometer	Flush Mount	6/6/2023	1548918.26	1937641.91	580.50	580.26	556.70	546.70	34.10
PT-05	Piezometer	Flush Mount	6/12/2023	1548913.06	1937638.48	580.83	580.54	555.73	545.73	35.40
PT-06	Piezometer	Flush Mount	6/7/2023	1548916.95	1937634.25	580.68	580.36	555.18	545.18	35.80
MW-55	Piezometer	Flush Mount	6/13/2023	1548823.40	1937575.72	582.78	582.49	566.78	556.88	26.20
MW-56	Piezometer	Protective Riser	6/16/2023	1547906.81	1938260.81	570.60	573.47	559.60	549.60	21.30
MW-57	Piezometer	Protective Riser	6/16/2023	1547895.53	1938349.49	571.30	574.28	560.30	550.30	21.30
MW-58	Piezometer	Protective Riser	6/17/2023	1547931.46	1938592.55	572.96	575.87	559.46	549.46	23.80
MW-59	Piezometer	Protective Riser	6/14/2023	1547971.14	1938344.65	589.52	592.20	559.52	549.52	40.30
INW-01	Piezometer	Protective Riser	6/16/2023	1547921.52	1938350.62	571.04	573.90	561.04	551.04	20.30
INW-02	Piezometer	Flush Mount	6/6/2023	1548915.00	1937643.89	580.78	580.56	555.78	545.78	35.30

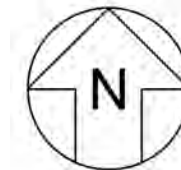
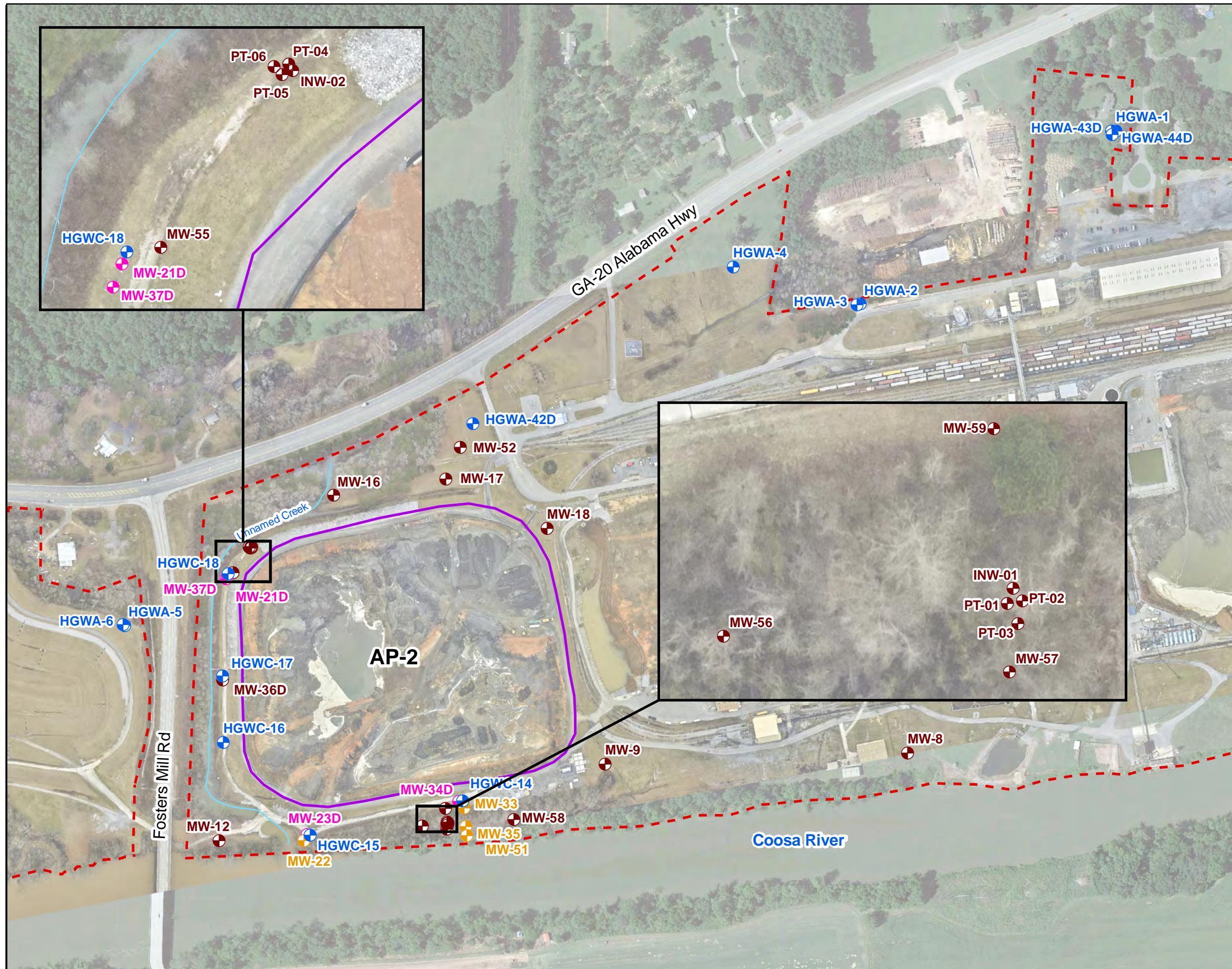
Notes:

ft bgs = feet below ground surface.

- (1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Survey was completed by GEL Solutions and certified July 17, 2023, and August 30, 2023.
- (2) Vertical elevations are referenced to the North American Vertical Datum (NAVD) of 1988. Ground surface elevation defined at the survey nail installed within the well pad. Survey was completed by GEL Solutions and certified July 17, 2023, and August 30, 2023.
- (3) Total well depth accounts for 0.3 ft sump.



# FIGURE



**LEGEND**

- Detection Monitoring Well
- Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well
- ⊕ Piezometer
- Unnamed Creek
- Approximate AP-2 Boundary
- Plant Hammond Property Boundary

- Notes:
1. Piezometers INW-01, INW-02, MW-55 through MW-59, and PT-01 through PT-06 were installed in support of an Assessment of Corrective Measures (ACM) geochemical injections pilot study and are not included in the routine semiannual sampling of the monitoring well network.
  2. Aerial photograph source: Google Earth Pro, August 2019 and Georgia Power Company, February 2023.



**GROUNDWATER MONITORING NETWORK MAP**

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

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA    OCTOBER 2023

**FIGURE 1**

# APPENDIX A

## Well Driller Performance Bonds

CONTINUATION  
CERTIFICATE

Atlantic Specialty Insurance Company

, Surety upon

a certain Bond No. 800033976

dated effective September 27, 2017  
(MONTH-DAY-YEAR)

on behalf of Ricky Davis / Cascade Drilling, L.P.  
(PRINCIPAL)

and in favor of Department of Natural Resources, State of Georgia  
(OBLIGEE)

does hereby continue said bond in force for the further period

beginning on June 30, 2023  
(MONTH-DAY-YEAR)

and ending on June 30, 2025  
(MONTH-DAY-YEAR)

Amount of bond Thirty Thousand and 00/100 Dollars (\$30,000.00)

Description of bond Performance Bond for Water Well Contractors

Premium:

**PROVIDED:** That this continuation certificate does not create a new obligation and is executed upon the express condition and provision that the Surety's liability under said bond and this and all Continuation Certificates issued in connection therewith shall not be cumulative and that the said Surety's aggregate liability under said bond and this and all such Continuation Certificates on account of all defaults committed during the period (regardless of the number of years) said bond had been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and dated on April 13, 2023  
(MONTH-DAY-YEAR)

Atlantic Specialty Insurance Company

By   
ATTORNEY-IN-FACT Carlos A. Albelo



# Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Megan Sivley, Melissa Haddick, Sandra Parker, Orlando Aguirre, Stacy Killebrew, Carlos A. Albelo**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

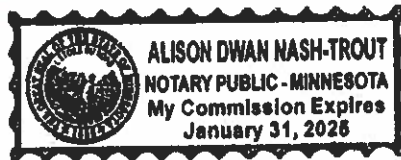
IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this first day of January, 2023.



By   
Sarah A. Kolar, General Counsel

STATE OF MINNESOTA  
HENNEPIN COUNTY

On this first day of January, 2023, before me personally came Sarah A. Kolar, General Counsel of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and she acknowledged the execution of the same, and being by me duly sworn, that she is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.



  
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 13<sup>th</sup> day of April, 2023.



This Power of Attorney expires  
January 31, 2025

  
Kara Barrow, Secretary

# APPENDIX B

## Boring and Well Construction Logs

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/17/23</u> <b>COMPLETED</b> <u>06/17/23</u>	<b>NORTHING</b> <u>1547916.85 ft</u> <b>EASTING</b> <u>1938348.81 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>571.14 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>574.13 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

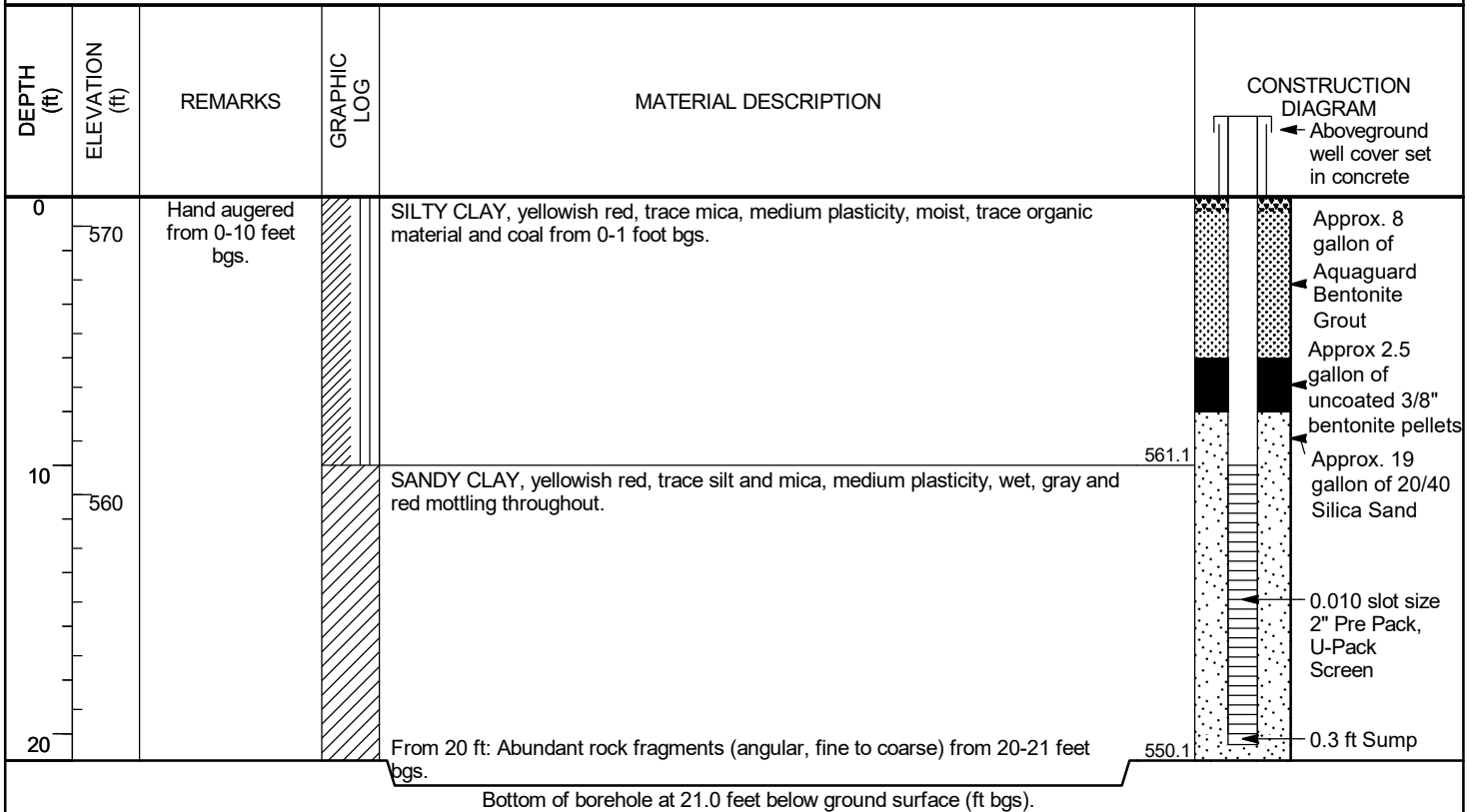
DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs.		SILTY CLAY, yellowish red, trace sand, silt, and mica, medium plasticity, moist, trace coal from 0-2 feet bgs.	<p>CONSTRUCTION DIAGRAM</p> <ul style="list-style-type: none"> <li>← Aboveground well cover set in concrete</li> <li>Approx. 8 gallon of Aquaguard Bentonite Grout</li> <li>Approx 2.5 gallon of uncoated 3/8" bentonite pellets</li> <li>Approx. 19 gallon of 20/40 Silica Sand</li> <li>← 0.010 slot size 2" Pre Pack, U-Pack Screen</li> <li>← 0.3 ft Sump</li> </ul>
7 to 10 ft:		Wet.			
10	560			SANDY CLAY, yellowish red, trace silt and mica, medium plasticity, wet, gray mottling throughout.	
				From 15 ft: Brown, gravelly (angular, fine), wet.	
20					

550

Bottom of borehole at 21.2 feet below ground surface (ft bgs).


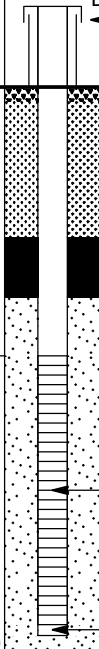

549.9

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/16/23</u> <b>COMPLETED</b> <u>06/16/23</u>	<b>NORTHING</b> <u>1547917.68 ft</u> <b>EASTING</b> <u>1938353.52 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>571.10 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>574.06 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

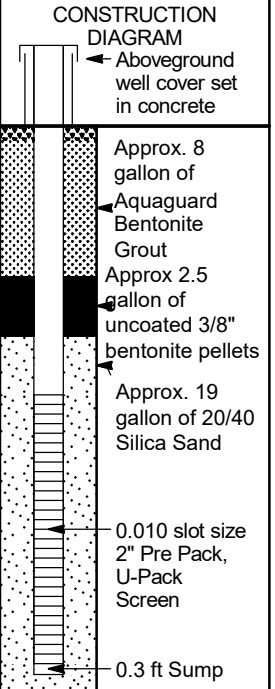




<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/17/23</u> <b>COMPLETED</b> <u>06/17/23</u>	<b>NORTHING</b> <u>1547910.57 ft</u> <b>EASTING</b> <u>1938352.13 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>571.10 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>574.09 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

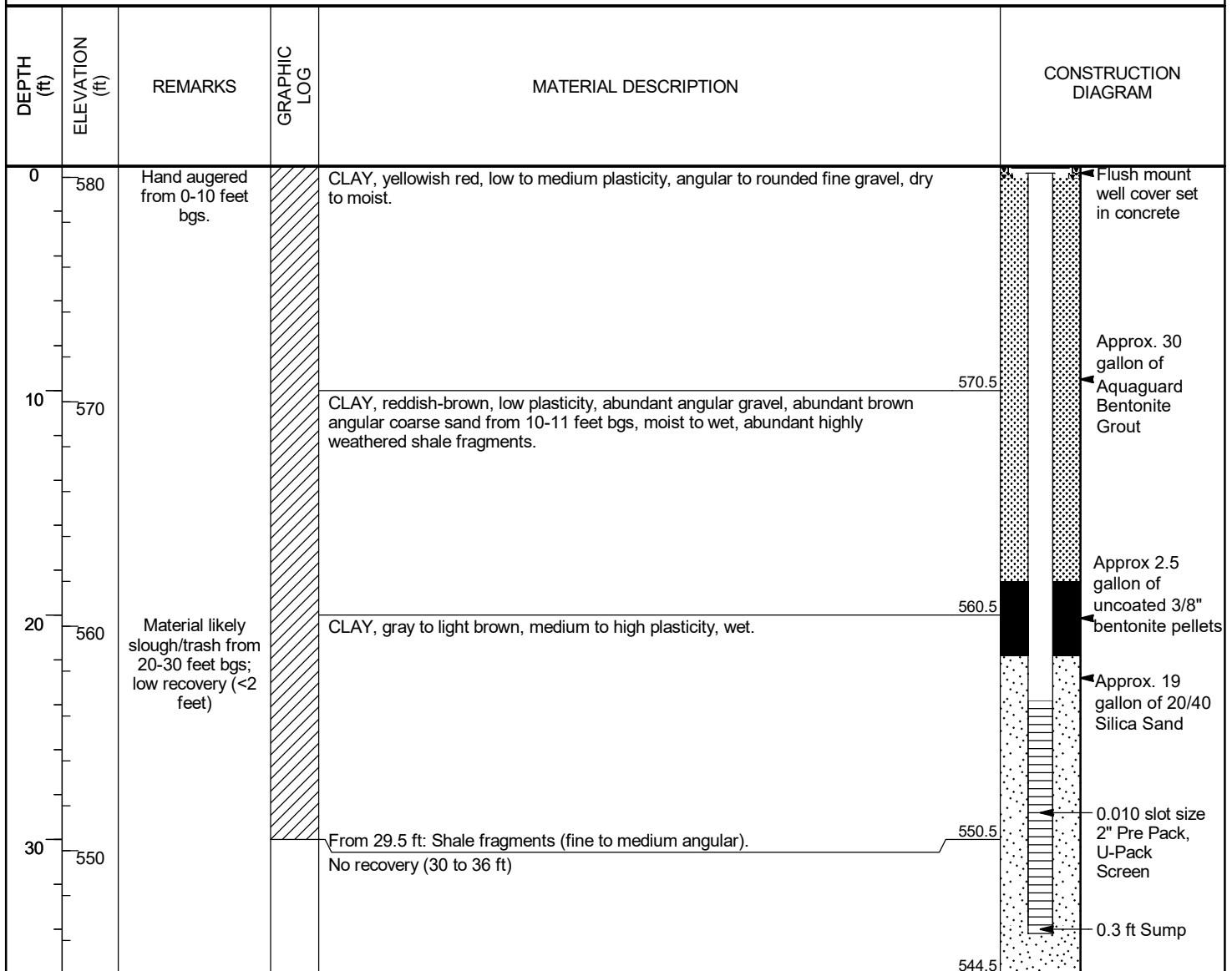
DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs. Obstruction at 3.5 feet bgs. Move South 1 foot.		SILTY CLAY, yellowish red, trace sand and mica, medium plasticity, moist, trace organic material.	
				From 8 ft: Wet.	
10	560			SANDY CLAY, yellowish red, trace mica, medium plasticity, wet, gray and brown mottling throughout.	Approx. 8 gallon of Aquaguard Bentonite Grout
				From 17 ft: Brown, silty.	Approx. 2.5 gallon of uncoated 3/8" bentonite pellets
20	550			Bottom of borehole at 21.1 feet below ground surface (ft bgs).	Approx. 19 gallon of 20/40 Silica Sand

Bottom of borehole at 21.1 feet below ground surface (ft bgs).



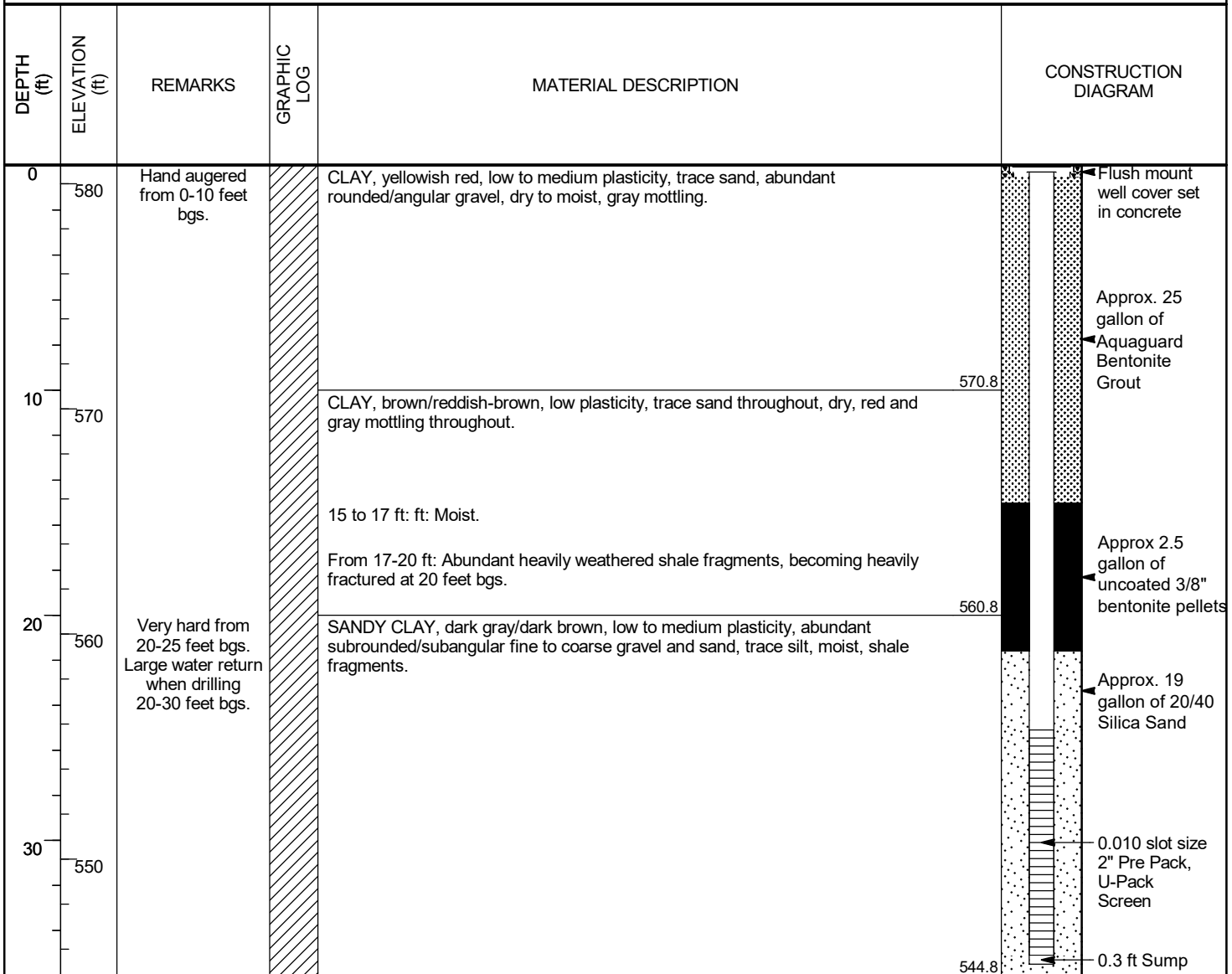
**CLIENT** Southern Company Services  
**PROJECT NUMBER** GW6581E  
**DATE STARTED** 06/06/23 **COMPLETED** 06/06/23  
**DRILLER** Cascade Drilling  
**DRILLING METHOD** Sonic  
**SAMPLING METHOD** Sonic Core  
**RIG TYPE** Terrasonic Compact Crawler

**PROJECT NAME** Plant Hammond Well Installation  
**PROJECT LOCATION** Plant Hammond  
**NORTHING** 1548918.26 ft **EASTING** 1937641.91 ft  
**GROUND ELEVATION** 580.50 **BORING DIAMETER** 6 in.  
**TOP OF CASING ELEVATION** 580.26 ft  
**GEOPHYSICAL CONTRACTOR** ---  
**LOGGED BY** T. Kessler **CHECKED BY** C. Hug



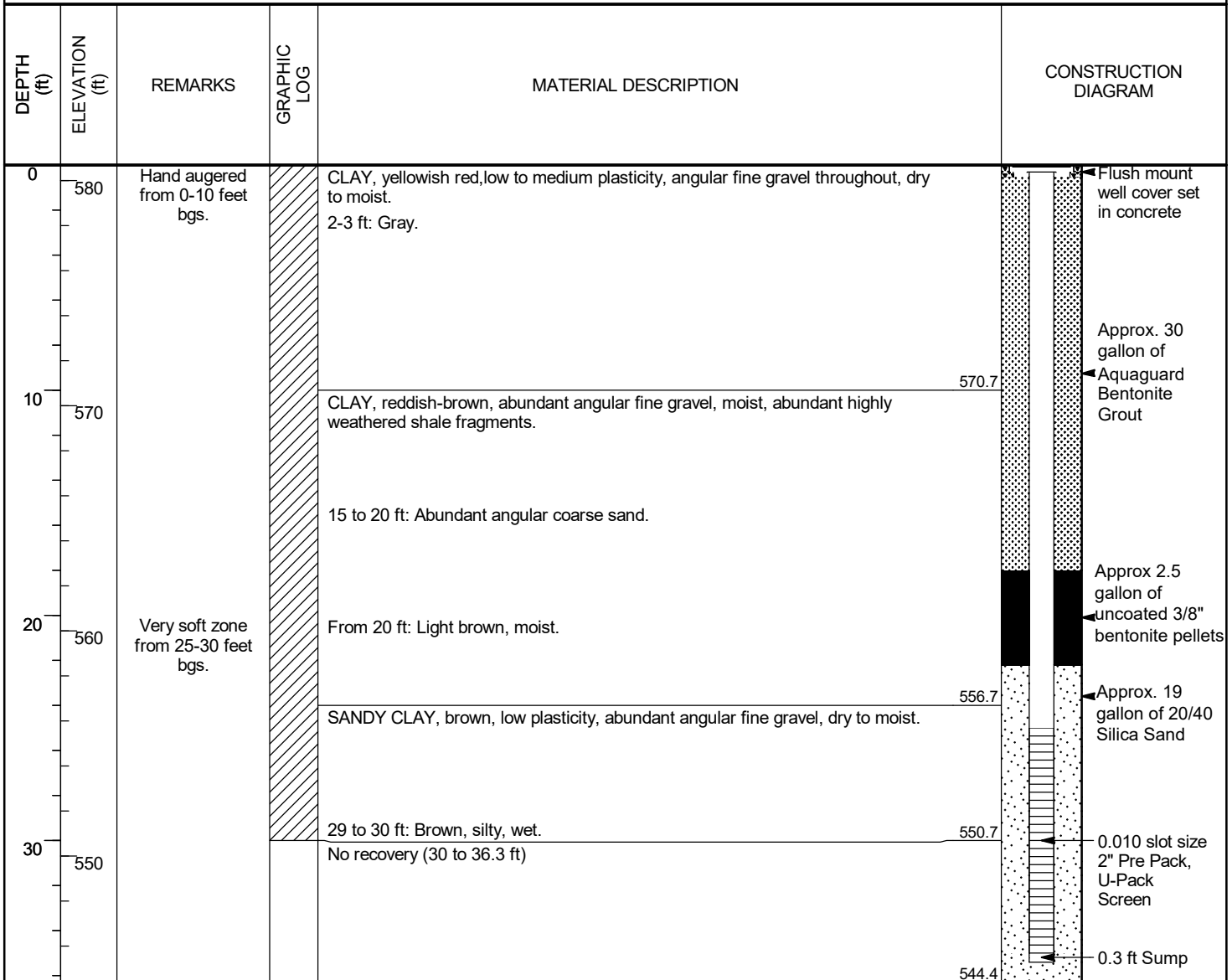
Bottom of borehole at 36.0 feet below ground surface (ft bgs).

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/12/23</u> <b>COMPLETED</b> <u>06/12/23</u>	<b>NORTHING</b> <u>1548913.06 ft</u> <b>EASTING</b> <u>4937638.48 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>580.83 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>580.54 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>



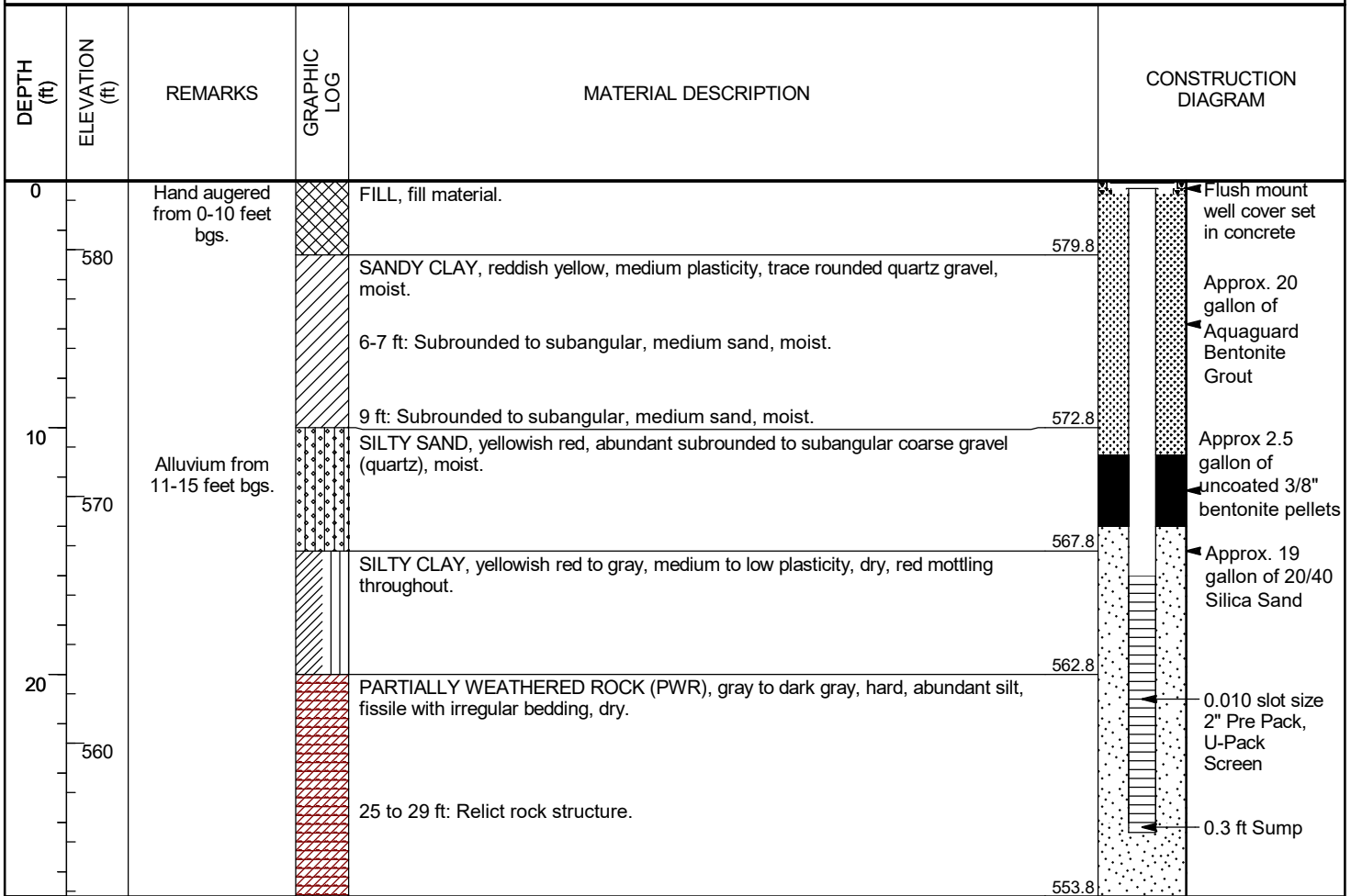
Bottom of borehole at 36.0 feet below ground surface (ft bgs).

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/07/23</u> <b>COMPLETED</b> <u>06/07/23</u>	<b>NORTHING</b> <u>1548916.95 ft</u> <b>EASTING</b> <u>1937634.25 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>580.68 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>580.36 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>



Bottom of borehole at 36.3 feet below ground surface (ft bgs).

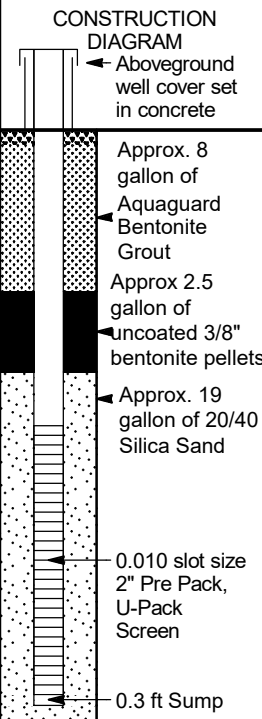
<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/13/23</u> <b>COMPLETED</b> <u>06/13/23</u>	<b>NORTHING</b> <u>1548823.40 ft</u> <b>EASTING</b> <u>1937575.72 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>582.78 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>582.49 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>



Bottom of borehole at 29.0 feet below ground surface (ft bgs).


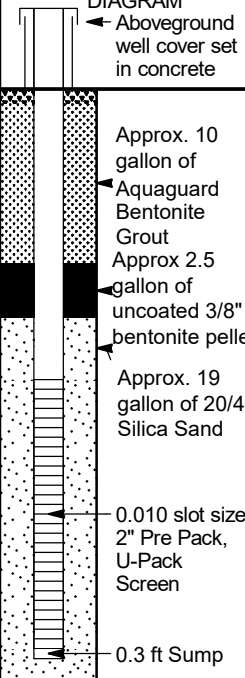


<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/15/23</u> <b>COMPLETED</b> <u>06/16/23</u>	<b>NORTHING</b> <u>1547906.81 ft</u> <b>EASTING</b> <u>1938260.81 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>570.60 ft</u> <b>BORING DIAMETER</b> <u>6</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	in. <b>TOP OF CASING ELEVATION</b> <u>573.47 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs.		SILTY CLAY, yellowish red, medium to high plasticity, moist, trace mica and organic material.	
				From 7.5 ft: Wet.	
10	560			CLAY, yellowish red to yellowish-brown, medium plasticity, abundant fine sand and silt, trace mica, wet.	
					560.6
				SILTY GRAVEL, brown to dark brown, fine, subounded, wet.	
					555.6
				GRAVELLY CLAY, reddish yellow, low plasticity, abundant subounded fine to coarse gravel, subounded to subangular fine to medium sand, abundant silt, wet.	
					554.6
					551.6
20	550			SILTY CLAY, reddish yellow, medium plasticity, wet, red mottling throughout.	
					548.5



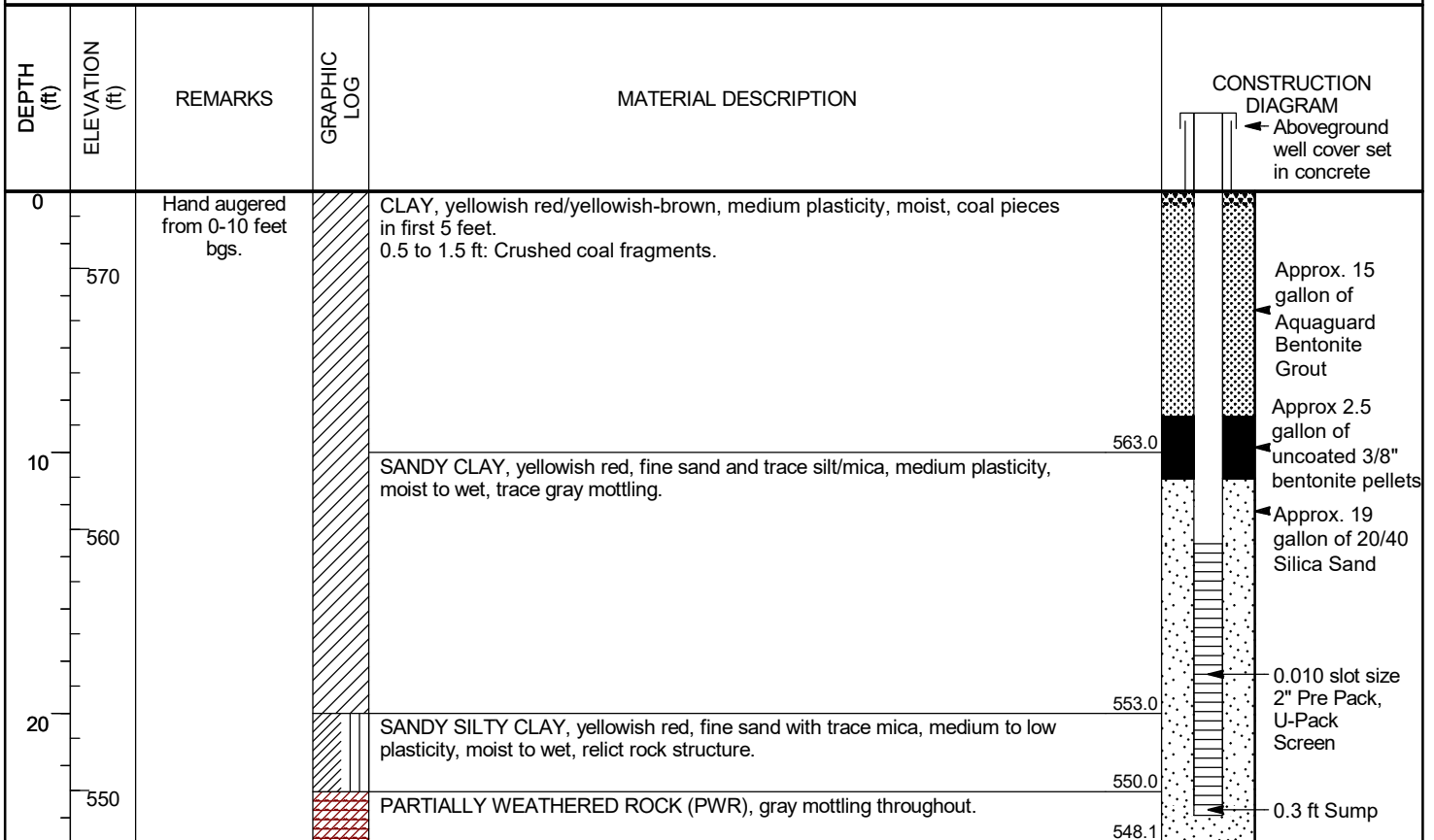
Bottom of borehole at 22.1 feet below ground surface (ft bgs).

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/16/23</u> <b>COMPLETED</b> <u>06/16/23</u>	<b>NORTHING</b> <u>1547895.53 ft</u> <b>EASTING</b> <u>1938349.49 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>571.30 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>574.28 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs.		SILTY CLAY, yellowish red, medium to high plasticity, moist, trace mica and organic matter.	 <p>Aboveground well cover set in concrete</p> <p>Approx. 10 gallon of Aquaguard Bentonite Grout</p> <p>Approx 2.5 gallon of uncoated 3/8" bentonite pellets</p> <p>Approx. 19 gallon of 20/40 Silica Sand</p> <p>0.010 slot size 2" Pre Pack, U-Pack Screen</p> <p>0.3 ft Sump</p>
10	560			From 9 ft: Wet. 561.3	
				No recovery (10 to 12 ft) 559.3	
				SANDY CLAY, yellowish red to yellowish-brown, medium to high plasticity, wet, red/gray mottling. 556.3	
20	550			SILTY SAND, yellowish red, fine, subangular, wet.	
				From 18 ft: With highly weathered rock fragments.	
				From 21 ft: With angular rock fragments. 549.3	

Bottom of borehole at 22.0 feet below ground surface (ft bgs).

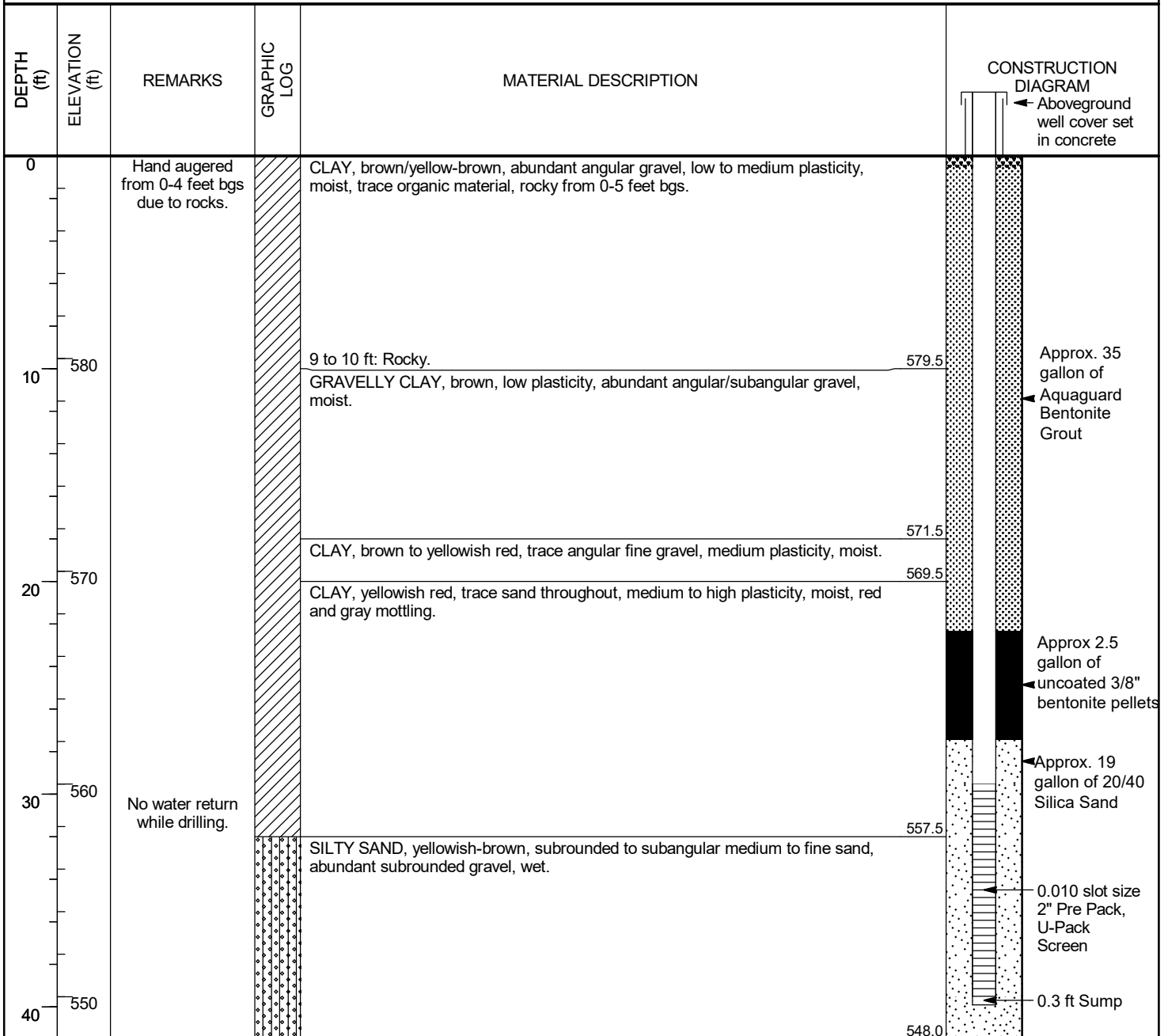
<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/17/23</u> <b>COMPLETED</b> <u>06/17/23</u>	<b>NORTHING</b> <u>1547931.46 ft</u> <b>EASTING</b> <u>1938592.55 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>572.96 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>575.87 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>



Bottom of borehole at 24.9 feet below ground surface (ft bgs).


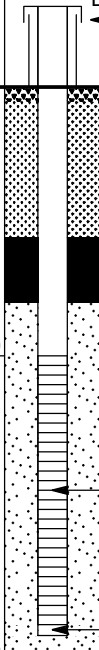



<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/13/23</u> <b>COMPLETED</b> <u>06/14/23</u>	<b>NORTHING</b> <u>1547971.14 ft</u> <b>EASTING</b> <u>1938344.65 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>589.52 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>592.2 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>



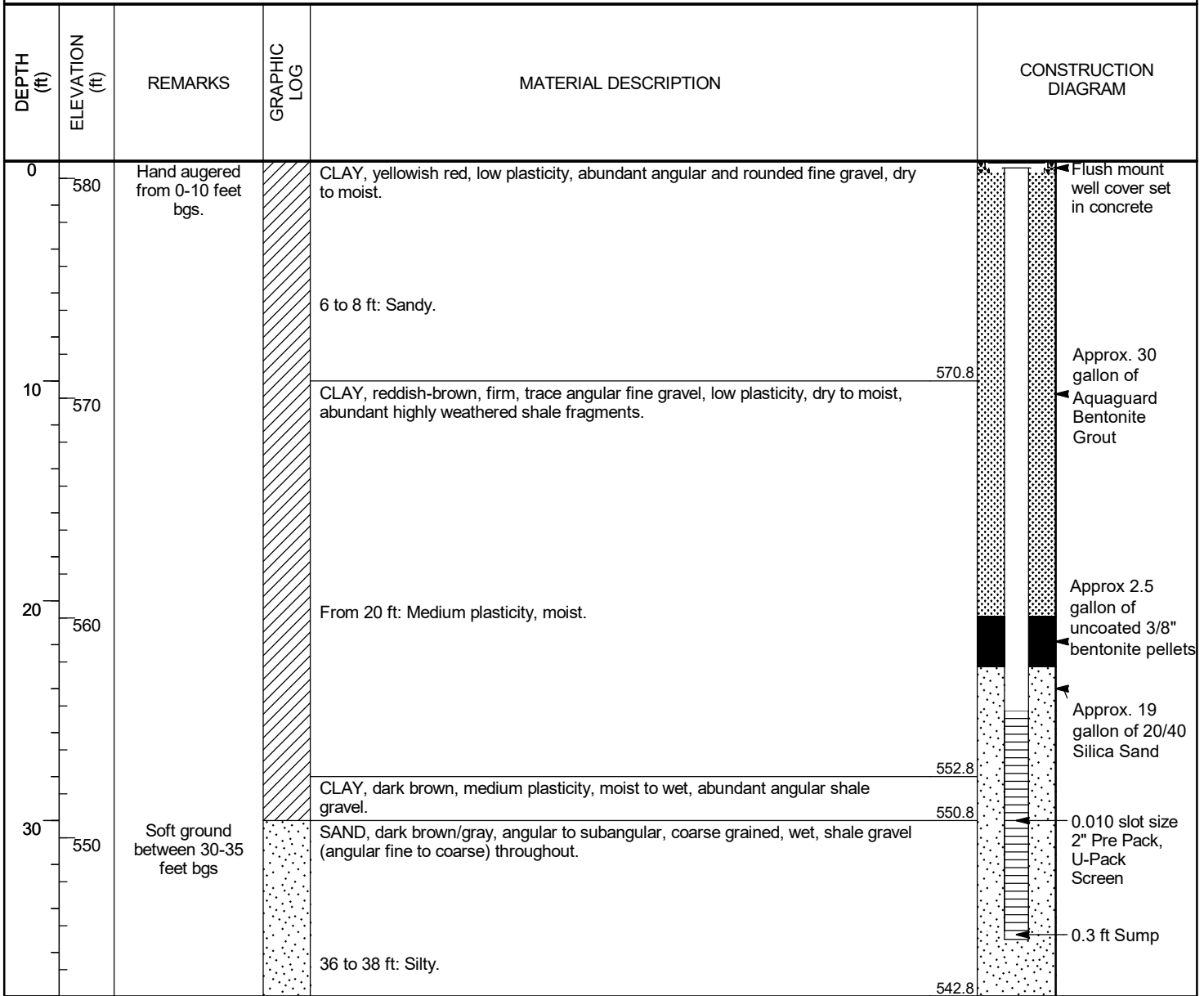
Bottom of borehole at 41.5 feet below ground surface (ft bgs).

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/16/23</u> <b>COMPLETED</b> <u>06/16/23</u>	<b>NORTHING</b> <u>1547921.52 ft</u> <b>EASTING</b> <u>1938350.62 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>571.04 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>573.90 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs.		SILTY CLAY, yellowish red, medium plasticity, moist, trace mica and organic material.	 <p>Aboveground well cover set in concrete</p> <p>Approx. 10 gallon of Aquaguard Bentonite Grout</p> <p>Approx 2.5 gallon of uncoated 3/8" bentonite pellets</p> <p>Approx. 19 gallon of 20/40 Silica Sand</p> <p>0.010 slot size 2" Pre Pack, U-Pack Screen</p> <p>0.3 ft Sump</p>
10	560			SANDY CLAY, yellowish red, trace silt and mica, medium to low plasticity, wet, gray mottling throughout.	
20	550			From 20 ft: Abundant angular, fine to coarse rock gravel.	

Bottom of borehole at 21.2 feet below ground surface (ft bgs).

<b>CLIENT</b> Southern Company Services	<b>PROJECT NAME</b> Plant Hammond Well Installation
<b>PROJECT NUMBER</b> GW6581E	<b>PROJECT LOCATION</b> Plant Hammond
<b>DATE STARTED</b> 06/06/23 <b>COMPLETED</b> 06/06/23	<b>NORTHING</b> 1548915.00 ft <b>EASTING</b> 1937643.89 ft
<b>DRILLER</b> Cascade Drilling	<b>GROUND ELEVATION</b> 580.78 ft <b>BORING DIAMETER</b> 6 in.
<b>DRILLING METHOD</b> Sonic	<b>TOP OF CASING ELEVATION</b> 580.56 ft
<b>SAMPLING METHOD</b> Sonic Core	<b>GEOPHYSICAL CONTRACTOR</b> ---
<b>RIG TYPE</b> Terrasonic Compact Crawler	<b>LOGGED BY</b> T. Kessler <b>CHECKED BY</b> C. Hug



Bottom of borehole at 38.0 feet below ground surface (ft bgs).

# APPENDIX C

## Well Development and Equipment Calibration Forms

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-01 PFO1  
 Total Depth (ft): 23.47  
 Depth to Water (ft): 9.81  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.24  
 Well Volume (L) = gal \* 3.785: 8.48

Project No.: G-65816  
 Location: AP-2  
 Pump Type/Model: Monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 23/18.5  
 Start/Stop Purge Time: 1240/1539  
 Purge Rate (mL/min): gal/min 1.0/0.5  
 Total Purge Volume (L): gal 48.0

Sampling Date: 6-29-2023  
 Sampler's Name: A. Szwast  
 Sample Collection Time: ✓  
 Sample Purge Rate (mL/min): ✓  
 Sample ID: ✓  
 Laboratory Analyses: ✓

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush  Stick Up  
 Well Lock:  Yes No  
 Well Cap Condition:  Good Replace  
 Well Tag Present:  Yes No

Purge Method: Low-Flow Well Volume Other: ✓  
 Sampling Method: Pump Discharge Other: ✓  
 QA/QC Collected? ✓  
 QA/QC I.D. ✓

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No N/A

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (gal/min)	Purged Volume (gal)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1240								1.0		Pre-purge 1 gal/min
1255								0	15	Purge dry. allow recharge
1310								0.5	15	Pre-purge 0.5 gal/min
1320								0	20	Purge dry. allow recharge
1335								1.0	20	Pre-purge 1 gal/min
1338								0	23	Purge dry. allow recharge
1357	4.82	1859.4	149.4	4.60	20.58	— @6-29-23	17.56	1.0	23	Pre-purge @ 6-29-2023. Begin purge. Not enough for subcell
1358					21.10 @6-29-23			0	24	Purge dry. allow recharge
1424	4.79	1862.5	150.3	3.48	18.47	21.4	15.89	0.5	24	Begin purge
1429	4.79	2072.2	123.5	5.89	18.47	10.3	17.28	0.5	26.5	
1434	4.70	1932.5	114.7	4.22	19.14	15.6	19.63	0.5	29	
1437							20.03	0	30.5	Purge dry. allow recharge
1454	4.73	1916.2	129.1	4.43	21.82	51.3 @6-29-23	17.43	0.5	30.5	DTW = 15.81
1459	4.71	2091.6	104.7	6.04	19.11	34.3 @6-29-23	17.93	0.5	33.0	
1500								0	35.5	Purge dry
1514	4.81	2077.5	127.1	4.35	22.04	27.6	14.89	0.5	35.5	
1519	4.62	2003.1	106.7	4.08	28.65	36.8	17.45	0.5	38.0	
1524	4.71	2131.2	105.3	5.61	19.05	24.8	17.48	0.5	40.5	
1529	4.73	2144.7	114.8	4.96	19.50	12.8	18.32	0.5	43.0	Flow intermittently decreasing, then return to full flow
Stabilizing Criteria	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client:	<u>SCS</u>	Project No.:	<u>G-65876</u>	Sampling Date:	<u>6-29-2023</u>
Site:	<u>Plant Hammond</u>	Location:	<u>AP-2</u>	Sampler's Name:	<u>A. Szwast</u>
Well ID:	<u>PT-01</u>	Pump Type/Model:	<u>Monsoon</u>	Sample Collection Time:	<u>—</u>
Total Depth (ft):	<u>23.47</u>	Tubing Material:	<u>Poly</u>	Sample Purge Rate (mL/min):	<u>—</u>
Depth to Water (ft):	<u>9.81</u>	Pump Intake Depth (ft):	<u>23/18.5</u>	Sample ID:	<u>—</u>
Well Diameter (in):	<u>2</u>	Start/Stop Purge Time:	<u>1240/1539</u>	Laboratory Analyses:	<u>—</u>
Well Volume (gal) = 0.041d <sup>2</sup> h:	<u>2.24</u>	Purge Rate (mL/min):	<u>gal/min 1.0/0.5</u>		
Well Volume (L) = gal * 3.785:	<u>8.48</u>	Total Purge Volume (gal):	<u>48.0</u>		
<i>d = well diameter (inches); h = length of water column (feet)</i>					
Well Type:	Flush	<input checked="" type="radio"/> Stick Up	gal/min C.H. 9/22	Purge Method:	Low-Flow Well Volume Other: <u>—</u>
Well Lock:	<input checked="" type="radio"/> Yes	No		Sampling Method:	Pump Discharge Other: <u>—</u>
Well Cap Condition:	<input checked="" type="radio"/> Good	Replace			QA/QC Collected? <u>—</u>
Well Tag Present:	<input checked="" type="radio"/> Yes	No			QA/QC I.D. <u>—</u>

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No NA

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1534	4.60	2036.7	111.1	4.98	19.68	13.7	17.47	0.5	45.5	
1539	4.61	2100.4	123.1	5.28	19.93	2.59	17.45	0.5	48.0	
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCS</u>	Project No.: <u>GW65816</u>	Sampling Date: <u>6-29-2023</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>A. Swast</u>
Well ID: <u>PT-01</u>	Pump Type/Model: <u>Monsoon</u>	Sample Collection Time: <u>—</u>
Total Depth (ft): <u>23.47</u>	Tubing Material: <u>Poly</u>	Sample Purge Rate (mL/min): <u>—</u>
Depth to Water (ft): <u>12.15</u>	Pump Intake Depth (ft): <u>23 18.5</u>	Sample ID: <u>—</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>1604 /</u>	Laboratory Analyses: <u>—</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>1.86</u>	Purge Rate (mL/min): <u>150</u>	
Well Volume (L) = gal * 3.785: <u>7.03</u>	Total Purge Volume (L): <u>2.3</u>	
<i>d = well diameter (inches); h = length of water column (feet)</i>		
Well Type: Flush <input checked="" type="radio"/> Stick Up	Purge Method: <input checked="" type="radio"/> Low-Flow <input type="radio"/> Well Volume <input type="radio"/> Other: <u>—</u>	QA/QC Collected? <u>—</u>
Well Lock: <input checked="" type="radio"/> Yes <input type="radio"/> No	Sampling Method: <input type="radio"/> Pump Discharge <input type="radio"/> Other: <u>—</u>	QA/QC I.D. <u>—</u>
Well Cap Condition: <input checked="" type="radio"/> Good <input type="radio"/> Replace	All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No <u>N/A</u>	
Well Tag Present: <input checked="" type="radio"/> Yes <input type="radio"/> No		

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
<u>1604</u>										<u>Pre-purge for flow at 150 mL/min</u>
<u>1609</u>	<u>4.71</u>	<u>2320.3</u>	<u>166.7</u>	<u>3.12</u>	<u>22.35</u>	<u>4.71</u>	<u>11.68</u>	<u>150</u>	<u>0.75</u>	
<u>1614</u>	<u>4.69</u>	<u>2260.3</u>	<u>178.1</u>	<u>3.28</u>	<u>23.16</u>	<u>3.23</u>	<u>11.45</u>	<u>150</u>	<u>1.5</u>	
<u>1619</u>	<u>4.63</u>	<u>2246.3</u>	<u>106.5</u>	<u>3.38</u>	<u>22.63</u>	<u>2.49</u>	<u>11.44</u>	<u>150</u>	<u>2.3</u>	
<b>Stabilizing Criteria</b>	<b>+/- 0.1 SU</b>	<b>+/- 5%</b>		<b>0.2 mg/L or 10% for DO &gt; 0.5 mg/L (whichever is greater)</b>		<b>&lt; 5 NTUs</b>	<b>&lt; 0.3 ft</b>	<b>&gt; 100 mL &lt; 250 mL</b>	<b>&gt; 3L</b>	

@ 6-29-2023

GROUNDWATER SAMPLING LOG SHEET

Client: SCS Project No.: GW0516 Sampling Date: 6/28/23  
 Site: Plant Hammond Location: AP-2 Sampler's Name: AN  
 Well ID: PT-02 Pump Type/Model: monsoon Sample Collection Time: -  
 Total Depth (ft): 23.4 Tubing Material: poly Sample Purge Rate (mL/min): -  
 Depth to Water (ft): 9.6 Pump Intake Depth (ft): 18 Sample ID: -  
 Well Diameter (in): 2 Start/Stop Purge Time: 1030/1050 Laboratory Analyses: -  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.26 Purge Rate (mL/min): 8000  
 Well Volume (L) = gal \* 3.785: 8.57 Total Purge Volume (L): 8.57

$d = \text{well diameter (inches)}$ ;  $h = \text{length of water column (feet)}$

Well Type: Flush  Stick Up Purge Method: Low-Flow Well Volume Other: - QA/QC Collected? -  
 Well Lock:  Yes No Sampling Method: Pump Discharge Other: - QA/QC ID: -  
 Well Cap Condition:  Good Replace  
 Well Tag Present:  Yes No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
<u>1030</u>	---	---	---	---	---	---	---	---	---	<u>begin purging, motor broke had to</u>
<u>1050</u>	---	---	---	---	---	---	---	---	<u>urgently</u>	
<u>AN</u>										
<u>6/27/23</u>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	



GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCG</u>	Project No.: <u>GWUS81G</u>	Sampling Date: <u>06/28/23</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>AN</u>
Well ID: <u>PT-02</u>	Pump Type/Model: <u>monssoon</u>	Sample Collection Time: <u>-</u>
Total Depth (ft): <u>23.4</u>	Tubing Material: <u>poly</u>	Sample Purge Rate (mL/min): <u>-</u>
Depth to Water (ft): <u>9.6</u>	Pump Intake Depth (ft): <u>18</u>	Sample ID: <u>-</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>1625/1700</u>	Laboratory Analyses: <u>-</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>2.26</u>	Purge Rate (mL/min): <u>8000</u>	
Well Volume (L) = gal * 3.785: <u>8.57</u>	Total Purge Volume (L): <u>8.57</u>	
<i>d = well diameter (inches); h = length of water column (feet)</i>		
Well Type: Flush <input type="radio"/> <u>Stick Up</u> <input checked="" type="radio"/>	Purge Method: Low-Flow <input type="checkbox"/> Well Volume <input type="checkbox"/> Other: <input type="checkbox"/>	QA/QC Collected? <input type="checkbox"/>
Well Lock: <input checked="" type="radio"/> Yes <input type="radio"/> No	Sampling Method: Pump Discharge <input type="checkbox"/> Other: <input type="checkbox"/>	QA/QC I.D. <input type="checkbox"/>
Well Cap Condition: <input checked="" type="radio"/> Good <input type="radio"/> Replace	<b>All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No</b>	
Well Tag Present: <input checked="" type="radio"/> Yes <input type="radio"/> No		

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1625										begin purging, pumped any, on + off pumping in between recharges stop purging
1700										
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>6/27/23 AN</p> <p>6/27/23 AN</p> </div>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCS</u>	Project No.: <u>'06W65816</u>	Sampling Date: <u>6-30-2013</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>A. Sworst</u>
Well ID: <u>PT-02</u>	Pump Type/Model: <u>Monsoon</u>	Sample Collection Time: <u>—</u>
Total Depth (ft): <u>23.4</u>	Tubing Material: <u>Pols</u>	Sample Purge Rate (mL/min): <u>—</u>
Depth to Water (ft): <u>9.86</u>	Pump Intake Depth (ft): <u>23 / 18.4</u>	Sample ID: <u>—</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>1050 / 1550</u>	Laboratory Analyses: <u>—</u>
Well Volume (gal) = 0.041 d <sup>3</sup> h: <u>2.22</u>	Purge Rate (mL/min): <u>1.0 / 0.5 / 0.25</u>	QA/QC Collected?: <u>—</u>
Well Volume (L) = gal * 3.785: <u>8.40</u>	Total Purge Volume (L): <u>21.0</u>	QA/QC I.D.: <u>—</u>
d = well diameter (inches); h = length of water column (feet)		
Well Type: Flush <input type="checkbox"/> <u>Stick Up</u>	Purge Method: Low-Flow <input type="checkbox"/> Well Volume <input type="checkbox"/> Other: <input type="checkbox"/>	
Well Lock: Yes <input type="checkbox"/> No <input type="checkbox"/>	Sampling Method: Pump Discharge <input checked="" type="checkbox"/> Other: <input type="checkbox"/>	
Well Cap Condition: Good <input checked="" type="checkbox"/> Replace <input type="checkbox"/>	All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No <u>N/A</u>	
Well Tag Present: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1050								1.0	0	Pre-purge at 1 gal/min
1058								0	8.0	Purge dry, allow recharge
1146	5.15	1932.6	91.9	6.46	19.59	707 AU	20.0	0.5	8.0	Begin development
1148								0	9.0	Purge dry
1209								0.5	9.0	Begin development
1211	5.25	1870.5	74.9	6.58	19.34	7500 NTU	21.22	0.5	10.0	>> 00 NTU = turbidity overrange
1216	5.44	2031.0	88.0	6.61	19.32	7500 NTU	20.68	0.5	12.5	
1218								0	13.5	Purge dry
1300								0	13.5	Lightning stand down
1457						99.5	10.39	0.25	13.5	Restart purge
1506	5.02	1928.7	121.5	6.94	19.61	41.2	14.70	0.25	15.8	
1516	4.86	1918.2	85.7	5.67	18.16	92.9	17.73	0.25	17.0	
1517								0	17.5	Purge dry
1526	5.03	1978.1	88.6	6.75	21.10	122	16.64	0.25	17.5	Restart purge
1531	4.91	2034.3	110.2	6.22	19.70	132	17.97	0.25	19.8	
1532								0	20.0	Purge dry
1546	4.87	1976.8	98.5	6.73	19.19	60.2	16.76	0.25	20.0	
1550									21.0	Purge dry. Development incomplete.
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L. (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCS</u>	Project No.: <u>0W4587</u>	Sampling Date: <u>7/5/23</u>
Site: <u>Plant Hammond</u>	Location: <u>AD-2</u>	Sampler's Name: <u>AN</u>
Well ID: <u>PT-02</u>	Pump Type/Model: <u>MONSOON</u>	Sample Collection Time: <u>-</u>
Total Depth (ft): <u>23.4</u>	Tubing Material: <u>POLY</u>	Sample Purge Rate (mL/min): <u>-</u>
Depth to Water (ft): <u>9.8</u>	Pump Intake Depth (ft): <u>18.4</u>	Sample ID: <u>-</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>1350/1437</u>	Laboratory Analyses: <u>-</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>2.23</u>	Purge Rate (mL/min): <u>8000</u>	
Well Volume (L) = gal * 3.785: <u>8.44</u>	Total Purge Volume (L): <u>0.92</u>	
<i>d = well diameter (inches); h = length of water column (feet)</i>		
Well Type: <u>Stick Up</u> (Flush <input type="checkbox"/> Stick Up <input checked="" type="checkbox"/> )	Purge Method: <u>-</u> Low-Flow <input type="checkbox"/> Well Volume <input type="checkbox"/> Other: <input type="checkbox"/>	QA/QC Collected? <u>-</u>
Well Lock: <u>Yes</u> (Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> )	Sampling Method: <u>Pump Discharge</u> (Pump Discharge <input type="checkbox"/> Other: <input type="checkbox"/>	QA/QC I.D. <u>-</u>
Well Cap Condition: <u>Good</u> (Good <input checked="" type="checkbox"/> Replace <input type="checkbox"/> )	All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No	
Well Tag Present: <u>Yes</u> (Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> )		

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1427	5.00	1915.9	174.0	2.40	18.58	1829 AU	17.9	8000	18	
1432	5.01	2116.8	117.5	0.03	19.17	2122 AU	18.2	8000	58	pre purge 20 min on rate
1437	5.33	2040.0	125.7	3.39	19.80	1875 AU	18.2	8000	98	flow, well pumps dry quickly
1442	5.30	2000.0	83.8	3.02	20.00	1060 AU	18.2	8000	132	
1447	5.27	1951.1	84.9	4.02	20.19	704 AU	18.2	8000	172	
1452	5.35	1990.2	72.7	3.36	20.53	50	18.2	8000	212	
1457	2.31	1908.4	105.4	3.81	20.77	15	18.2	8000	252	
1502	5.31	1925.5	45.8	7.02	22.28	17	18.2	8000	292	cell wasn't completely full
1507	5.19	1940.5	78.8	4.50	20.31	64.8	18.2	8000	332	
1512	5.14	1941.9	74.9	4.47	20.30	35.3	18.2	8000	372	
1517	5.30	2102.4	71.3	5.50	20.82	50.5	18.2	8000	412	
1522	3.30	1916.6	67.0	5.43	21.30	53.5	18.2	8000	452	
1527	3.21	1958.8	66.8	4.37	20.97	47.2	18.2	8000	492	
1615	4.98	1837.0	112.8	8.85	21.43	22.2	18.2	8000	532	battery died, had to vent cell
1622	4.93	1915.9	100.7	5.71	19.55	28	18.2	8000	572	
1627	4.91	2050.8	136.7	4.70	19.81	21.1	18.2	8000	612	
1632	5.02	2020.0	83.4	4.07	20.45	11.16	18.2	8000	652	
1637	5.02	2057.3	69.4	4.68	20.95	8.12	18.2	8000	692	7/5/23 AN
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-02  
 Total Depth (ft): 23.4  
 Depth to Water (ft): 9.8  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.23  
 Well Volume (L) = gal \* 3.785: 8.44

Project No.: GW0581  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: PVDF  
 Pump Intake Depth (ft): 18.4  
 Start/Stop Purge Time: 11040/11057  
 Purge Rate (mL/min): 2.00  
 Total Purge Volume (L): 3.4  
 Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

Sampling Date: 7/5/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected?: -  
 QA/QC ID: -

*d = well diameter (inches); h = length of water column (feet)*  
 Well Type: Flush  Stick Up  
 Well Lock:  Yes No  
 Well Cap Condition:  Good Replace  
 Well Tag Present:  Yes No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
11042	5.00	2048.7	86.1	4.85	21.84	7.88	18.0	2.00	0.4	pre purge for flow
11047	4.98	2020.3	71.8	5.02	22.60	6.81	18.0	2.00	1.4	
11052	5.02	1991.5	93.4	4.91	22.09	7.77	18.0	2.00	2.4	
11057	4.96	2017.0	101.8	5.32	20.89	4.55	18.0	2.00	3.4	
<del>7/5/23 AN</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCS</u>	Project No: <u>GW0581G</u>	Sampling Date: <u>6/28/23</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>AN</u>
Well ID: <u>PT-03</u>	Pump Type/Model: <u>monsoon</u>	Sample Collection Time: <u>-</u>
Total Depth (ft): <u>25.6</u>	Tubing Material: <u>poly</u>	Sample Purge Rate (mL/min): <u>-</u>
Depth to Water (ft): <u>9.60</u>	Pump Intake Depth (ft): <u>20</u>	Sample ID: <u>-</u>
Well Diameter (in): <u>25.0<sup>mm</sup> 2</u>	Start/Stop Purge Time: <u>0850/0943</u>	Laboratory Analyses: <u>-</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>2.62</u>	Purge Rate (mL/min): <u>8000</u>	
Well Volume (L) = gal * 3.785: <u>9.92</u>	Total Purge Volume (L): <u>424</u>	
<i>d = well diameter (inches); h = length of water column (feet)</i>	Purge Method: Low-Flow Well Volume Other: <u>-</u>	QA/QC Collected? <u>-</u>
Well Type: Flush <u>Stick Up</u>	Sampling Method: Pump Discharge Other: <u>-</u>	QA/QC I.D. <u>-</u>
Well Lock: <u>Yes</u> No		
Well Cap Condition: <u>Good</u> Replace		
Well Tag Present: <u>Yes</u> No		

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0913	5.18	2118.0	171.5	4.13	17.45	0.26 AN	19.3	8000	184	
0918	5.40	2205.9	243.7	3.59	17.45	0.5	19.5	8000	224	
0923	5.30	2199.2	248.9	3.69	17.40	0.8	18.8	8000	264	
0928	5.22	2091.2	229.3	3.42	17.41	0.47	19.4	8000	304	
0933	5.17	2061.8	242.6	3.43	17.41	0.37	19.3	8000	344	
0938	5.35	2207.3	227.3	3.75	17.44	0.76	19.4	8000	384	
0943	5.33	2187.9	223.4	3.07	17.36	3.26	19.4	8000	424	
AN 6/28/23										

<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%	0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)	< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L
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GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-03  
 Total Depth (ft): 25.6  
 Depth to Water (ft): 9.60  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.62  
 Well Volume (L) – gal \* 3.785: 9.92

Project No.: GW65816  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 20.5  
 Start/Stop Purge Time: 092848/1005  
 Purge Rate (mL/min): 300  
 Total Purge Volume (L): 6

Sampling Date: 6/28/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected? -  
 QA/QC ID: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method:  Low-Flow  Well Volume  Other: -  
 Sampling Method:  Pump Discharge  Other: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0953	5.52	2176.1	219.5	2.04	17.66	15.6	12.6	300	1.5	
0958	5.38	2142.5	132.6	0.91	17.55	3.43	12.3	300	3	
1003	5.41	2163.0	158.4	1.04	17.57	3.09	12.3	300	4.5	
1008	5.39	2160.2	162.0	0.97	17.54	2.62	12.3	300	6	
<p style="font-size: 2em; opacity: 0.5;">AN 6/28/23</p>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

**GROUNDWATER SAMPLING LOG SHEET**

Client: SCS  
Site: Plant Hammond  
Well ID: PT-04  
Total Depth (ft): 34.07  
Depth to Water (ft): 14.62  
Well Diameter (in): 2  
Well Volume (gal) = 0.041d<sup>2</sup>h: 3.19  
Well Volume (L) = gal \* 3.785: 12.1

Project No.: GW65816  
Location: AP-2  
Pump Type/Model: Monsoon  
Tubing Material: Poly  
Pump Intake Depth (ft): 33.5 / 29  
Start/Stop Purge Time: 1230 / 1452  
Purge Rate (mL/min): 2.5 gal/min  
Total Purge Volume (L): 155 gal

Sampling Date: 6-27-2023  
Sampler's Name: A. Sewest  
Sample Collection Time: —  
Sample Purge Rate (mL/min): —  
Sample ID: —  
Laboratory Analyses: —

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
Well Lock:  Yes  No  
Well Cap Condition:  Good  Replace  
Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: —  
Sampling Method: Pump Discharge Other: —

QA/QC Collected? —  
QA/QC I.D. —

**All sample containers requiring chemical preservation properly preserved prior to demob from well?** Yes No NA

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (gal/min) (mL/min)	Purged Volume (gal) (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1230										
1248										Pre purge at 2.5 gal/min
1408									45	well purging dry. stop purge
1412	6.26	1710.4	-8.2	0.28	18.88	2776 AU	24.78	2.5	45	Start purge at 2.5 gal/min (pre-purge) turbidity units: AU
1417	6.25	1744.8	-23.3	0.56	18.42	2819 AU	25.15	2.5	68	
1422	6.23	1745.7	-16.5	0.27	18.34	191 NTU	25.48	2.5	80	
1427	6.86	5.23	-5.1	6.65	20.84	765 AU	20.01	2.5	93	
1432	6.23	1747.4	0.6	0.34	18.65	775 NTU	20.58	2.5	105	turbidity units: NTU
1437	6.21	1759.2	5.1	0.23	18.74	27.7	21.07	2.5	118	
1442	6.21	1762.6	5.1	0.17	18.73	27.7	21.25	2.5	130	
1447	6.20	1761.2	16.1	0.14	18.34	13.9	21.30	2.5	143	
1452	6.20	1763.4	5.6	0.12	18.30	9.38	21.41	2.5	155	
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-04  
 Total Depth (ft): 34.07  
 Depth to Water (ft): 19.65  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.02  
 Well Volume (L) = gal \* 3.785: 11.4

Project No.: G-065816  
 Location: AP-2  
 Pump Type/Model: Mohrsoern  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 29  
 Start/Stop Purge Time: 1454/1519  
 Purge Rate (mL/min): 300/150  
 Total Purge Volume (L): 6.0  
 Purge Method:  Low-Flow Well Volume Other: —  
 Sampling Method: Pump Discharge Other: —

Sampling Date: 6-27-2023  
 Sampler's Name: A. Szewast  
 Sample Collection Time: —  
 Sample Purge Rate (mL/min): —  
 Sample ID: —  
 Laboratory Analyses: —  
 QA/QC Collected? —  
 QA/QC I.D. —

d = well diameter (inches); h = length of water column (feet)

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No N/A

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1504	6.27	1781.7	-15.4	0.04	23.03	8.18	15.65	300	3.0	Pre-purge 10 min at 300 ml/min for flow Reduce flow to 150 ml/min
1509	6.24	1798.4	-30.7	0.02	25.01	6.25	15.44	150	4.5	
1514	6.23	1765.9	-33.0	0.03	26.83	5.42	15.39	150	5.3	
1519	6.22	1778.3	-36.1	0.05	27.86	4.65	15.35	150	6.0	
AS 6-27-2023										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	



**GROUNDWATER SAMPLING LOG SHEET**

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-05  
 Total Depth (ft): 35.39  
 Depth to Water (ft): 14.81  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.38  
 Well Volume (L) = gal \* 3.785: 12.8

Project No.: GW65816  
 Location: AP-2  
 Pump Type/Model: Monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 34.9 / 30.4  
 Start/Stop Purge Time: 1348 / 1447  
 Purge Rate (mL/min): 1.5 gal/min  
 Total Purge Volume (L): 88.5 gal

Sampling Date: 6-28-2023  
 Sampler's Name: A. Seewert  
 Sample Collection Time: —  
 Sample Purge Rate (mL/min): —  
 Sample ID: —  
 Laboratory Analyses: —

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock: Yes  No   
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: —  
 Sampling Method: Pump Discharge Other: —

QA/QC Collected? —  
 QA/QC ID: —

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No N/A

Time	pH (SU)	Spec. Cond. (μS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	gal/min Purge Rate (mL/min)	Purged Volume gal	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
<del>1348</del>	<del>6.23</del>	<del>1655.9</del>	<del>19.5</del>	<del>0</del>	<del>19.45</del>	<del>2497 AU</del>	<del>18.35</del>	<del>1.5</del>	<del>30</del>	Pre-purge at 1.5 gal/min
1412	6.23	1666.4	23.3	0	18.61	85.8 NTU	18.43	36		
1417	6.22	1666.4	23.3	0	18.61	69.1	18.43	44		
1422	6.21	1677.4	23.8	0	18.55	37.9	18.44	51		
1427	6.21	1683.8	25.8	0	18.56	11.6	18.60	59		
1432	6.20	1694.6	25.6	0	18.53	51.8	18.63	66		
1437	6.20	1701.7	26.1	0	18.54	13.8	18.64	73.9		
1442	6.20	1713.8	15.2	0	18.52	3.59	18.76	81		
1447	6.20	1715.6	14.3	0	18.50		18.82	88.5		
<p>6-28-2023</p>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: <u>SC9</u>	Project No.: <u>G-W6581G</u>	Sampling Date: <u>6-28-2023</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>A. Sewast</u>
Well ID: <u>PT-05</u>	Pump Type/Model: <u>Monsoon</u>	Sample Collection Time: <u>—</u>
Total Depth (ft): <u>35.39</u>	Tubing Material: <u>Poly</u>	Sample Purge Rate (mL/min): <u>—</u>
Depth to Water (ft): <u>15.49</u>	Pump Intake Depth (ft): <u>30.4</u>	Sample ID: <u>—</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>1455/1516</u>	Laboratory Analyses: <u>—</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>8.26 3.38</u> <sup>②</sup> <u>6-29-2023</u>	Purge Rate (mL/min): <u>120</u>	
Well Volume (L) = gal * 3.785: <u>12.4</u>	Total Purge Volume (L): <u>2.5</u>	
<i>d = well diameter (inches); h = length of water column (feet)</i>		
Well Type: <input checked="" type="radio"/> Flush <input type="radio"/> Stick Up	Purge Method: <input checked="" type="radio"/> Low-Flow <input type="radio"/> Well Volume <input type="radio"/> Other: <u>—</u>	QA/QC Collected? <input type="checkbox"/> <u>—</u>
Well Lock: <input type="radio"/> Yes <input checked="" type="radio"/> No	Sampling Method: <input checked="" type="radio"/> Pump Discharge <input type="radio"/> Other: <u>—</u>	QA/QC I.D. <input type="checkbox"/> <u>—</u>

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No N/A

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
<u>1455</u>										<u>Pre-purge at 120 mL/min</u>
<u>1506</u>	<u>6.21</u>	<u>1728.1</u>	<u>13.5</u>	<u>0.03</u>	<u>26.11</u>	<u>1.15</u>	<u>15.42</u>	<u>120</u>	<u>1.3</u>	
<u>1511</u>	<u>6.21</u>	<u>1719.9</u>	<u>6.8</u>	<u>0.03</u>	<u>26.10</u>	<u>1.05</u>	<u>15.46</u>	<u>120</u>	<u>1.4</u>	
<u>1516</u>	<u>6.21</u>	<u>1733.6</u>	<u>10.7</u>	<u>0.04</u>	<u>26.15</u>	<u>2.06</u>	<u>15.32</u>	<u>120</u>	<u>2.5</u>	
<b>Stabilizing Criteria</b>	<b>+/- 0.1 SU</b>	<b>+/- 5%</b>		<b>0.2 mg/L or 10% for DO &gt; 0.5 mg/L (whichever is greater)</b>		<b>&lt; 5 NTUs</b>	<b>&lt; 0.3 ft</b>	<b>&gt; 100 mL &lt; 250 mL</b>	<b>&gt; 3L</b>	

GROUNDWATER SAMPLING LOG SHEET

Client: Southern Company  
 Site: Plant Hammond  
 Well ID: PT-06  
 Total Depth (ft): 30  
 Depth to Water (ft): 13.25  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: AN 5.90 3.73  
 Well Volume (L) = gal \* 3.785: AN 22.35 14.12

Project No.: 6W6581  
 Location: Plant Hammond  
 Pump Type/Model: Megamonsan P10  
 Tubing Material: PVC  
 Pump Intake Depth (ft): 30  
 Start/Stop Purge Time: 1058/1515  
 Purge Rate (mL/min): ~~4000~~ 1000, 5000, 1500  
 Total Purge Volume (L): 892.5  
 Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge AN Other: -

Sampling Date: 6/26/23  
 Sampler's Name: AN  
 Sample Collection Time: N/A  
 Sample Purge Rate (mL/min): N/A  
 Sample ID: N/A  
 Laboratory Analyses: N/A  
 QA/QC Collected?: -  
 QA/QC I.D.: -

d = well diameter (inches); h = length of water column (feet)

Well Type:  Flush  Stick Up  
 Well Lock: Yes  No   
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1118	6.10	1805.1	-68.5	0.01	18.20	92.1	18.45	4000	100	pre purged for 20 min
1123	6.15	1792.9	-50.9	0.03	18.11	overrange	18.90	4000	120	pump motor breakdown repaired
1128	6.14	1808.9	-48.5	0.02	18.08	overrange	18.95	4000	140	
1133	6.14	1807.0	-85.8	0.02	18.12	overrange	19.00	4000	160	
1138	6.15	1804.3	-44.4	0.01	18.17	1953 AV	18.95	4000	180	
1143	6.14	1805.7	-68.20.0	2.34	18.59	1355 AV	18.95	4000	200	tubing fell off briefly
1149	6.14	1809.4	-40.9	0.01	18.17	81	18.75	4000	220	
1154	6.10	1792.9	-17.7	0.08	18.92	4088 AV	18.75	4000	240	
1159	6.12	1820.4	-40.2	0.01	18.0	1069 AV	19.00	4000	260	
1209	6.13	1870.9	-76.7	0.01	18.26	8410 AV	18.60	4000	280	reattached tubing
1214	6.25	1881.5	-30.5	1.52	18.50	overrange	18.75	4000	300	
1219	6.11	1830.9	-34.1	0.01	18.13	925 AV	18.95	4000	320	
1224	6.10	1830.1	-75.0	0.01	18.08	764 AV	18.95	4000	340	
1229	6.10	1832.9	-75.6	0.01	18.16	770 AV	19.13	4000	360	
1234	6.10	1830.4	-70.7	0.01	18.12	740 AV	19.05	4000	380	
1239	6.11	1836.9	-35.7	0.01	18.12	59	19.20	4000	400	
1245	6.09	1836.4	-48.0	0.01	18.17	77	19.21	4000	420	
1250	6.09	1839.7	-43.5	0.01	18.18	1310 AV	19.50	4000	440	
1255						1018 AV	19.25	4000	460	ipad overheated
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: Southern Company  
 Site: Plant Hammond  
 Well ID: PT-06  
 Total Depth (ft): 36  
 Depth to Water (ft): 13.25  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 15.90 3.73  
 Well Volume (L) = gal \* 3.785: 22.35 14.12

Project No.: GW0581  
 Location: Plant Hammond  
 Pump Type/Model: Mega Monsoon Pro  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 30  
 Start/Stop Purge Time: 1058/1515  
 Purge Rate (mL/min): 4000, 5000, 1500  
 Total Purge Volume (L): 897.5  
 Purge Method: Low Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

Sampling Date: 6/26/23  
 Sampler's Name: AN  
 Sample Collection Time: N/A  
 Sample Purge Rate (mL/min): N/A  
 Sample ID: N/A  
 Laboratory Analyses: N/A

d = well diameter (inches); h = length of water column (feet)

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1300	6.08	1852.7	-55.9	0.00	18.14	11	19.05	4000	500	
1305	6.09	1842.0	-77.2	0.01	18.17	743 AV	19.25	4000	520	
1310	6.09	1839.8	-76.7	0.00	18.17	93	19.65	4000	540	
1315	6.08	1836.3	-36.7	0.01	18.12	71	19.45	4000	560	
1320	6.08	1834.9	-71.9	0.00	18.17	71	19.70	4000	580	
1325	6.09	1835.9	-77.1	0.00	18.19	93	19.45	4000	600	
1330	6.08	1843.3	-73.1	0.00	18.17	1051 AV	19.68	4000	620	
1335	6.08	1839.9	-37.4	0.00	18.17	82	19.04	4000	640	
1340	6.16	1820.6	-72.5	0.02	18.20	1445 AV	19.90	4000	680	
1345	6.09	1833.1	-72.4	0.01	18.10	059 AV	19.75	4000	700	
1350	6.09	1832.2	-71.1	0.00	18.17	61	19.75	4000	720	
1355	6.09	1834.4	-68.3	0.00	18.21	62	19.40	4000	740	
1400	6.09	1837.4	-35.1	0.00	18.22	56	19.50	4000	760	
1405	6.10	1832.2	-65.9	0.01	18.21	115	19.45	4000	780	
1410	6.09	1819.4	-67.9	0.00	18.17	73	20.8	5000	805	
1415	6.09	1817.5	-20.8	0.01	18.26	101.5	20.18	5000	830	
1420	6.08	1816.0	-66.3	0.00	18.14	82.7	21.8	5000	855	
1455	6.15	1800.2	-11.3	0.02	20.46	600 AV	17.55	1500	817.5	pump motor broke, had to replace
1500	6.15	1847.0	-34.5	0.01	19.31	1193 AV	18.55	1500	870	
Stabilizing Criteria	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

pg. 3063

Client: southern company  
 Site: Plant Hammond  
 Well ID: PT-06  
 Total Depth (ft): 30  
 Depth to Water (ft): 13.25  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.73  
 Well Volume (L) = gal \* 3.785: 14.12

Project No.: 6WU581  
 Location: Plant Hammond  
 Pump Type/Model: Mega monsoon pro  
 Tubing Material: poly  
 Pump Intake Depth (ft): 30  
 Start/Stop Purge Time: 1058/1515  
 Purge Rate (mL/min): 400, 500, 1500  
 Total Purge Volume (L): 892.5  
 Purge Method: Low Flow Well Volume Other: ---  
 Sampling Method: Pump Discharge Other: ---

Sampling Date: 6/26/23  
 Sampler's Name: AV  
 Sample Collection Time: N/A  
 Sample Purge Rate (mL/min): N/A  
 Sample ID: N/A  
 Laboratory Analyses: N/A  
 QA/QC Collected?: ---  
 QA/QC I.D.: ---

d = well diameter (inches); h = length of water column (feet)

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
<del>1505</del>	<del>6.15</del>	<del>1853.6</del>	<del>-49.1</del>	<del>0.01</del>	<del>19.05</del>	<del>1213 AU</del>	<del>19.97</del>	<del>1500</del>	<del>877.5</del>	
<del>1510</del>	<del>6.13</del>	<del>1840.6</del>	<del>-62.6</del>	<del>0.06</del>	<del>18.97</del>	<del>798 AU</del>	<del>20.35</del>	<del>1500</del>	<del>883</del>	
1515	6.13	1847.2	-50.4	8.06	19.82	1769 AU	19.05	1500	892.5	pump motor broke, had to terminate purging well development incomplete
<del>-----</del>										
Stabilizing Criteria	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

6/26/23 AV

GROUNDWATER SAMPLING LOG SHEET

Client: Southern Company  
 Site: Plant Hammond  
 Well ID: PT-06  
 Total Depth (ft): 36  
 Depth to Water (ft): 14.70  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.49  
 Well Volume (L) = gal \* 3.785: 13.21

Project No.: GW0581  
 Location: Plant Hammond  
 Pump Type/Model: Megamons con pro  
 Tubing Material: poly  
 Pump Intake Depth (ft): 31  
 Start/Stop Purge Time: 1200/1248  
 Purge Rate (mL/min): 15000  
 Total Purge Volume (L): 690

Sampling Date: 10/27/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

QA/QC Collected? -  
 QA/QC I.D. -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
12:22	0.13	1770.2	31.7	0.02	19.17	3052 AU	19.5	15000	330	Pre-purge for 20 min -
12:27	0.12	1784.8	30.1	0.07	18.48	2123 AU	19.8	15000	405	PVC filaments got caught
12:32	0.12	1792.8	27.1	0.01	18.16	64	18.8	15000	480	in motor & had to remove
12:38	0.12	1795.7	26.4	0.01	18.12	18.7	20.0	15000	540	
12:42	0.11	1801.4	30.9	0.01	18.11	17.4	20.5	15000	615	
12:48	0.11	1797.2	28.0	0.00	18.09	7.50	20.5	15000	690	
<del>AN 10/27/23</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS Project No.: GW05816 Sampling Date: 6-27-2023  
 Site: Plant Hammond Location: AP-2 Sampler's Name: AN  
 Well ID: PT-06 Pump Type/Model: Monsoon Sample Collection Time: -  
 Total Depth (ft): 36 Tubing Material: Poly Sample Purge Rate (mL/min): -  
 Depth to Water (ft): 14.70 Pump Intake Depth (ft): 31 Sample ID: -  
 Well Diameter (in): 2 Start/Stop Purge Time: 1250 / 1358 Laboratory Analyses: -  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.49 Purge Rate (mL/min): 300  
 Well Volume (L) = gal \* 3.785: 13.21 Total Purge Volume (L): 21  
 Well Type:  Flush Stick Up Purge Method:  Low-Flow Well Volume Other: - QA/QC Collected? -  
 Well Lock: Yes  No  Sampling Method: Pump Discharge Other: - QA/QC I.D. -  
 Well Cap Condition:  Good Replace  
 Well Tag Present:  Yes No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1250										
1316	6.09	1814.2	47.1	0.85	21.77	5.53	15.5	300	9	Pre purge for flow
1321	6.08	1837.1	42.2	0.93	22.39	4.43	15.1	300	10.5	
1326	6.08	1830.8	41.8	0.79	22.38	4.68	15.2	300	12	
1333	6.09	1810.8	43.8	0.60	22.94	6.39	15.2	300	13.5	ipad overrated
1338	6.10	1789.0	36.7	0.48	22.10	7.33	15.2	300	15	
1343	6.11	1710.6	33.3	0.40	20.20	5.89	15.2	300	16.5	
1348	6.12	1701.3	32.3	0.34	19.77	4.40	15.2	300	18	
1353	6.12	1762.0	34.5	0.28	19.74	3.01	15.2	300	19.5	
1658	6.12	1763.0	32.2	0.24	19.88	2.08	15.2	300	21	
AN 012712 <sup>5</sup>										
Stabilizing Criteria	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: MW-55  
 Total Depth (ft): 46.1  
 Depth to Water (ft): 17.3  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 1.44  
 Well Volume (L) = gal \* 3.785: 5.45

Project No.: GUL0581  
 Location: AP-2  
 Pump Type/Model: MONSOON  
 Tubing Material: P014  
 Pump Intake Depth (ft): 21.1  
 Start/Stop Purge Time: 1105/1229  
 Purge Rate (mL/min): 8000  
 Total Purge Volume (L): 672

Sampling Date: 7/15/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

QA/QC Collected? -  
 QA/QC ID: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1129	6.41	1871.2	-18.1	1.43	22.29	25.6	19.8	8000	192	Pre-purge 20 min
1134	6.44	1921.9	-16.3	1.43	22.30	38.2	19.8	8000	232	
1139	6.44	1944.9	-36.8	1.49	22.37	21.3	19.8	8000	272	
1144	6.43	1952.9	-35.1	1.68	22.37	18.6	19.8	8000	312	
1149	6.42	1993.9	-34.1	1.72	22.45	22.0	19.8	8000	352	
1154	6.42	1987.0	-33.9	1.74	22.52	25.1	19.8	8000	392	
1159	6.52	2127.8	-25.0	1.54	21.26	59	19.8	8000	432	
1204	6.49	2037.9	-17.1	1.86	21.63	73.8	19.8	8000	472	
1209	6.39	1958.6	-13.0	0.52	22.22	49.4	19.8	8000	512	
1214	6.48	2048.3	-23.1	0.63	21.69	40.0	19.8	8000	552	
1219	6.48	2056.3	-46.3	0.81	21.73	17.8	19.8	8000	592	
1224	6.49	2063.9	-21.2	1.04	21.69	11.0	19.8	8000	632	
1229	6.50	2070.5	-45.1	1.00	21.63	9.97	19.8	8000	672	
									AN	7/15/23
Stabilizing Criteria										
	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	



GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: mnv-55  
 Total Depth (ft): 26.1  
 Depth to Water (ft): 17.3  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 1.44  
 Well Volume (L) = gal \* 3.785: 5.49

Project No.: GW0581  
 Location: MP-2  
 Pump Type/Model: monsoon  
 Tubing Material: poly  
 Pump Intake Depth (ft): 21.1  
 Start/Stop Purge Time: 1230/1250  
 Purge Rate (mL/min): 200  
 Total Purge Volume (L): 4

Sampling Date: 7/5/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock: Yes  No   
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method:  Low-Flow  Well Volume  Other: -  
 Sampling Method:  Pump Discharge  Other: -

QA/QC Collected?  -  
 QA/QC ID: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1235	6.51	2115.1	-79.8	0.77	22.2	16.0	19.0	200	1	prepurge for flow
1240	6.65	2181.6	-88.0	0.15	23.43	14.8	19.0	200	2	
1245	6.70	2175.1	-56.1	0.08	23.41	5.32	19.0	200	3	
1250	6.71	2171.6	-92.9	0.08	23.76	4.48	19.0	200	4	
<u>7/5/23 AN</u>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Piant + Hammond  
 Well ID: MW-56  
 Total Depth (ft): 24.1  
 Depth to Water (ft): 9.3  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.43  
 Well Volume (L) = gal \* 3.785: 9.198

Project No.: GW-0581  
 Location: AD-2  
 Pump Type/Model: monsoon  
 Tubing Material: 0014  
 Pump Intake Depth (ft): 19.7  
 Start/Stop Purge Time: ~~1030~~ 1025/1137  
 Purge Rate (mL/min): 9000  
 Total Purge Volume (L): 648

Sampling Date: 6/30/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -  
 QA/QC Collected?: -  
 QA/QC ID: -

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush   Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1047	5.11	2380.10	3510.8	0.04	17.54	914 AN	9.7	9000	198	
1052	5.05	2398.0	514.7	0.07	17.53	749 AN	9.7	9000	243	
1057	5.01	2407.4	521.2	0.02	17.49	30 AN	9.7	9000	288	
1102	5.00	2403.0	428.0	0.02	17.47	25	9.7	9000	333	
1107	5.00	2401.3	428.9	0.01	17.49	67.4	9.7	9000	378	
1112	4.98	2401.3	437.4	0.01	17.49	48.2	9.7	9000	423	
1117	4.90	2405.6	529.5	0.00	17.48	35.2	9.7	9000	468	
1122	4.90	2409.2	450.0	0.00	17.48	22.8	9.7	9000	513	
1127	4.98	2406.8	454.0	0.00	17.47	15.8	9.7	9000	558	
1132	4.94	2407.7	451.0	0.00	17.50	11.8	9.7	9000	603	
1137	4.93	2413.9	456.4	0.00	17.50	9.55	9.7	9000	648	
AN 6/30/23										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
Site: Diane Hammond  
Well ID: MW-54  
Total Depth (ft): 24.1  
Depth to Water (ft): 9.3  
Well Diameter (in): 2  
Well Volume (gal) = 0.041d<sup>2</sup>h: 2.43  
Well Volume (L) = gal \* 3.785: 9.198

Project No.: GW06581  
Location: AP-2  
Pump Type/Model: monsoon  
Tubing Material: pvc  
Pump Intake Depth (ft): 19.1  
Start/Stop Purge Time: 1139/1244  
Purge Rate (mL/min): 250  
Total Purge Volume (L): 10.25

Sampling Date: 6/30/23  
Sampler's Name: AN  
Sample Collection Time: -  
Sample Purge Rate (mL/min): -  
Sample ID: -  
Laboratory Analyses: -  
QA/QC Collected?: -  
QA/QC ID: -

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush  Stick Up  
Well Lock:  Yes  No  
Well Cap Condition:  Good  Replace  
Well Tag Present:  Yes  No

Purge Method:  Low-Flow  Well Volume  Other: -  
Sampling Method:  Pump Discharge  Other: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1144	4.92	2481.6	310.1	0.02	19.00	36.4	9.4	250	1.25	pre purge for flow
1149	4.95	2408.1	269.6	0.03	20.93	23.5	9.4	250	2.5	
1154	4.91	2404.8	407.0	0.01	19.32	13.6	9.4	250	3.75	
1159	4.92	2412.1	301.2	0.01	18.81	11.9	9.4	250	5	
1204	4.93	2413.5	283.5	0.01	18.96	9.4	9.4	250	6.25	
1209	4.93	2408.8	270.3	0.01	19.00	8.12	9.4	250	7.5	
1214	4.94	2407.8	255.8	0.01	19.17	7.19	9.4	250	8.75	
1219	4.94	2408.8	247.9	0.02	19.15	7.02	9.4	150	10	
1224	4.96	2397.0	255.1	0.01	18.61	7.85	9.4	250	11.25	
1229	4.96	2406.5	400.1	0.01	18.87	20.0	9.4	250	12.5	
1234	4.95	2436.9	302.8	0.01	18.38	9.66	9.4	250	13.75	
1239	4.96	2420.9	281.4	0.02	19.24	6.12	9.4	250	15	
1244	4.96	2400.4	331.4	0.02	19.30	4.67	9.4	250	16.25	
<del>AN</del>										
<del>6/30/23</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%	0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)			< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: MW-57  
 Total Depth (ft): 24.4  
 Depth to Water (ft): 10.1  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.35  
 Well Volume (L) = gal \* 3.785: 8.89

Project No.: GWU581  
 Location: AP-2  
 Pump Type/Model: MONSOON  
 Tubing Material: POLY  
 Pump Intake Depth (ft): 19.4  
 Start/Stop Purge Time: 1510/1540  
 Purge Rate (ml/min): 8000  
 Total Purge Volume (L): 240

Sampling Date: 7/16/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 Purge Method: Low-Flow  Well Volume  Other:   
 Sampling Method: Pump Discharge  Other:   
 QA/QC Collected?   
 QA/QC I.D.

*d = well diameter (inches); h = length of water column (feet)*

Well Type: Flush  Stick Up  
 Well Lock:  Yes No  
 Well Cap Condition:  Good Replace  
 Well Tag Present:  Yes No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1530	6.24	2246.6	18.9	0.49	19.17	62.8	17.3	8000	160	pre purge 20min
1535	6.29	2278.5	18.0	0.40	17.75	16.3	8000	200		
1540	6.25	2224.2	6.5	0.81	17.68	8.58	8000	240		
<del>AN 7/16/23</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: MN-57  
 Total Depth (ft): 24.4  
 Depth to Water (ft): 10.1  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.35  
 Well Volume (L) = gal \* 3.785: 8.89

Project No.: GW4581  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 19.4  
 Start/Stop Purge Time: 1540/1559  
 Purge Rate (mL/min): 200  
 Total Purge Volume (L): 3.8

Sampling Date: 7/16/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method:  Low-Flow Well Volume Other: -  
 Sampling Method:  Pump Discharge Other: -

QA/QC Collected?   
 QA/QC ID: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1544	6.20	2328.0	16.3	0.58	18.20	6.85	16.3	200	0.8	pre purge for flow
1549	6.41	2486.8	12.4	0.05	18.30	3.08	16.3	200	1.8	
1554	6.47	2489.0	20.2	0.04	18.72	2.67	16.3	200	2.8	
1559	6.39	2481.0	2.8	0.04	18.39	2.39	16.3	200	3.8	
<del>7/16/23 AN</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: MW-58  
 Total Depth (ft): 27.0  
 Depth to Water (ft): 11.7  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.51  
 Well Volume (L) = gal \* 3.785: 9.50

Project No.: GW0581  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: poly  
 Pump Intake Depth (ft): 22  
 Start/Stop Purge Time: 0835/0930  
 Purge Rate (mL/min): 8000  
 Total Purge Volume (L): 540

Sampling Date: 6/30/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -  
 QA/QC Collected? -  
 QA/QC ID: -

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0855	5.58	1292.3	179.1	0.61	17.32	1389 AU	14.1	8000	160	pre purge 20 min
0900	5.61	1292.9	149.5	0.61	17.14	919 AU	14.1	8000	200	
0905	5.64	1256.0	135.4	0.81	17.09	623 AU	14.6	8000	240	
0910	5.65	1270.2	85.3	0.71	17.05	67.2	14.7	8000	380	
0915	5.67	1259.9	111.1	0.72	17.04	37.3	14.7	8000	420	
0920	5.69	1262.7	107.2	0.71	17.05	16.4	14.7	8000	460	
0925	5.69	1266.8	72.6	0.71	17.05	12.53	14.7	8000	500	
0930	5.70	1265.7	95.0	0.68	17.04	7.46	14.7	8000	540	
<div style="border: 1px solid black; padding: 5px; display: inline-block;">           AN 6/30/23         </div>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCS</u>	Project No.: <u>GWU581</u>	Sampling Date: <u>6/30/23</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>AN</u>
Well ID: <u>MW-58</u>	Pump Type/Model: <u>monsoon</u>	Sample Collection Time: <u>-</u>
Total Depth (ft): <u>27.0</u>	Tubing Material: <u>poly</u>	Sample Purge Rate (mL/min): <u>-</u>
Depth to Water (ft): <u>11.7</u>	Pump Intake Depth (ft): <u>22.35</u>	Sample ID: <u>-</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>0947 0951</u>	Laboratory Analyses: <u>-</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>2.91</u>	Purge Rate (mL/min): <u>250</u>	
Well Volume (L) = gal * 3.785: <u>9.50</u>	Total Purge Volume (L): <u>4</u>	
<i>d = well diameter (inches); h = length of water column (feet)</i>		
Well Type: Flush <input type="radio"/> <input checked="" type="radio"/> Stick Up	Purge Method: <input checked="" type="radio"/> Low-Flow <input type="radio"/> Well Volume <input type="radio"/> Other: <u>-</u>	QA/QC Collected? <input type="radio"/> <input checked="" type="radio"/>
Well Lock: <input checked="" type="radio"/> Yes <input type="radio"/> No	Sampling Method: <input type="radio"/> Pump Discharge <input type="radio"/> Other: <u>-</u>	QA/QC LD: <input type="radio"/> <input checked="" type="radio"/>
Well Cap Condition: <input checked="" type="radio"/> Good <input type="radio"/> Replace	<b>All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No</b>	
Well Tag Present: <input checked="" type="radio"/> Yes <input type="radio"/> No		

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0941	5.59	1371.1	109.7	0.38	17.74	3.17	12.1	250	1.5	Pre purge for 11 DW
0946	5.62	1352.3	73.6	0.31	18.03	1.67	12.2	250	2.75	
0951	5.63	1341.6	64.9	0.31	17.95	1.28	12.2	250	4	
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>AN</p> <p>6/30/23</p> </div>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: AND SCS  
 Site: Plant Hammond  
 Well ID: MW-59  
 Total Depth (ft): 44.8  
 Depth to Water (ft): 27.5  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.84  
 Well Volume (L) = gal \* 3.785: 10.75

Project No: GW05816  
 Location: AP-2  
 Pump Type/Model: MORSEON  
 Tubing Material: POLY  
 Pump Intake Depth (ft): 39.8  
 Start/Stop Purge Time: 1335/1435  
 Purge Rate (mL/min): 8000  
 Total Purge Volume (L): 360

Sampling Date: 6/29/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected?: -  
 QA/QC I.D.: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type: Flush   Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1415	5.97	1840.0	45.4	3.47	21.28	991 AU	37.5	8000	200	pre purge 20 min, PVC filament stuck multiple times, had to remove
1420	5.90	1859.3	45.3	4.11	20.45	over range	38.5	8000	240	
1425	5.90	1851.5	40.6	3.54	20.47	32.2	38.8	8000	280	
1430	5.78	1822.8	50.4	2.18	20.11	110.0	38.8	8000	320	
1435	5.69	1850.2	59.7	1.92	20.84	10.85	38.8	8000	360	
6/29/23 AN										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	



GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: MW-59  
 Total Depth (ft): 44.8  
 Depth to Water (ft): 27.5  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.84  
 Well Volume (L) = gal \* 3.785: 10.75

d = well diameter (inches); h = length of water column (feet)

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Project No.: GW05816  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: PD14  
 Pump Intake Depth (ft): 39.8  
 Start/Stop Purge Time: 8:00 AM 1335 / 1440 / 1512  
 Purge Rate (mL/min): 300  
 Total Purge Volume (L): 8.1 9.6  
 Purge Method:  Low-Flow  Well Volume  Other: \_\_\_\_\_  
 Sampling Method:  Pump Discharge  Other: \_\_\_\_\_

Sampling Date: 6/29/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected? -  
 QA/QC I.D. -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1442	5.65	1880.0	61.4	1.35	21.75	4.80	37.5	300	0.6	
1447	5.62	1810.0	55.9	0.61	21.50	2.55	37.1	300	2.1	
1452	5.63	1933.0	59.2	1.55	21.33	2.00	37.0	300	3.0	
1457	5.62	1992.0	53.0	1.70	21.28	1.23	37.0	300	5.1	
1502	5.62	2052.2	89.4	2.23	21.24	1.42	37.0	300	6.0	
1507	5.60	2088.8	93.0	2.43	21.11	1.26	37.0	300	8.1	
1512	5.59	2101.2	95.2	2.41	21.21	1.12	37.0	300	9.6	

AN  
6/29/23

<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%	0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)	< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L
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GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCS</u>	Project No.: <u>GW6557</u>	Sampling Date: <u>7/6/12</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>AW</u>
Well ID: <u>TW-01</u>	Pump Type/Model: <u>MONSOON</u>	Sample Collection Time: <u>-</u>
Total Depth (ft): <u>23.4</u>	Tubing Material: <u>PDLV</u>	Sample Purge Rate (mL/min): <u>-</u>
Depth to Water (ft): <u>9.7</u>	Pump Intake Depth (ft): <u>18.4</u>	Sample ID: <u>-</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>0915/1025</u>	Laboratory Analyses: <u>-</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>2.25</u>	Purge Rate (mL/min): <u>8000</u>	
Well Volume (L) = gal * 3.785: <u>8.50</u>	Total Purge Volume (L): <u>540</u>	

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush <input type="radio"/> <u>Stick Up</u> <input checked="" type="radio"/>	Purge Method: Low-Flow <input type="checkbox"/> Well Volume <input type="checkbox"/> Other: <input type="checkbox"/>	QA/QC Collected? <input type="checkbox"/>
Well Lock: <u>Yes</u> <input checked="" type="radio"/> No <input type="radio"/>	Sampling Method: Pump Discharge <input checked="" type="checkbox"/> Other: <input type="checkbox"/>	QA/QC I.D. <u>-</u> <input type="checkbox"/>

Well Cap Condition: Good  Replace  **All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No**

Well Tag Present: Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0935	5.65	1852.9	2.2	2.56	19.90	1879 AU	18.0	8000	160	pre purge 20 min
0940	5.56	1865.7	-6.0	2.91	20.26	824 AU	18.0	8000	200	
0945	5.82	2048	85.8	6.10	21.28	1933 AU	18.0	8000	240	not fun due to purging only
0950	5.50	1964.0	6.2	3.70	19.90	79	18.0	8000	280	
0955	5.52	2052.1	-32.0	1.97	21.20	70	18.0	8000	320	
1000	5.47	2089.2	-28.9	2.14	21.62	28	18.0	8000	360	
1005	5.46	2115.9	-31.8	2.17	22.51	46	18.0	8000	400	
1010	5.51	2145.5	-43.9	1.24	22.80	77	18.0	8000	440	
1015	5.42	2092.8	0.4	2.69	20.38	1662 AU	18.0	8000	480	
1020	5.37	2150.9	14.2	4.78	19.79	36	18.0	8000	520	
1025	5.33	2188.9	-3.8	3.97	20.63	9.0	18.0	8000	540	
<u>TURBIDITY</u>										

Stabilizing Criteria	+/- 0.1 SU	+/- 5%	0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)	< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L
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GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: 1W-01  
 Total Depth (ft): 23.4  
 Depth to Water (ft): 9.7  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.25  
 Well Volume (L) = gal \* 3.785: 8.50

Project No.: GW0581  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: poly  
 Pump Intake Depth (ft): 18.4  
 Start/Stop Purge Time: 1025/1225  
 Purge Rate (mL/min): 200  
 Total Purge Volume (L): 2

Sampling Date: 7/6/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush  **Stick Up**   
 Well Lock: **Yes**  No   
 Well Cap Condition: **Good**  Replace   
 Well Tag Present: **Yes**  No

Purge Method: **Low-Flow**  Well Volume  Other:   
 Sampling Method: Pump Discharge  Other:

QA/QC Collected?   
 QA/QC I.D.

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1030	5.35	2229.4	2.7	2.08	21.44	80.0	18.0	200	1	
1035	5.31	2151.1	14.1	3.06	19.88	73.4	18.0	200	2	prep work for flow
1040	5.22	2228.5	2.1	3.38	23.01	25.9	18.0	200	3	
1045	5.29	2279.7	15.4	2.16	23.34	75.9	18.0	200	4	
1050	5.32	2260.8	20.4	1.05	23.50	58.1	18.0	200	5	
1055	5.09	2237.7	28.6	4.72	19.77	48.1	18.0	200	6	pumped dry, wait + recover
1100	5.12	2273.8	28.4	2.99	20.83	98	18.0	200	7	
1105	5.01	2277.9	32.8	4.78	19.5	77.1	18.0	200	8	
1110	5.02	2322.9	28.1	4.30	20.22	65.1	18.0	200	9	
1115	5.02	2347.4	22.7	3.19	20.66	31.5	18.0	200	10	
1120	5.01	2325.5	21.4	3.19	20.10	16.7	18.0	200	11	
1125	5.00	2394.2	21.9	3.03	20.84	11.0	18.0	200	12	
1130	4.99	2255.0	21.3	2.15	20.93	7.21	18.0	200	13	
1135	4.99	2300.8	24.2	3.28	20.21	11.8	18.0	200	14	
1140	4.97	2316.1	25.5	2.80	20.60	9.7	18.0	200	15	
1145	4.94	2306.8	25.2	2.81	20.46	8.3	18.0	200	16	
1150	4.93	2399.5	27.1	2.49	20.83	5.8	18.0	200	17	
1155	4.93	2366.5	24.1	2.57	20.54	7.76	18.0	200	18	
1200	4.89	2385.0	26.2	2.80	21.64	6.44	18.0	200	19	

Stabilizing Criteria: +/- 0.1 SU, +/- 5%, 0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater), < 5 NTUs, < 0.3 ft, > 100 mL < 250 mL, > 3L

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: 1W-01  
 Total Depth (ft): 23.4  
 Depth to Water (ft): 9.7  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.25  
 Well Volume (L) = gal \* 3.785: 8.50

Project No.: GW0581  
 Location: APD-2  
 Pump Type/Model: monsoon  
 Tubing Material: poly  
 Pump Intake Depth (ft): 18.4  
 Start/Stop Purge Time: 1025/1225  
 Purge Rate (mL/min): 200  
 Total Purge Volume (L): 20

Sampling Date: 7/14/23  
 Sampler's Name: AW  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type: Flush  Stick Up  
 Well Lock: Yes  No   
 Well Cap Condition: Good Replace   
 Well Tag Present: Yes  No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

QA/QC Collected?   
 QA/QC I.D. -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1225	4.91	2355.0	23.9	2.62	20.70	4.91	18.0	200	20	
AW										
7/16/23										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

<p>Client: <u>SCS</u></p> <p>Site: <u>Plant Hammond</u></p> <p>Well ID: <u>1Nw-02</u></p> <p>Total Depth (ft): <u>30</u> <u>35.16</u></p> <p>Depth to Water (ft): <u>14.49</u></p> <p>Well Diameter (in): <u>2</u></p> <p>Well Volume (gal) = 0.041d<sup>2</sup>h: <u>3.39</u></p> <p>Well Volume (L) = gal * 3.785: <u>12.8</u></p> <p><i>d = well diameter (inches); h = length of water column (feet)</i></p> <p>Well Type: <u>Flush</u> Stick Up</p> <p>Well Lock: <u>Yes</u> <u>No</u></p> <p>Well Cap Condition: <u>Good</u> Replace</p> <p>Well Tag Present: <u>Yes</u> No</p>	<p>Project No.: <u>GW65816</u></p> <p>Location: <u>AP-2</u></p> <p>Pump Type/Model: <u>Monsoon</u></p> <p>Tubing Material: <u>Poly</u></p> <p>Pump Intake Depth (ft): <u>34.5</u></p> <p>Start/Stop Purge Time: <u>1024/1537</u></p> <p>Purge Rate (mL/min): <u>4 gal/min</u></p> <p>Total Purge Volume (L): <u>1146 gal</u></p> <p>Purge Method: <u>Low-Flow</u> Well Volume Other: <u>---</u></p> <p>Sampling Method: <u>Pump Discharge</u> Other: <u>---</u></p>	<p>Sampling Date: <u>6-26-2023</u></p> <p>Sampler's Name: <u>A. Sewast</u></p> <p>Sample Collection Time: <u>---</u></p> <p>Sample Purge Rate (mL/min): <u>---</u></p> <p>Sample ID: <u>---</u></p> <p>Laboratory Analyses: <u>---</u></p> <p>QA/QC Collected? <u>---</u></p> <p>QA/QC I.D. <u>---</u></p>
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All sample containers requiring chemical preservation properly preserved prior to demob from well?  Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (gal/min)	Purged Volume (gal)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1024	6.2									
1117	6.30	1670.5	-18.6	0	18.21	7500	17.80	4.0	106	Pic-purge 2 gal/min
1127	6.29	1666.6	-16.6	0	18.21	>5000	17.88	4	126	increase purge rate to 4 gal/min
1127	6.30	1692.6	-33.1	0	18.18	2500	17.88	4	146	Turbidity Over range (>500 NTU)
1132	6.30	1665.1	-17.8	0	18.18	2500	17.88	4	166	
1137	6.30	1661.7	-18.3	0	18.18	2500	17.97	4	186	
1142	6.31	1730.8	-38.7	0	18.22	2500	17.74	4	206	
1147	6.30	1668.2	-16.9	0	18.20	2500	18.05	4	226	
1152	6.30	1679.0	-36.8	0	18.19	2500	17.45	4	246	
1157	6.30	1670.2	-16.2	0	18.24	2500	18.12	4	266	
1202	6.31	1678.6	-37.4	0	18.21	2500	18.12	4	286	
1202	6.30	1662.5	-16.5	0	18.21	2500	18.15	4	306	
1212	6.30	1682.6	-35.6	0	18.21	2500	18.04	4	326	
1217	6.31	1711.4	-19.0	0	18.23	4090 AU	18.26	4	346	
1222	6.30	1680.0	-35.9	0	18.21	3775 AU	18.26	4	366	Free Chlorine units: AU
1227	6.30	1680.7	-36.5	0	18.20	3457 AU	18.30	4	386	
1232	6.29	1742.1	-38.4	0	18.18	1909 AU	18.45	4	406	
1237	6.30	1725.7	-18.6	0	18.21	2670 AU	18.53	4	426	
1242	6.30	1683.0	-35.8	0	18.21	2586 AU	18.50	4	446	
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client:	<u>SCS</u>	Project No.:	<u>GW65816</u>	Sampling Date:	<u>6-26-2023</u>
Site:	<u>Plant Hammond</u>	Location:	<u>AP-2</u>	Sampler's Name:	<u>A. Swast</u>
Well ID:	<u>1NW-02</u>	Pump Type/Model:	<u>Monsoon</u>	Sample Collection Time:	<u>—</u>
Total Depth (ft):	<u>35.16</u>	Tubing Material:	<u>Poly</u>	Sample Purge Rate (mL/min):	<u>—</u>
Depth to Water (ft):	<u>14.49</u>	Pump Intake Depth (ft):	<u>34.5</u>	Sample ID:	<u>—</u>
Well Diameter (in):	<u>2</u>	Start/Stop Purge Time:	<u>1024/1537</u>	Laboratory Analyses:	<u>—</u>
Well Volume (gal) = 0.041d <sup>2</sup> h:	<u>3.39</u>	Purge Rate (mL/min):	<u>4 gal/min</u>		
Well Volume (L) = gal * 3.785:	<u>12.8</u>	Total Purge Volume (L):	<u>1146 gal</u>		
<i>d = well diameter (inches); h = length of water column (feet)</i>					
Well Type:	<input checked="" type="radio"/> Flush	Stick Up		QA/QC Collected?	<input type="checkbox"/>
Well Lock:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		QA/QC I.D.	<input type="checkbox"/>
Well Cap Condition:	<input checked="" type="radio"/> Good	Replace			
Well Tag Present:	<input checked="" type="radio"/> Yes	No			

All sample containers requiring chemical preservation properly preserved prior to demob from well?  Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (gal/min) (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1247	6.31	1687.8	-36.2	0	18.21	2495 AU	18.64	4	466	
1252	6.31	1683.1	-36.6	0	18.21	631 AU	18.61	4	486	
1257	6.31	1711.1	-37.5	0	18.25	1144 AU	18.67	4	506	
1302	6.30	1686.1	-36.2	0	18.21	616 AU	18.71	4	526	
1307	6.31	1681.7	-16.4	0	18.21	693 AU	18.77	4	546	
1312	6.31	1686.3	-35.5	0	18.22	729 AU	18.78	4	566	
1317	6.30	1690.8	-35.4	0	18.22	717 AU	18.85	4	586	
1322	6.31	1692.9	-35.9	0	18.22	788 AU	18.89	4	606	
1327	6.30	1693.4	-15.4	0	18.24	662 AU	18.93	4	626	
1332	6.30	1696.2	-34.4	0	18.25	666 AU	18.96	4	646	
1337	6.30	1696.5	-15.4	0	18.24	71 NTU	18.08	4	666	
1342	6.30	1698.0	-34.9	0	18.24	36.2 NTU	19.09	4	686	Used 2nd turbidity meter. (checked calibration on 1st meter, calibration off) Use 2nd meter
1347	6.30	1695.7	-35.1	0	18.25	79.6 NTU	19.14	4	706	
1352	6.31	1694.7	-15.5	0	18.25	123 NTU	19.16	4	726	
1357	6.30	1697.8	-34.8	0	18.25	65.3 NTU	19.22	4	746	
1402	6.30	1702.8	-33.2	0	18.26	30 NTU	19.21	4	766	
1407	6.30	1703.8	-33.5	0	18.26	10.4 NTU	19.30	4	786	
1412	6.30	1705.3	-13.8	0	18.26	43.1 NTU	19.95	4	806	Adjust flow, Turbidity = 36 NTU
1417	6.31	1706.5	-34.5	0	18.31	108 NTU	20.05	4	826	
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

**GROUNDWATER SAMPLING LOG SHEET**

Client: SCS  
 Site: Plant Hammond  
 Well ID: 1NW-02  
 Total Depth (ft): 35.16  
 Depth to Water (ft): 14.49  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.39  
 Well Volume (L) = gal \* 3.785: 12.8

Project No.: GW 65816  
 Location: AP-2  
 Pump Type/Model: Monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 34.5  
 Start/Stop Purge Time: 1024/1537  
 Purge Rate (mL/min): 4 gal/min  
 Total Purge Volume (L): 1146 gal

Sampling Date: 6-26-2023  
 Sampler's Name: A. Szewast  
 Sample Collection Time: —  
 Sample Purge Rate (mL/min): —  
 Sample ID: —  
 Laboratory Analyses: —

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock: Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: —  
 Sampling Method: Pump Discharge Other: —

QA/QC Collected? —  
 QA/QC I.D. —

All sample containers requiring chemical preservation properly preserved prior to demob from well?  Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (gal/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1422	6.30	1710.7	-34.8	0	18.30	104	19.55	4	846	
1427	6.31	1715.2	-15.6	0	18.31	—	—	4	866	
1432	6.31	1718.4	-35.2	0	18.30	—	—	4	886	Assist AN with pump issues
1437	6.30	1712.7	-35.3	0	18.30	—	—	4	906	
1442	6.30	1716.4	-15.5	0	18.30	—	—	4	926	
1447	6.30	1717.6	-14.8	0	18.30	6.27	19.49	4	946	
1452	6.30	1712.7	-34.0	0	18.30	1344 AU	19.62	4	966	Permeability well
1457	6.31	1709.9	-15.4	0	18.34	65.0	19.71	4	986	
1502	6.30	1716.0	-33.1	0	18.32	94.2	19.88	4	1006	
1507	6.30	1719.1	-33.5	0	18.31	28.5	20.04	4	1026	
1512	6.30	1709.5	-13.2	0	18.33	77.4	19.98	4	1046	
1517	6.30	1711.9	-30.6	0	18.34	68.3	19.99	4	1066	
1522	6.30	1722.1	-31.5	0	18.34	67.3	19.84	4	1086	
1527	6.30	1722.5	-11.9	0	18.34	11.28	19.73	4	1106	
1532	6.30	1723.6	-30.9	0	18.34	7.72	19.71	4	1126	
1537	6.30	1714.6	-12.0	0	18.34	4.17	19.73	4	1146	
1542										
<del>6-26-2023</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: 1NW-02  
 Total Depth (ft): 35.16  
 Depth to Water (ft): 17.18  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.95  
 Well Volume (L) = gal \* 3.785: 11.2

Project No.: G-W65816  
 Location: AP-2  
 Pump Type/Model: Monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 30.16  
 Start/Stop Purge Time: 1550/1624  
 Purge Rate (mL/min): 150 mL/min  
 Total Purge Volume (L): 5.1  
 Purge Method: Low-Flow Well Volume Other: —  
 Sampling Method: Pump Discharge Other: —

Sampling Date: 6-26-2023  
 Sampler's Name: A. Szwarz  
 Sample Collection Time: —  
 Sample Purge Rate (mL/min): —  
 Sample ID: —  
 Laboratory Analyses: —  
 QA/QC Collected?: —  
 QA/QC I.D.: —

d = well diameter (inches); h = length of water column (feet)

Well Type:  Flush Stick Up  
 Well Lock: Yes  No  
 Well Cap Condition:  Good Replace  
 Well Tag Present:  Yes No

All sample containers requiring chemical preservation properly preserved prior to demob from well?  Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1550	2									
1600	6.33	1741.6	-22.8	0.07	23.89	4.17	17.12	150	1.5	Pre-purge 10 min for flow
1604	6.35	1720.0	-36.1	0.00	21.87	1.824	17.08	150	2.1	ipad reset.
1609	6.34	1728.3	-17.0	0.00	20.53	1.55	17.01	150	2.9	
1614	6.32	22.76	-38.4	0.00	22.76	1.72	16.81	150	3.6	Conductivity = 1748.8
1619	6.33	1736.3	-44.0	0.00	23.76	1.63	16.84	150	4.4	
1624	6.34	1713.6	-42.6	0.00	22.53	1.20	16.60	150	5.1	
<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">                     03 6-26-2023                 </div>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	



EQUIPMENT CALIBRATION LOG

Field Technician: A. Swart

Date: 6-26-2023

Time (start): 855

Time (finish): 915

SmartTroll SN: 989630

Turbidity Meter Type: LaMotte 2020we

SN: 1603-4411

Weather Conditions: Sunny, 70°F

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot# / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	24000044	24.15	4490	4094	4490.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	05/2024	24.42	4.00	4.04	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check			4.00			+/- 0.1 SU	Yes No	
pH (7)	22290139 04/2024	24.72	7.00	7.05	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	Yes No	
pH (10)	22110130 04/2024	24.98	10.00	9.95	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	25.05	228	291	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	101.56	100.0	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.00	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.50	0.60	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.94	10.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Neely

Date: 6/26/23

Time (start): 0845

Time (finish): 0915

smarTroll SN: 883553

Turbidity Meter Type: LaMotte 2020we

SN: 7007-1410

Weather Conditions: 70-91°, sunny

Facility and Unit: Pian+Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	<del>4</del> 22250153 11/23	25.05	4490	4020.7	4489.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)			4.00	4.03	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	—	—	4.00	—	—	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	24.92	7.00	7.14	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	—	—	7.00	—	—	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	24.96	10.00	10.39	10.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	—	—	10.00	—	—	+/- 0.1 SU	Yes No	
ORP (mV)	24390144 11/23	25.51	228	228.1	228	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	99.29	100.18	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.01	0.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	<del>0.88</del> 0.88	1.02	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	11.38	<del>10.01</del> 10.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: A. Swast Date: 6-27-2023 Time (start): 1145 Time (finish): 1200  
 smarTroll SN: 989630 Turbidity Meter Type: LaMote 2020we SN: 7009-1416  
 Weather Conditions: Sunny, 85°F Facility and Unit: Plant Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	2400 0044	30.19	4490	4318.3	4490	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	05/2024	29.92	4.00	4.07	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	<del>22290139 04/</del>		4.00			+/- 0.1 SU	Yes No	
pH (7)	22290139 04/2024	29.68	7.00	7.01	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	Yes No	
pH (10)	22110136 04/2024	29.53	10.00	10.02	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	29.73	228	217.4	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	96.99	100	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.41	0.0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	See AN's cal report New turbidity meter 1315
Turbidity 1 NTU			1.00	0.92	0.98	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	9.95	10.08	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

↑ readings  
OK

EQUIPMENT CALIBRATION LOG

Field Technician: Amana Meely

Date: 0127123

Time (start): 0735

Time (finish): 0755

smarTroll SN: 883553

Turbidity Meter Type: LaMote 2020we

SN: 7007-1416

Weather Conditions: 66-89°, sunny

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	27.06	4490	4561.1	4486.0	+/- 5%	<input checked="" type="radio"/> Yes No	
pH (4)	11/23		4.00	4.18	3.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	—	—	4.00	—	—	+/- 0.1 SU	Yes No	
pH (7)	2210893 11/23	26.72	7.00	6.97	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	—	—	7.00	—	—	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	26.92	10.00	9.89	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	—	—	10.00	—	—	+/- 0.1 SU	Yes No	
ORP (mV)	2390144 11/23	25.06	228	217.0	228.2	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	98.78%	99.78%	+/- 6% saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.00	-0.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.37	0.99	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	12.42	9.87	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: A. Stewart Date: 6-28-2023 Time (start): 1310 Time (finish): 1348  
 smarTroll SN: 989630 Turbidity Meter Type: LaMotte 2020we SN: 7009-1416  
 Weather Conditions: Sunny, 85°F Facility and Unit: Plant Hammond Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	24000044	36.12	4490	4578.5	4490.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	05/2024	38.12	4.00	4.01	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	<del>_____</del>		<del>4.00</del>	<del>_____</del>	<del>_____</del>	+/- 0.1 SU	Yes No	
pH (7)	22290739 04/2024	33.87	7.00	6.96	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	<del>_____</del>		<del>7.00</del>	<del>_____</del>	<del>_____</del>	+/- 0.1 SU	Yes No	
pH (10)	22110130 04/2024	32.48	10.00	9.88	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	<del>_____</del>		<del>10.00</del>	<del>_____</del>	<del>_____</del>	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	32.18	228	225.2	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	100.85	100.0	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.45	0.0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.91	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.78	10.07	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alan Anweely

Date: 6/17/23

Time (start): 0730

Time (finish): 0800

smarTroll SN: 883553

Turbidity Meter Type: LaMotte 2020we

SN: 7007-1416

Weather Conditions: 62-92° sunny

Facility and Unit: Plant Hammond

Project No: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	24.51	4490	4435.3	4490.8	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	11/23		4.00	4.21	3.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2210893 11/23	23.80	7.00	7.00	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	-	-	7.00	-	-	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	24.24	10.00	9.85	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	-	-	10.00	-	-	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	22.83	228	231	228.4	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	98.60	100.52	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	-0.02	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.62	0.75	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	12.35	9.96	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	



EQUIPMENT CALIBRATION LOG

Field Technician: Anana Neely

Date: 6/29/23

Time (start): 0735

Time (finish): 0755

smarTroll SN: 883553

Turbidity Meter Type: LaMotte 2020we

SN: 7007-1416

Weather Conditions: 65-94° sunny

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	25.95	4490	4478.9	4494.5	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)	11/23		4.00	4.24	3.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes <input type="radio"/> No <input type="radio"/>	
pH (7)	2216893 11/23	25.14	7.00	6.91	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check	-		-	7.00	-	-	+/- 0.1 SU	Yes <input type="radio"/> No <input type="radio"/>
pH (10)	21320202 12/23	25.92	10.00	9.86	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check	-		-	10.00	-	-	+/- 0.1 SU	Yes <input type="radio"/> No <input type="radio"/>
ORP (mV)	21390144 11/23	23.50	228	226.2	228.0	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	99.65	100.48	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.27	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	0.42	0.95	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	9.82	10.04	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	



**EQUIPMENT CALIBRATION LOG**

Field Technician: A. Swartz

Date: 6-30-2023

Time (start): 905

Time (finish): 920

smarTroll SN: 989630

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: Sunny, 70°F

Facility and Unit: Plant Hammond

Project No.: GW6581

**Calibration log**

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	24000044	23.92	4490	4493.8	4490.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	05/2024	23.81	4.00	4.03	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check			<del>4.00</del>			+/- 0.1 SU	Yes No	
pH (7)	22290139 04/2024	24.00	7.00	7.03	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check			<del>7.00</del>			+/- 0.1 SU	Yes No	
pH (10)	22110130 4/2024	24.08	10.00	9.98	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check			<del>10.00</del>			+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	24.08	228	234.5	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	96.19	100.0	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.35	0.05	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	1.06	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.17	9.90	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Murray

Date: 6/30/23

Time (start): 0735

Time (finish): 0750

smarTroll SN: 883553

Turbidity Meter Type: LaMote 2020we

SN: 7007-1414

Weather Conditions: 66-95°

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	23.79	4490	4458.8	4487.4	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	-	-	4.00	4.24	3.98	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	23.12	7.00	6.93	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	-	-	7.00	-	-	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	23.72	10.00	9.82	10.01	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	-	-	10.00	-	-	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	22.3	228	230.3	228	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	100.521	100.611	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.52	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.68	0.94	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.23	9.88	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Neely

Date: 7/5/23

Time (start): 1000

Time (finish): 1030

smarTroll SN: 883853

Turbidity Meter Type: LaMotte 2020we

SN: 7007-1416

Weather Conditions: 70-86°, cloudy/rainy

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	24.69	4490	4731.8	4413.1	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)			4.00	4.01	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	24.96	7.00	7.26	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	-	-	7.00	-	-	+/- 0.1 SU	Yes No	
pH (10)	21320202 11/23	24.80	10.00	9.63	10.01	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	-	-	10.00	-	-	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	24.90	228	227.5	227.8	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	97.89%	100.56%	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.62	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.79	0.89	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.93	9.98	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Neely

Date: 7/16/23

Time (start): 0725

Time (finish): \_\_\_\_\_

smarTroll SN: 883553

Turbidity Meter Type: LaMotte 2020we

SN: 7007-14110

Weather Conditions: 70-90, sunny

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250533 11/23	26.21	4490	4310.7	4488.3	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	11/23		4.00	4.30	3.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	26.14	7.00	7.01	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	-	-	7.00	-	-	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	25.95	10.00	9.83	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	-	-	10.00	-	-	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	25.19	228	223	228	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	99.331		+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.43	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.77	0.84	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	11.26	9.84	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

# APPENDIX D

## Certified Well Survey Data

Well ID	Casing Northing	Casing Easting	Top of Casing Elevation	Nail or Pad Northing	Nail or Pad Easting	Nail or Pad Elevation	Description
INW01	1547921.52	1938350.62	573.90	1547920.66	1938350.81	571.04	NAIL ON PAD
PT-01	1547916.85	1938348.81	574.13	1547916.04	1938348.97	571.14	NAIL ON PAD
PT-02	1547917.68	1938353.52	574.06	1547917.08	1938353.43	571.10	NAIL ON PAD
PT-03	1547910.57	1938352.13	574.09	1547909.42	1938351.78	571.10	NAIL ON PAD
MW-56	1547906.81	1938260.81	573.47	1547907.03	1938261.87	570.60	NAIL ON PAD
MW-57	1547895.53	1938349.49	574.28	1547896.78	1938349.21	571.30	NAIL ON PAD
MW58	1547931.46	1938592.55	575.87	1547932.08	1938592.44	572.96	NAIL ON PAD
MW-59	1547971.14	1938344.65	592.20	1547972.39	1938344.39	589.52	NAIL ON PAD
<b>Benchmark</b>	<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>				
BM-H2	1548149.4490	1938960.2220	590.68				

SURVEY DATA CERTIFICATION FOR SOUTHERN COMPANY TO DETERMINE NORTHING, EASTING, AND VERTICAL ELEVATION OF THE NAIL IN THE CONCRETE PAD & THE PVC WELL CASING. DATE OF FIELD SURVEY & INSPECTION: 07/11/2023. FIELD SURVEY POSITIONAL TOLERANCE=0.5 FEET HORIZONTAL-NAD'83, 0.01 VERTICAL-NAVD '88. EQUIPMENT USED FOR HORIZONTAL LOCATION: TRIMBLE R12 RTK GPS & TRIMBLE S5 ROBOTIC TOTAL STATION. THE VERTICAL LOCATION OF EACH SURVEYED POINT WAS ESTABLISHED BASED UPON LEVEL RUNS WITH A DIGITAL LEVEL LOOP FROM VERTICAL CONTROL ESTABLISHED BY ON-SITE BENCHMARK BM-H2 SET BY GEL SOLUTIONS USING A TRIMBLE DINI LEVEL

*David Baker*

7/17/2023



COA - LS003119  
Exp. 12/31/2023

Well ID	Casing Northing	Casing Easting	Top of Casing	Nail or Pad Northing	Nail or Pad Easting	Nail or Pad Elevation	Description
INW02	1548915.001	1937643.885	580.56	1548914.667	1937643.335	580.78	NAIL ON PAD
PT-04	1548918.264	1937641.905	580.26	1548917.858	1937641.396	580.495	NAIL ON PAD
PT-05	1548913.064	1937638.478	580.54	1548912.735	1937637.953	580.826	NAIL ON PAD
PT-06	1548916.945	1937634.248	580.36	1548916.496	1937633.777	580.681	NAIL ON PAD
MW-55	1548823.4	1937575.715	582.49	1548822.243	1937575.258	582.783	NAIL ON PAD
<b>Benchmark</b>	<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>				
BM-H2	1548149.4490	1938960.2220	590.68				

SURVEY DATA CERTIFICATION FOR SOUTHERN COMPANY TO DETERMINE NORTHING, EASTING, AND VERTICAL ELEVATION OF THE NAIL IN THE CONCRETE PAD & THE PVC WELL CASING. DATE OF FIELD SURVEY & INSPECTION: 08/29/2023. FIELD SURVEY POSITIONAL TOLERANCE=0.5 FEET HORIZONTAL-NAD'83, 0.01 VERTICAL-NAVD '88. EQUIPMENT USED FOR HORIZONTAL LOCATION: TRIMBLE R12 RTK GPS & TRIMBLE S5 ROBOTIC TOTAL STATION. THE VERTICAL LOCATION OF EACH SURVEYED POINT WAS ESTABLISHED BASED UPON LEVEL RUNS WITH A DIGITAL LEVEL LOOP FROM VERTICAL CONTROL ESTABLISHED BY ON-SITE BENCHMARK BM-H2 SET BY GEL SOLUTIONS USING A TRIMBLE DINI LEVEL

*David Baker*

8/30/2023



COA - LS003119  
Exp. 12/31/2023

# APPENDIX B

## Well Maintenance and Repair Documentation Memoranda



January 2023

**MEMORANDUM**

**DATE:** June 22, 2023

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

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

**FROM:** Geosyntec Consultants

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

Geosyntec Consultants has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant Hammond Ash Pond 2 (AP-2) during the January/February 2023 sampling event. All repairs and maintenance were completed in accordance with the Georgia Environmental Protection Division (GA EPD) guidance on routine visual inspections of groundwater monitoring wells. Documentation of the well inspections are provided as an attachment to this memorandum.

<b>Georgia Power Site/Unit</b>	<b>Date Performed</b>	<b>Well ID</b>	<b>Maintenance/ Repair Performed</b>
Hammond/AP-2	1/23/2023	All Wells	Checked and cleared weep holes of debris.

# ATTACHMENT

## Well Inspection Forms

# Well Inspection Form

Plant Name/Unit Name Plant Hammond AP-1, AP-2, AP-3  
 Field Technician C. CAIN  
 Well ID HGWA-1

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions sunny, 50F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .			<u>Sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-1/2/3  
 Field Technician C. CAIN  
 Well ID HGWA-2

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>			<u>Sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond Ap-1/2/3  
 Field Technician C. COIN  
 Well ID HGW/A-3

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 50

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .			<u>Sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID HGWA-4

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 50F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .			<u>Sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name P (dist) Hammond AP-2  
 Field Technician A. Szwest  
 Well ID HGWA-5

Date (mm/dd/yyyy) 1/23/2023  
 Field Conditions Sunny, 45°F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .			<u>dedicated sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID HGWA-6

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 50

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .			<u>Sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID HGWA-42D

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny SOF

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .	<u>Sampling equipment</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond Ap-1/2/3  
 Field Technician C. CAIN  
 Well ID HGWA-43D

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny & C

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .	<u>Sampling Equipment</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-1, AP-2, AP-3  
 Field Technician C. CAIN  
 Well ID HGWA-440

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions SOF sunny

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .	<u>NA</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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:			

*X* 1/23/23

# Well Inspection Form

Plant Name/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID HGWG-14

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 52F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>			<u>Sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID HQW-15

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 80

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>	<u>NA</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID HGWG-16

Date (mm/dd/yyyy) 4/23/23  
 Field Conditions Sunny SDF

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>	<u>NA</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. RAIN  
 Well ID HGW-17

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 50

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .			<u>Sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CALN  
 Well ID HGW-18

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 50F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>	<u>NA</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-1/AP-2  
 Field Technician C. CAIN  
 Well ID MW-8

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions 50°F Sunny

	Yes	No	Comments
<b>1 Location/Identification</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>2 Protective Casing</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>3 Surface Pad</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>4 Internal Casing</b>			
a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a	<input type="checkbox"/>		<u>NA</u>
b	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6 Corrective Actions</b>			
a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If yes, indicate here:			

# Well Inspection Form

Plant Name/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID MW-9

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny SDF

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .	<u>NA</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2, AP-4  
 Field Technician C. CAIN  
 Well ID MW-12

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 50F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .	<u>NA</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID MW-16

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 50F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>	<u>NA</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CRIN  
 Well ID MW-17

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 52F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>	<input checked="" type="checkbox"/>		<u>NA</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician S. CABIN  
 Well ID MW-18

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny S/F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. GAIN  
 Well ID MW-21D

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 50F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>			<u>Sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond/AP-2  
 Field Technician A. Swarust  
 Well ID MW-22

Date (mm/dd/yyyy) 01/23/2023  
 Field Conditions Sunny, 45°F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .			<u>dedicated sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID MW-23D

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny S/F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>	<u>NA</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID MW-33

Date (mm/dd/yyyy) 4/23/23  
 Field Conditions Sunny 54F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .	<u>Sampling equipment</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CAIN  
 Well ID MW-34B

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions sunny 50

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>			<u>NA</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?			<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?			<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?			<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?			<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CHAN  
 Well ID MW-35

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny SOF

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .	<u>NA</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CRAIN  
 Well ID MW-36D

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 50F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>			<u>NA</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?			<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?			<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?			<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?			<u>NA</u>
f Does the well recharge adequately when purged?			<u>NA</u>
g Does the well require redevelopment (low flow, excess turbidity)?		<input checked="" type="checkbox"/>	
<b>6 Corrective Actions</b>			
a Are corrective actions needed?		<input checked="" type="checkbox"/>	
If yes, indicate here:			

## Well Inspection Form

Plant Name/Unit Name Plant Hammond / AP-2  
 Field Technician A. Sewart  
 Well ID MW-37D

Date (mm/dd/yyyy) 01/23/2023  
 Field Conditions Sunny, 45°F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment</b> , a <b>dedicated water quality sonde</b> , and/or <b>dedicated water level data logger</b> .			<u>dedicated sampling equipment</u>
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CRAIN  
 Well ID MW-51

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny 50F

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>	<u>NA</u>		
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	<u>NA</u>
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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/Unit Name Plant Hammond AP-2  
 Field Technician C. CABIN  
 Well ID MW-52

Date (mm/dd/yyyy) 1/23/23  
 Field Conditions Sunny SWF

	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., bollards)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e 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 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 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?	<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 lid in good condition?	<input checked="" 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"/>	
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 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 (not covered with sediment 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 bailers)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c Is the well properly vented for equilibration 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 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"/>	
<b>5 Sampling and Data Collection Equipment</b>			
a Indicate if the well is equipped with <b>dedicated sampling equipment, a dedicated water quality sonde, and/or dedicated water level data logger.</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NA
b If equipped with dedicated sampling equipment, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
c If equipped with a dedicated water quality sonde, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
d Does the desiccant need to be replaced on the water quality sonde?	<input type="checkbox"/>	<input type="checkbox"/>	NA
e If equipped with a water level data logger, is it in good operational condition?	<input type="checkbox"/>	<input type="checkbox"/>	NA
f Does the well recharge adequately when purged?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g Does the well require redevelopment (low flow, excess turbidity)?	<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:			

August 2023

**MEMORANDUM**

**DATE:** November 6, 2023

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

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

**FROM:** Geosyntec Consultants

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

---

Geosyntec Consultants has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant Hammond Ash Pond 2 (AP-2) during the August 2023 sampling event. All repairs and maintenance were completed in accordance with the Georgia Environmental Protection Division (GA EPD) guidance on routine visual inspections of groundwater monitoring wells. Documentation of the well inspections are provided as an attachment to this memorandum.

<b>Georgia Power Site/Unit</b>	<b>Date Performed</b>	<b>Well ID</b>	<b>Maintenance/ Repair Performed</b>
Hammond/AP-2	8/7/2023 – 8/8/2023	All Wells	Checked and cleared weep holes of debris.

# ATTACHMENT

## Well Inspection Summary Table

## Well Inspection

Site Name: Plant Hammond AP-2

Date: 08/07/2023

Permit Number: 057-024D(CCR)

Field Conditions: Sunny, 70° F

Well ID:	Location/Identification			
	Visible and accessible	Properly identified with correct well ID	Located in high traffic area; does the well require protection from traffic	Acceptable drainage around well (no standing water, not located in obvious drainage flow path)
HGWA-1	Yes	Yes	No	Yes
HGWA-2	Yes	Yes	No	Yes
HGWA-3	Yes	Yes	No	Yes
HGWA-4	Yes	Yes	No	Yes
HGWA-5	Yes	Yes	No	Yes
HGWA-6	Yes	Yes	No	Yes
HGWA-42D	Yes	Yes	No	Yes
HGWA-43D	Yes	Yes	No	Yes
HGWA-44D	Yes	Yes	No	Yes
HGWC-14	Yes	Yes	No	Yes
HGWC-15	Yes	Yes	No	Yes
HGWC-16	Yes	Yes	No	Yes
HGWC-17	Yes	Yes	No	Yes
HGWC-18	Yes	Yes	No	Yes
MW-9	Yes	Yes	No	Yes
MW-12	Yes	Yes	No	Yes
MW-16	Yes	Yes	No	Yes
MW-17	Yes	Yes	No	Yes
MW-18	Yes	Yes	No	Yes
MW-21D	Yes	Yes	No	Yes
MW-22	Yes	Yes	No	Yes
MW-23D	Yes	Yes	No	Yes
MW-33	Yes	Yes	No	Yes
MW-34D	Yes	Yes	No	Yes
MW-35	Yes	Yes	No	Yes
MW-36D	Yes	Yes	No	Yes
MW-37D	Yes	Yes	No	Yes
MW-51	Yes	Yes	No	Yes
MW-52	Yes	Yes	No	Yes

## Well Inspection

Site Name: Plant Hammond AP-2

Date: 08/07/2023

Permit Number: 057-024D(CCR)

Field Conditions: Sunny, 70° F

Well ID:	Protective Casing				
	Free from apparent damage and able to be secured	No degradation or deterioration	Functioning weep hole	Annular space clear of debris and water, or filled with pea gravel/sand	Locked and is the lock in good condition
HGWA-1	Yes	Yes	Yes	Yes	Yes
HGWA-2	Yes	Yes	Yes	Yes	Yes
HGWA-3	Yes	Yes	Yes	Yes	Yes
HGWA-4	Yes	Yes	Yes	Yes	Yes
HGWA-5	Yes	Yes	Yes	Yes	Yes
HGWA-6	Yes	Yes	Yes	Yes	Yes
HGWA-42D	Yes	Yes	Yes	Yes	Yes
HGWA-43D	Yes	Yes	Yes	Yes	Yes
HGWA-44D	Yes	Yes	Yes	Yes	Yes
HGWC-14	Yes	Yes	Yes	Yes	Yes
HGWC-15	Yes	Yes	Yes	Yes	Yes
HGWC-16	Yes	Yes	Yes	Yes	Yes
HGWC-17	Yes	Yes	Yes	Yes	Yes
HGWC-18	Yes	Yes	Yes	Yes	Yes
MW-9	Yes	Yes	Yes	Yes	Yes
MW-12	Yes	Yes	Yes	Yes	Yes
MW-16	Yes	Yes	Yes	Yes	Yes
MW-17	Yes	Yes	Yes	Yes	Yes
MW-18	Yes	Yes	Yes	Yes	Yes
MW-21D	Yes	Yes	Yes	Yes	Yes
MW-22	Yes	Yes	Yes	Yes	Yes
MW-23D	Yes	Yes	Yes	Yes	Yes
MW-33	Yes	Yes	Yes	Yes	Yes
MW-34D	Yes	Yes	Yes	Yes	Yes
MW-35	Yes	Yes	Yes	Yes	Yes
MW-36D	Yes	Yes	Yes	Yes	Yes
MW-37D	Yes	Yes	Yes	Yes	Yes
MW-51	Yes	Yes	Yes	Yes	Yes
MW-52	Yes	Yes	Yes	Yes	Yes

## Well Inspection

Site Name: Plant Hammond AP-2

Date: 08/07/2023

Permit Number: 057-024D(CCR)

Field Conditions: Sunny, 70° F

	Surface Pad			Internal Casing		
	Good condition (not cracked/ broken)	Sloped away from the protective casing	In complete contact with the ground surface and stable	Cap prevents entry of foreign material into the well	Free of kinks/bends, or any obstructions from foreign objects (such as bailers)	Properly vented for equilibration of air pressure
<b>Well ID:</b>						
HGWA-1	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-2	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-3	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-4	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-5	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-6	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-42D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-43D	Yes	Yes	Yes	Yes	Yes	Yes
HGWA-44D	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-14	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-15	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-16	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-17	Yes	Yes	Yes	Yes	Yes	Yes
HGWC-18	Yes	Yes	Yes	Yes	Yes	Yes
MW-9	Yes	Yes	Yes	Yes	Yes	Yes
MW-12	Yes	Yes	Yes	Yes	Yes	Yes
MW-16	Yes	Yes	Yes	Yes	Yes	Yes
MW-17	Yes	Yes	Yes	Yes	Yes	Yes
MW-18	Yes	Yes	Yes	Yes	Yes	Yes
MW-21D	Yes	Yes	Yes	Yes	Yes	Yes
MW-22	Yes	Yes	Yes	Yes	Yes	Yes
MW-23D	Yes	Yes	Yes	Yes	Yes	Yes
MW-33	Yes	Yes	Yes	Yes	Yes	Yes
MW-34D	Yes	Yes	Yes	Yes	Yes	Yes
MW-35	Yes	Yes	Yes	Yes	Yes	Yes
MW-36D	Yes	Yes	Yes	Yes	Yes	Yes
MW-37D	Yes	Yes	Yes	Yes	Yes	Yes
MW-51	Yes	Yes	Yes	Yes	Yes	Yes
MW-52	Yes	Yes	Yes	Yes	Yes	Yes

Well Inspection

Site Name: Plant Hammond AP-2

Date: 08/07/2023

Permit Number: 057-024D(CCR)

Field Conditions: Sunny, 70° F

<b>Well ID:</b>	<b>Corrective actions as needed, by date:</b>
HGWA-1	N/A
HGWA-2	N/A
HGWA-3	N/A
HGWA-4	N/A
HGWA-5	N/A
HGWA-6	N/A
HGWA-42D	N/A
HGWA-43D	N/A
HGWA-44D	N/A
HGWC-14	N/A
HGWC-15	N/A
HGWC-16	N/A
HGWC-17	N/A
HGWC-18	N/A
MW-9	N/A
MW-12	N/A
MW-16	N/A
MW-17	N/A
MW-18	N/A
MW-21D	N/A
MW-22	N/A
MW-23D	N/A
MW-33	N/A
MW-34D	N/A
MW-35	N/A
MW-36D	N/A
MW-37D	N/A
MW-51	N/A
MW-52	N/A



# APPENDIX C

## Laboratory Analytical and Field Sampling Reports

# LABORATORY ANALYTICAL REPORTS

January 2023

April 27, 2023

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

RE: Project: Hammond AP-2  
Pace Project No.: 92648451

Dear Joju Abraham:

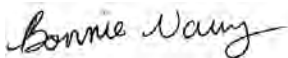
Enclosed are the analytical results for sample(s) received by the laboratory between January 24, 2023 and February 03, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,



Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Noelia Gangi, Georgia Power  
Ben Hodges, Georgia Power-CCR  
Christine Hug, Geosyntec Consultants, Inc.  
Kristen Jurinko  
Thomas Kessler, Geosyntec  
Whitney Law, Geosyntec Consultants  
Laura Midkiff, Georgia Power  
Michael Smilley, Georgia Power  
Tina Sullivan, ERM  
Anthony Szwast, Geosyntec



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Hammond AP-2

Pace Project No.: 92648451

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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-2

Pace Project No.: 92648451

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92648451001	HAM-HGWA-4	Water	01/23/23 17:04	01/24/23 12:38
92648451002	HAM-HGWA-42D	Water	01/23/23 18:06	01/24/23 12:38
92648451003	HAM-HGWC-17	Water	01/30/23 15:50	02/01/23 12:45
92648451004	HAM-MW-22	Water	01/30/23 18:15	02/01/23 12:45
92648451005	HAM-MW-34D	Water	01/30/23 13:05	02/01/23 12:45
92648451006	HAM-MW-37D	Water	01/30/23 16:11	02/01/23 12:45
92648451007	HAM-HGWC-14	Water	02/01/23 14:55	02/03/23 12:05
92648451008	HAM-HGWC-15	Water	02/01/23 14:44	02/03/23 12:05
92648451009	HAM-HGWC-16	Water	02/01/23 12:30	02/03/23 12:05
92648451010	HAM-HGWC-18	Water	02/01/23 10:55	02/03/23 12:05
92648451011	HAM-MW-23D	Water	02/01/23 13:20	02/03/23 12:05
92648451012	HAM-MW-35	Water	02/01/23 10:02	02/03/23 12:05
92648451013	HAM-MW-51	Water	02/01/23 11:32	02/03/23 12:05
92648451014	HAM-AP2-EB-02	Water	02/01/23 14:20	02/03/23 12:05
92648451015	HAM-AP2-FB-02	Water	02/01/23 14:15	02/03/23 12:05
92648451016	HAM-AP2-FD-02	Water	02/01/23 00:00	02/03/23 12:05
92648451017	HAM-MW-52	Water	02/01/23 13:41	02/03/23 12:05
92649378001	HAM-HGWA-5	Water	01/27/23 10:59	01/30/23 11:58
92649378002	HAM-HGWA-6	Water	01/27/23 10:10	01/30/23 11:58
92649378003	HAM-MW-21D	Water	01/27/23 17:08	01/30/23 11:58
92649378004	HAM-MW-33	Water	01/27/23 14:34	01/30/23 11:58

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2  
Pace Project No.: 92648451

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92648451001	HAM-HGWA-4	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92648451002	HAM-HGWA-42D	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92648451003	HAM-HGWC-17	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92648451004	HAM-MW-22	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92648451005	HAM-MW-34D	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92648451006	HAM-MW-37D	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92648451007	HAM-HGWC-14	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92648451008	HAM-HGWC-15	EPA 6010D	MS	1
		EPA 6020B	CW1	13

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2  
Pace Project No.: 92648451

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92648451009	HAM-HGWC-16	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92648451010	HAM-HGWC-18	SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92648451011	HAM-MW-23D	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92648451012	HAM-MW-35	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
92648451013	HAM-MW-51	EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
92648451014	HAM-AP2-EB-02	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92648451015	HAM-AP2-FB-02	SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2  
Pace Project No.: 92648451

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92648451016	HAM-AP2-FD-02	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92648451017	HAM-MW-52	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6020B	CW1	5
		SM 2320B-2011	SMS	2
92649378001	HAM-HGWA-5	SM 4500-S2D-2011	JP1	1
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92649378002	HAM-HGWA-6	SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
92649378003	HAM-MW-21D	SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6020B	CW1	14
		EPA 7470A	VB	1
92649378004	HAM-MW-33	SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville  
PASI-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 AP-2

Pace Project No.: 92648451

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92648451001</b>	<b>HAM-HGWA-4</b>					
	Performed by	Customer			02/09/23 20:33	
	pH	5.62	Std. Units		02/09/23 20:33	
EPA 6010D	Calcium	24.0	mg/L	1.0	01/27/23 19:55	
EPA 6020B	Barium	0.057	mg/L	0.0050	01/31/23 13:06	
EPA 6020B	Beryllium	0.00010J	mg/L	0.00050	01/31/23 13:06	
EPA 6020B	Boron	0.023J	mg/L	0.040	01/31/23 13:06	
EPA 6020B	Cobalt	0.00049J	mg/L	0.0050	01/31/23 13:06	
SM 2540C-2015	Total Dissolved Solids	128	mg/L	25.0	01/27/23 14:04	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	01/26/23 10:29	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	01/26/23 10:29	
EPA 300.0 Rev 2.1 1993	Sulfate	42.5	mg/L	1.0	01/26/23 10:29	
<b>92648451002</b>	<b>HAM-HGWA-42D</b>					
	Performed by	Customer			02/10/23 19:01	
	pH	7.55	Std. Units		02/10/23 19:01	
EPA 6010D	Calcium	43.7	mg/L	1.0	01/27/23 20:00	
EPA 6020B	Antimony	0.0016J	mg/L	0.0030	01/31/23 13:30	
EPA 6020B	Barium	0.21	mg/L	0.0050	01/31/23 13:30	
EPA 6020B	Boron	0.052	mg/L	0.040	01/31/23 13:30	
EPA 6020B	Lithium	0.0097J	mg/L	0.030	01/31/23 13:30	
SM 2540C-2015	Total Dissolved Solids	168	mg/L	25.0	01/27/23 14:06	
EPA 300.0 Rev 2.1 1993	Chloride	3.3	mg/L	1.0	01/25/23 23:50	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	01/25/23 23:50	
EPA 300.0 Rev 2.1 1993	Sulfate	11.1	mg/L	1.0	01/25/23 23:50	
<b>92648451003</b>	<b>HAM-HGWC-17</b>					
	Performed by	Customer			02/09/23 20:34	
	pH	6.44	Std. Units		02/09/23 20:34	
EPA 6010D	Calcium	286	mg/L	1.0	02/14/23 18:56	M1
EPA 6020B	Arsenic	0.0028J	mg/L	0.0050	02/17/23 13:03	
EPA 6020B	Barium	0.030	mg/L	0.0050	02/17/23 13:03	
EPA 6020B	Beryllium	0.000057J	mg/L	0.00050	02/17/23 13:03	
EPA 6020B	Boron	6.8	mg/L	0.040	02/17/23 13:03	
EPA 6020B	Cobalt	0.011	mg/L	0.0050	02/17/23 13:03	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	02/17/23 13:03	
EPA 6020B	Thallium	0.00025J	mg/L	0.0010	02/17/23 13:03	
SM 2540C-2015	Total Dissolved Solids	1320	mg/L	25.0	02/02/23 20:28	
EPA 300.0 Rev 2.1 1993	Chloride	154	mg/L	10.0	02/04/23 12:53	
EPA 300.0 Rev 2.1 1993	Fluoride	0.097J	mg/L	0.10	02/03/23 22:34	
EPA 300.0 Rev 2.1 1993	Sulfate	451	mg/L	10.0	02/04/23 12:53	
<b>92648451004</b>	<b>HAM-MW-22</b>					
	Performed by	Customer			02/09/23 20:41	
	pH	5.47	Std. Units		02/09/23 20:41	
EPA 6010D	Calcium	189	mg/L	1.0	02/14/23 19:25	
EPA 6020B	Barium	0.014	mg/L	0.0050	02/17/23 13:09	
EPA 6020B	Beryllium	0.000081J	mg/L	0.00050	02/17/23 13:09	
EPA 6020B	Boron	2.4	mg/L	0.040	02/17/23 13:09	
EPA 6020B	Cadmium	0.0017	mg/L	0.00050	02/17/23 13:09	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92648451

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92648451004</b>	<b>HAM-MW-22</b>					
EPA 6020B	Cobalt	0.027	mg/L	0.0050	02/17/23 13:09	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	02/17/23 13:09	
SM 2540C-2015	Total Dissolved Solids	961	mg/L	25.0	02/02/23 20:28	
EPA 300.0 Rev 2.1 1993	Chloride	109	mg/L	9.0	02/04/23 13:09	
EPA 300.0 Rev 2.1 1993	Fluoride	0.064J	mg/L	0.10	02/03/23 23:22	
EPA 300.0 Rev 2.1 1993	Sulfate	445	mg/L	9.0	02/04/23 13:09	
<b>92648451005</b>	<b>HAM-MW-34D</b>					
	Performed by	Customer			02/09/23 20:42	
	pH	6.99	Std. Units		02/09/23 20:42	
EPA 6010D	Calcium	558	mg/L	5.0	02/15/23 16:48	
EPA 6020B	Antimony	0.0018J	mg/L	0.0030	02/17/23 13:32	
EPA 6020B	Arsenic	0.0047J	mg/L	0.0050	02/17/23 13:32	
EPA 6020B	Barium	0.040	mg/L	0.0050	02/17/23 13:32	
EPA 6020B	Boron	8.0	mg/L	0.040	02/17/23 13:32	
EPA 6020B	Cadmium	0.00047J	mg/L	0.00050	02/17/23 13:32	
EPA 6020B	Cobalt	0.0071	mg/L	0.0050	02/17/23 13:32	
EPA 6020B	Lithium	0.0013J	mg/L	0.030	02/17/23 13:32	
EPA 6020B	Selenium	0.0016J	mg/L	0.0050	02/17/23 13:32	
SM 2540C-2015	Total Dissolved Solids	2230	mg/L	50.0	02/02/23 20:28	
EPA 300.0 Rev 2.1 1993	Chloride	173	mg/L	25.0	02/04/23 13:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.089J	mg/L	0.10	02/03/23 23:38	
EPA 300.0 Rev 2.1 1993	Sulfate	1120	mg/L	25.0	02/04/23 13:24	
<b>92648451006</b>	<b>HAM-MW-37D</b>					
	Performed by	Customer			02/09/23 20:44	
	pH	7.56	Std. Units		02/09/23 20:44	
EPA 6010D	Calcium	74.6	mg/L	1.0	02/14/23 19:35	
EPA 6020B	Barium	0.13	mg/L	0.0050	02/17/23 13:38	
EPA 6020B	Boron	0.15	mg/L	0.040	02/17/23 13:38	
EPA 6020B	Lithium	0.021J	mg/L	0.030	02/17/23 13:38	
EPA 6020B	Molybdenum	0.0063J	mg/L	0.010	02/17/23 13:38	
SM 2540C-2015	Total Dissolved Solids	226	mg/L	25.0	02/02/23 20:28	
EPA 300.0 Rev 2.1 1993	Chloride	49.2	mg/L	1.0	02/03/23 23:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.092J	mg/L	0.10	02/03/23 23:54	
EPA 300.0 Rev 2.1 1993	Sulfate	85.2	mg/L	1.0	02/03/23 23:54	
<b>92648451007</b>	<b>HAM-HGWC-14</b>					
	Performed by	Customer			02/09/23 20:46	
	pH	4.93	Std. Units		02/09/23 20:46	
EPA 6010D	Calcium	464	mg/L	5.0	02/15/23 16:53	
EPA 6020B	Arsenic	0.0040J	mg/L	0.0050	02/16/23 19:44	
EPA 6020B	Barium	0.017	mg/L	0.0050	02/16/23 19:44	
EPA 6020B	Beryllium	0.00039J	mg/L	0.00050	02/16/23 19:44	
EPA 6020B	Boron	7.7	mg/L	0.20	02/17/23 17:25	M1
EPA 6020B	Cobalt	0.035	mg/L	0.0050	02/16/23 19:44	
EPA 6020B	Lead	0.0011	mg/L	0.0010	02/16/23 19:44	
EPA 6020B	Selenium	0.0036J	mg/L	0.0050	02/16/23 19:44	
EPA 6020B	Thallium	0.00047J	mg/L	0.0010	02/16/23 19:44	

### REPORT OF LABORATORY ANALYSIS

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**SUMMARY OF DETECTION**

Project: Hammond AP-2  
Pace Project No.: 92648451

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92648451007</b>	<b>HAM-HGWC-14</b>					
SM 2540C-2015	Total Dissolved Solids	1950	mg/L	25.0	02/07/23 18:38	
EPA 300.0 Rev 2.1 1993	Chloride	108	mg/L	24.0	02/08/23 08:23	
EPA 300.0 Rev 2.1 1993	Fluoride	0.094J	mg/L	0.10	02/07/23 17:33	
EPA 300.0 Rev 2.1 1993	Sulfate	1060	mg/L	24.0	02/08/23 08:23	
<b>92648451008</b>	<b>HAM-HGWC-15</b>					
	Performed by	Customer			02/09/23 20:47	
	pH	6.22	Std. Units		02/09/23 20:47	
EPA 6010D	Calcium	174	mg/L	1.0	02/14/23 19:45	
EPA 6020B	Antimony	0.0021J	mg/L	0.0030	02/16/23 20:08	
EPA 6020B	Barium	0.021	mg/L	0.0050	02/16/23 20:08	
EPA 6020B	Boron	2.0	mg/L	0.20	02/17/23 17:43	
EPA 6020B	Cadmium	0.00088	mg/L	0.00050	02/16/23 20:08	
EPA 6020B	Cobalt	0.0091	mg/L	0.0050	02/16/23 20:08	
EPA 6020B	Lithium	0.016J	mg/L	0.030	02/16/23 20:08	
EPA 6020B	Thallium	0.00022J	mg/L	0.0010	02/16/23 20:08	
SM 2540C-2015	Total Dissolved Solids	892	mg/L	25.0	02/07/23 18:39	
EPA 300.0 Rev 2.1 1993	Chloride	85.0	mg/L	1.0	02/07/23 18:23	
EPA 300.0 Rev 2.1 1993	Fluoride	0.086J	mg/L	0.10	02/07/23 18:23	
EPA 300.0 Rev 2.1 1993	Sulfate	341	mg/L	7.0	02/08/23 08:38	
<b>92648451009</b>	<b>HAM-HGWC-16</b>					
	Performed by	Customer			02/09/23 20:48	
	pH	7.15	Std. Units		02/09/23 20:48	
EPA 6010D	Calcium	216	mg/L	1.0	02/14/23 19:49	
EPA 6020B	Barium	0.11	mg/L	0.0050	02/16/23 20:14	
EPA 6020B	Boron	2.8	mg/L	0.20	02/17/23 17:49	
EPA 6020B	Lithium	0.0036J	mg/L	0.030	02/16/23 20:14	
SM 2540C-2015	Total Dissolved Solids	1030	mg/L	25.0	02/07/23 18:39	
EPA 300.0 Rev 2.1 1993	Chloride	112	mg/L	5.0	02/08/23 08:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.053J	mg/L	0.10	02/07/23 18:39	
EPA 300.0 Rev 2.1 1993	Sulfate	257	mg/L	5.0	02/08/23 08:54	
<b>92648451010</b>	<b>HAM-HGWC-18</b>					
	Performed by	Customer			02/09/23 20:51	
	pH	4.66	Std. Units		02/09/23 20:51	
EPA 6010D	Calcium	288	mg/L	1.0	02/14/23 19:54	
EPA 6020B	Arsenic	0.0036J	mg/L	0.0050	02/16/23 20:20	
EPA 6020B	Barium	0.019	mg/L	0.0050	02/16/23 20:20	
EPA 6020B	Beryllium	0.0020	mg/L	0.00050	02/16/23 20:20	
EPA 6020B	Boron	5.9	mg/L	0.20	02/17/23 17:55	
EPA 6020B	Cadmium	0.0010	mg/L	0.00050	02/16/23 20:20	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	02/16/23 20:20	
EPA 6020B	Lithium	0.0093J	mg/L	0.030	02/16/23 20:20	
EPA 6020B	Selenium	0.0054	mg/L	0.0050	02/16/23 20:20	
SM 2540C-2015	Total Dissolved Solids	1430	mg/L	25.0	02/07/23 18:39	
EPA 300.0 Rev 2.1 1993	Chloride	92.7	mg/L	1.0	02/07/23 18:55	
EPA 300.0 Rev 2.1 1993	Fluoride	0.21	mg/L	0.10	02/07/23 18:55	
EPA 300.0 Rev 2.1 1993	Sulfate	776	mg/L	17.0	02/08/23 09:10	

**REPORT OF LABORATORY ANALYSIS**

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### SUMMARY OF DETECTION

Project: Hammond AP-2  
Pace Project No.: 92648451

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92648451011</b>	<b>HAM-MW-23D</b>					
	Performed by	Customer			02/09/23 20:53	
	pH	6.69	Std. Units		02/09/23 20:53	
EPA 6010D	Calcium	294	mg/L	1.0	02/14/23 19:59	
EPA 6020B	Barium	0.047	mg/L	0.0050	02/16/23 20:26	
EPA 6020B	Boron	3.0	mg/L	0.20	02/17/23 18:01	
EPA 6020B	Cadmium	0.00012J	mg/L	0.00050	02/16/23 20:26	
EPA 6020B	Cobalt	0.00081J	mg/L	0.0050	02/16/23 20:26	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	02/16/23 20:26	
EPA 6020B	Molybdenum	0.0041J	mg/L	0.010	02/16/23 20:26	
SM 2540C-2015	Total Dissolved Solids	1320	mg/L	25.0	02/07/23 18:39	
EPA 300.0 Rev 2.1 1993	Chloride	137	mg/L	9.0	02/08/23 09:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.074J	mg/L	0.10	02/07/23 19:11	
EPA 300.0 Rev 2.1 1993	Sulfate	438	mg/L	9.0	02/08/23 09:25	
<b>92648451012</b>	<b>HAM-MW-35</b>					
	Performed by	Customer			02/09/23 20:54	
	pH	4.89	Std. Units		02/09/23 20:54	
EPA 6010D	Calcium	503	mg/L	5.0	02/15/23 16:57	
EPA 6020B	Arsenic	0.0060	mg/L	0.0050	02/16/23 20:44	
EPA 6020B	Barium	0.022	mg/L	0.0050	02/16/23 20:44	
EPA 6020B	Beryllium	0.00049J	mg/L	0.00050	02/16/23 20:44	
EPA 6020B	Boron	8.7	mg/L	0.040	02/16/23 20:44	
EPA 6020B	Cadmium	0.0017	mg/L	0.00050	02/16/23 20:44	
EPA 6020B	Cobalt	0.088	mg/L	0.025	02/17/23 18:06	
EPA 6020B	Lithium	0.0034J	mg/L	0.030	02/16/23 20:44	
EPA 6020B	Selenium	0.0063	mg/L	0.0050	02/16/23 20:44	
EPA 7470A	Mercury	0.00084	mg/L	0.00020	02/09/23 14:03	
SM 2540C-2015	Total Dissolved Solids	2410	mg/L	25.0	02/07/23 18:39	1g
EPA 300.0 Rev 2.1 1993	Chloride	189	mg/L	20.0	02/08/23 09:41	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	02/07/23 19:27	M1
EPA 300.0 Rev 2.1 1993	Sulfate	1190	mg/L	20.0	02/08/23 09:41	M1
<b>92648451013</b>	<b>HAM-MW-51</b>					
	Performed by	Customer			02/09/23 20:55	
	pH	6.37	Std. Units		02/09/23 20:55	
EPA 6010D	Calcium	492	mg/L	5.0	02/15/23 17:02	
EPA 6020B	Arsenic	0.0041J	mg/L	0.0050	02/16/23 20:50	
EPA 6020B	Barium	0.033	mg/L	0.0050	02/16/23 20:50	
EPA 6020B	Beryllium	0.00028J	mg/L	0.00050	02/16/23 20:50	
EPA 6020B	Boron	8.3	mg/L	0.040	02/16/23 20:50	
EPA 6020B	Cadmium	0.0016	mg/L	0.00050	02/16/23 20:50	
EPA 6020B	Cobalt	0.021J	mg/L	0.025	02/17/23 18:12	D3
EPA 6020B	Lithium	0.0015J	mg/L	0.030	02/16/23 20:50	
EPA 6020B	Selenium	0.0021J	mg/L	0.0050	02/16/23 20:50	
SM 2540C-2015	Total Dissolved Solids	2090	mg/L	25.0	02/07/23 18:40	
EPA 300.0 Rev 2.1 1993	Chloride	158	mg/L	15.0	02/08/23 11:16	
EPA 300.0 Rev 2.1 1993	Fluoride	0.18	mg/L	0.10	02/07/23 20:15	
EPA 300.0 Rev 2.1 1993	Sulfate	1110	mg/L	15.0	02/08/23 11:16	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2  
Pace Project No.: 92648451

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92648451014</b>	<b>HAM-AP2-EB-02</b>					
SM 2540C-2015	Total Dissolved Solids	28.0	mg/L	25.0	02/07/23 18:40	
<b>92648451015</b>	<b>HAM-AP2-FB-02</b>					
SM 2540C-2015	Total Dissolved Solids	58.0	mg/L	25.0	02/07/23 18:40	
<b>92648451016</b>	<b>HAM-AP2-FD-02</b>					
EPA 6010D	Calcium	283	mg/L	1.0	02/14/23 20:33	
EPA 6020B	Barium	0.048	mg/L	0.0050	02/16/23 21:08	
EPA 6020B	Boron	2.8	mg/L	0.040	02/16/23 21:08	
EPA 6020B	Cadmium	0.00012J	mg/L	0.00050	02/16/23 21:08	
EPA 6020B	Lithium	0.0020J	mg/L	0.030	02/16/23 21:08	
EPA 6020B	Molybdenum	0.0040J	mg/L	0.010	02/16/23 21:08	
SM 2540C-2015	Total Dissolved Solids	1400	mg/L	25.0	02/07/23 18:40	
EPA 300.0 Rev 2.1 1993	Chloride	137	mg/L	9.0	02/08/23 11:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.063J	mg/L	0.10	02/07/23 22:16	
EPA 300.0 Rev 2.1 1993	Sulfate	441	mg/L	9.0	02/08/23 11:32	
<b>92648451017</b>	<b>HAM-MW-52</b>					
	Performed by	Customer			02/09/23 20:58	
	pH	4.25	Std. Units		02/09/23 20:58	
EPA 6020B	Magnesium	5.7	mg/L	0.50	02/16/23 21:14	
EPA 6020B	Manganese	0.54	mg/L	0.10	02/16/23 21:14	
EPA 6020B	Potassium	1.2	mg/L	1.0	02/16/23 21:14	
EPA 6020B	Sodium	2.6	mg/L	1.0	02/16/23 21:14	
<b>92649378001</b>	<b>HAM-HGWA-5</b>					
	Performed by	Customer			01/30/23 16:41	
	pH	6.52	Std. Units		01/30/23 16:41	
EPA 6010D	Calcium	28.5	mg/L	1.0	03/21/23 18:47	
EPA 6020B	Barium	0.044	mg/L	0.0050	02/07/23 18:08	
EPA 6020B	Cobalt	0.00063J	mg/L	0.0050	02/07/23 18:08	
EPA 6020B	Lithium	0.0030J	mg/L	0.030	02/07/23 18:08	
SM 2540C-2015	Total Dissolved Solids	182	mg/L	25.0	02/02/23 19:17	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	02/03/23 16:07	
EPA 300.0 Rev 2.1 1993	Fluoride	0.088J	mg/L	0.10	02/03/23 16:07	
EPA 300.0 Rev 2.1 1993	Sulfate	22.7	mg/L	1.0	02/03/23 16:07	
<b>92649378002</b>	<b>HAM-HGWA-6</b>					
	Performed by	Customer			01/30/23 16:41	
	pH	7.66	Std. Units		01/30/23 16:41	
EPA 6010D	Calcium	55.4	mg/L	1.0	03/21/23 18:52	
EPA 6020B	Barium	0.20	mg/L	0.0050	02/07/23 18:14	
EPA 6020B	Boron	0.013J	mg/L	0.040	02/07/23 18:14	
EPA 6020B	Lithium	0.0096J	mg/L	0.030	02/07/23 18:14	
SM 2540C-2015	Total Dissolved Solids	229	mg/L	25.0	02/02/23 19:17	
EPA 300.0 Rev 2.1 1993	Chloride	1.4	mg/L	1.0	02/03/23 16:33	
EPA 300.0 Rev 2.1 1993	Fluoride	0.067J	mg/L	0.10	02/03/23 16:33	
EPA 300.0 Rev 2.1 1993	Sulfate	35.0	mg/L	1.0	02/03/23 16:33	

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**SUMMARY OF DETECTION**

Project: Hammond AP-2

Pace Project No.: 92648451

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92649378003</b>	<b>HAM-MW-21D</b>					
	Performed by	Customer			01/30/23 16:41	
	pH	7.31	Std. Units		01/30/23 16:41	
EPA 6020B	Barium	0.031	mg/L	0.0050	02/07/23 18:20	
EPA 6020B	Boron	3.6	mg/L	0.040	02/07/23 18:20	
EPA 6020B	Calcium	281	mg/L	0.10	02/07/23 18:20	E
EPA 6020B	Lithium	0.018J	mg/L	0.030	02/07/23 18:20	
EPA 6020B	Molybdenum	0.028	mg/L	0.010	02/07/23 18:20	
SM 2540C-2015	Total Dissolved Solids	1420	mg/L	25.0	02/02/23 19:17	
EPA 300.0 Rev 2.1 1993	Chloride	167	mg/L	14.0	02/04/23 00:43	
EPA 300.0 Rev 2.1 1993	Fluoride	0.050J	mg/L	0.10	02/03/23 16:58	
EPA 300.0 Rev 2.1 1993	Sulfate	646	mg/L	14.0	02/04/23 00:43	
<b>92649378004</b>	<b>HAM-MW-33</b>					
	Performed by	Customer			02/18/23 12:54	
	pH	5.61	Std. Units		02/18/23 12:54	
EPA 6010D	Calcium	371	mg/L	5.0	04/17/23 13:32	M1
EPA 6020B	Arsenic	0.0031J	mg/L	0.0050	02/07/23 18:44	
EPA 6020B	Barium	0.018	mg/L	0.0050	02/07/23 18:44	
EPA 6020B	Beryllium	0.00019J	mg/L	0.00050	02/07/23 18:44	
EPA 6020B	Boron	4.6	mg/L	0.040	02/07/23 18:44	
EPA 6020B	Cadmium	0.00017J	mg/L	0.00050	02/07/23 18:44	
EPA 6020B	Cobalt	0.034	mg/L	0.0050	02/07/23 18:44	
EPA 6020B	Selenium	0.015	mg/L	0.0050	02/07/23 18:44	
EPA 6020B	Thallium	0.00021J	mg/L	0.0010	02/07/23 18:44	
SM 2540C-2015	Total Dissolved Solids	1570	mg/L	25.0	02/02/23 19:18	
EPA 300.0 Rev 2.1 1993	Chloride	83.4	mg/L	1.0	02/03/23 18:16	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.087J	mg/L	0.10	02/03/23 18:16	
EPA 300.0 Rev 2.1 1993	Sulfate	895	mg/L	20.0	02/04/23 01:08	M1

**REPORT OF LABORATORY ANALYSIS**

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-HGWA-4		Lab ID: 92648451001		Collected: 01/23/23 17:04		Received: 01/24/23 12:38		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		02/09/23 20:33		
pH	<b>5.62</b>	Std. Units			1		02/09/23 20:33		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>24.0</b>	mg/L	1.0	0.12	1	01/27/23 11:32	01/27/23 19:55	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	01/27/23 12:00	01/31/23 13:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	01/27/23 12:00	01/31/23 13:06	7440-38-2	
Barium	<b>0.057</b>	mg/L	0.0050	0.00067	1	01/27/23 12:00	01/31/23 13:06	7440-39-3	
Beryllium	<b>0.00010J</b>	mg/L	0.00050	0.000054	1	01/27/23 12:00	01/31/23 13:06	7440-41-7	
Boron	<b>0.023J</b>	mg/L	0.040	0.0086	1	01/27/23 12:00	01/31/23 13:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	01/27/23 12:00	01/31/23 13:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	01/27/23 12:00	01/31/23 13:06	7440-47-3	
Cobalt	<b>0.00049J</b>	mg/L	0.0050	0.00039	1	01/27/23 12:00	01/31/23 13:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	01/27/23 12:00	01/31/23 13:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	01/27/23 12:00	01/31/23 13:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	01/27/23 12:00	01/31/23 13:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	01/27/23 12:00	01/31/23 13:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	01/27/23 12:00	01/31/23 13:06	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	02/01/23 08:00	02/01/23 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>128</b>	mg/L	25.0	25.0	1		01/27/23 14:04		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>1.6</b>	mg/L	1.0	0.60	1		01/26/23 10:29	16887-00-6	
Fluoride	<b>0.12</b>	mg/L	0.10	0.050	1		01/26/23 10:29	16984-48-8	
Sulfate	<b>42.5</b>	mg/L	1.0	0.50	1		01/26/23 10:29	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92648451

**Sample: HAM-HGWA-42D**      **Lab ID: 92648451002**      Collected: 01/23/23 18:06      Received: 01/24/23 12:38      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>Customer</b>				1		02/10/23 19:01		
pH	<b>7.55</b>	Std. Units			1		02/10/23 19:01		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>43.7</b>	mg/L	1.0	0.12	1	01/27/23 11:32	01/27/23 20:00	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	<b>0.0016J</b>	mg/L	0.0030	0.00078	1	01/27/23 12:00	01/31/23 13:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	01/27/23 12:00	01/31/23 13:30	7440-38-2	
Barium	<b>0.21</b>	mg/L	0.0050	0.00067	1	01/27/23 12:00	01/31/23 13:30	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	01/27/23 12:00	01/31/23 13:30	7440-41-7	
Boron	<b>0.052</b>	mg/L	0.040	0.0086	1	01/27/23 12:00	01/31/23 13:30	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	01/27/23 12:00	01/31/23 13:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	01/27/23 12:00	01/31/23 13:30	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	01/27/23 12:00	01/31/23 13:30	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	01/27/23 12:00	01/31/23 13:30	7439-92-1	
Lithium	<b>0.0097J</b>	mg/L	0.030	0.00073	1	01/27/23 12:00	01/31/23 13:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	01/27/23 12:00	01/31/23 13:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	01/27/23 12:00	01/31/23 13:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	01/27/23 12:00	01/31/23 13:30	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	02/01/23 08:00	02/01/23 13:08	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>168</b>	mg/L	25.0	25.0	1		01/27/23 14:06		
<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		01/25/23 23:50	16887-00-6	
Fluoride	<b>0.11</b>	mg/L	0.10	0.050	1		01/25/23 23:50	16984-48-8	
Sulfate	<b>11.1</b>	mg/L	1.0	0.50	1		01/25/23 23:50	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-HGWC-17      Lab ID: 92648451003      Collected: 01/30/23 15:50      Received: 02/01/23 12:45      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		02/09/23 20:34		
pH	<b>6.44</b>	Std. Units			1		02/09/23 20:34		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>286</b>	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 18:56	7440-70-2	M1
<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	02/16/23 13:08	02/17/23 13:03	7440-36-0	
Arsenic	<b>0.0028J</b>	mg/L	0.0050	0.0022	1	02/16/23 13:08	02/17/23 13:03	7440-38-2	
Barium	<b>0.030</b>	mg/L	0.0050	0.00067	1	02/16/23 13:08	02/17/23 13:03	7440-39-3	
Beryllium	<b>0.000057J</b>	mg/L	0.00050	0.000054	1	02/16/23 13:08	02/17/23 13:03	7440-41-7	
Boron	<b>6.8</b>	mg/L	0.040	0.0086	1	02/16/23 13:08	02/17/23 13:03	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/23 13:08	02/17/23 13:03	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/23 13:08	02/17/23 13:03	7440-47-3	
Cobalt	<b>0.011</b>	mg/L	0.0050	0.00039	1	02/16/23 13:08	02/17/23 13:03	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/23 13:08	02/17/23 13:03	7439-92-1	
Lithium	<b>0.0014J</b>	mg/L	0.030	0.00073	1	02/16/23 13:08	02/17/23 13:03	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/23 13:08	02/17/23 13:03	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/23 13:08	02/17/23 13:03	7782-49-2	
Thallium	<b>0.00025J</b>	mg/L	0.0010	0.00018	1	02/16/23 13:08	02/17/23 13:03	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	02/08/23 15:40	02/09/23 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>1320</b>	mg/L	25.0	25.0	1		02/02/23 20:28		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>154</b>	mg/L	10.0	6.0	10		02/04/23 12:53	16887-00-6	
Fluoride	<b>0.097J</b>	mg/L	0.10	0.050	1		02/03/23 22:34	16984-48-8	
Sulfate	<b>451</b>	mg/L	10.0	5.0	10		02/04/23 12:53	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92648451

Sample: HAM-MW-22		Lab ID: 92648451004		Collected: 01/30/23 18:15		Received: 02/01/23 12:45		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		02/09/23 20:41		
pH	<b>5.47</b>	Std. Units			1		02/09/23 20:41		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>189</b>	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 19:25	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	02/16/23 13:08	02/17/23 13:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/16/23 13:08	02/17/23 13:09	7440-38-2	
Barium	<b>0.014</b>	mg/L	0.0050	0.00067	1	02/16/23 13:08	02/17/23 13:09	7440-39-3	
Beryllium	<b>0.000081J</b>	mg/L	0.00050	0.000054	1	02/16/23 13:08	02/17/23 13:09	7440-41-7	
Boron	<b>2.4</b>	mg/L	0.040	0.0086	1	02/16/23 13:08	02/17/23 13:09	7440-42-8	
Cadmium	<b>0.0017</b>	mg/L	0.00050	0.00011	1	02/16/23 13:08	02/17/23 13:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/23 13:08	02/17/23 13:09	7440-47-3	
Cobalt	<b>0.027</b>	mg/L	0.0050	0.00039	1	02/16/23 13:08	02/17/23 13:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/23 13:08	02/17/23 13:09	7439-92-1	
Lithium	<b>0.0011J</b>	mg/L	0.030	0.00073	1	02/16/23 13:08	02/17/23 13:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/23 13:08	02/17/23 13:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/23 13:08	02/17/23 13:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/23 13:08	02/17/23 13:09	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	02/08/23 15:40	02/09/23 13:42	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>961</b>	mg/L	25.0	25.0	1		02/02/23 20:28		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>109</b>	mg/L	9.0	5.4	9		02/04/23 13:09	16887-00-6	
Fluoride	<b>0.064J</b>	mg/L	0.10	0.050	1		02/03/23 23:22	16984-48-8	
Sulfate	<b>445</b>	mg/L	9.0	4.5	9		02/04/23 13:09	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-MW-34D		Lab ID: 92648451005		Collected: 01/30/23 13:05		Received: 02/01/23 12:45		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		02/09/23 20:42		
pH	<b>6.99</b>	Std. Units			1		02/09/23 20:42		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>558</b>	mg/L	5.0	0.61	5	02/13/23 17:06	02/15/23 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>0.0018J</b>	mg/L	0.0030	0.00078	1	02/16/23 13:08	02/17/23 13:32	7440-36-0	
Arsenic	<b>0.0047J</b>	mg/L	0.0050	0.0022	1	02/16/23 13:08	02/17/23 13:32	7440-38-2	
Barium	<b>0.040</b>	mg/L	0.0050	0.00067	1	02/16/23 13:08	02/17/23 13:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/23 13:08	02/17/23 13:32	7440-41-7	
Boron	<b>8.0</b>	mg/L	0.040	0.0086	1	02/16/23 13:08	02/17/23 13:32	7440-42-8	
Cadmium	<b>0.00047J</b>	mg/L	0.00050	0.00011	1	02/16/23 13:08	02/17/23 13:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/23 13:08	02/17/23 13:32	7440-47-3	
Cobalt	<b>0.0071</b>	mg/L	0.0050	0.00039	1	02/16/23 13:08	02/17/23 13:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/23 13:08	02/17/23 13:32	7439-92-1	
Lithium	<b>0.0013J</b>	mg/L	0.030	0.00073	1	02/16/23 13:08	02/17/23 13:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/16/23 13:08	02/17/23 13:32	7439-98-7	
Selenium	<b>0.0016J</b>	mg/L	0.0050	0.0014	1	02/16/23 13:08	02/17/23 13:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/23 13:08	02/17/23 13:32	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	02/08/23 15:40	02/09/23 13:45	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>2230</b>	mg/L	50.0	50.0	1		02/02/23 20:28		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>173</b>	mg/L	25.0	15.0	25		02/04/23 13:24	16887-00-6	
Fluoride	<b>0.089J</b>	mg/L	0.10	0.050	1		02/03/23 23:38	16984-48-8	
Sulfate	<b>1120</b>	mg/L	25.0	12.5	25		02/04/23 13:24	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92648451

Sample: HAM-MW-37D		Lab ID: 92648451006		Collected: 01/30/23 16:11		Received: 02/01/23 12:45		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		02/09/23 20:44		
pH	<b>7.56</b>	Std. Units			1		02/09/23 20:44		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>74.6</b>	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 19:35	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	02/16/23 13:08	02/17/23 13:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/16/23 13:08	02/17/23 13:38	7440-38-2	
Barium	<b>0.13</b>	mg/L	0.0050	0.00067	1	02/16/23 13:08	02/17/23 13:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/16/23 13:08	02/17/23 13:38	7440-41-7	
Boron	<b>0.15</b>	mg/L	0.040	0.0086	1	02/16/23 13:08	02/17/23 13:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/16/23 13:08	02/17/23 13:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/16/23 13:08	02/17/23 13:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/16/23 13:08	02/17/23 13:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/16/23 13:08	02/17/23 13:38	7439-92-1	
Lithium	<b>0.021J</b>	mg/L	0.030	0.00073	1	02/16/23 13:08	02/17/23 13:38	7439-93-2	
Molybdenum	<b>0.0063J</b>	mg/L	0.010	0.00074	1	02/16/23 13:08	02/17/23 13:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/16/23 13:08	02/17/23 13:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/16/23 13:08	02/17/23 13:38	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	02/08/23 15:40	02/09/23 13:47	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>226</b>	mg/L	25.0	25.0	1		02/02/23 20:28		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>49.2</b>	mg/L	1.0	0.60	1		02/03/23 23:54	16887-00-6	
Fluoride	<b>0.092J</b>	mg/L	0.10	0.050	1		02/03/23 23:54	16984-48-8	
Sulfate	<b>85.2</b>	mg/L	1.0	0.50	1		02/03/23 23:54	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-HGWC-14		Lab ID: 92648451007		Collected: 02/01/23 14:55		Received: 02/03/23 12:05		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		02/09/23 20:46		
pH	<b>4.93</b>	Std. Units			1		02/09/23 20:46		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>464</b>	mg/L	5.0	0.61	5	02/13/23 17:06	02/15/23 16:53	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	02/14/23 17:00	02/16/23 19:44	7440-36-0	
Arsenic	<b>0.0040J</b>	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 19:44	7440-38-2	
Barium	<b>0.017</b>	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 19:44	7440-39-3	
Beryllium	<b>0.00039J</b>	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 19:44	7440-41-7	
Boron	<b>7.7</b>	mg/L	0.20	0.043	5	02/14/23 17:00	02/17/23 17:25	7440-42-8	M1
Cadmium	ND	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 19:44	7440-43-9	
Chromium	ND	mg/L	0.025	0.0055	5	02/14/23 17:00	02/17/23 17:25	7440-47-3	D3
Cobalt	<b>0.035</b>	mg/L	0.0050	0.00039	1	02/14/23 17:00	02/16/23 19:44	7440-48-4	
Lead	<b>0.0011</b>	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 19:44	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 19:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 19:44	7439-98-7	
Selenium	<b>0.0036J</b>	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 19:44	7782-49-2	
Thallium	<b>0.00047J</b>	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 19:44	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	02/08/23 15:40	02/09/23 13:50	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1950</b>	mg/L	25.0	25.0	1		02/07/23 18:38		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>108</b>	mg/L	24.0	14.4	24		02/08/23 08:23	16887-00-6	
Fluoride	<b>0.094J</b>	mg/L	0.10	0.050	1		02/07/23 17:33	16984-48-8	
Sulfate	<b>1060</b>	mg/L	24.0	12.0	24		02/08/23 08:23	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92648451

Sample: HAM-HGWC-15		Lab ID: 92648451008		Collected: 02/01/23 14:44		Received: 02/03/23 12:05		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		02/09/23 20:47		
pH	<b>6.22</b>	Std. Units			1		02/09/23 20:47		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>174</b>	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 19:45	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	<b>0.0021J</b>	mg/L	0.0030	0.00078	1	02/14/23 17:00	02/16/23 20:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 20:08	7440-38-2	
Barium	<b>0.021</b>	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 20:08	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 20:08	7440-41-7	
Boron	<b>2.0</b>	mg/L	0.20	0.043	5	02/14/23 17:00	02/17/23 17:43	7440-42-8	
Cadmium	<b>0.00088</b>	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 20:08	7440-43-9	
Chromium	ND	mg/L	0.025	0.0055	5	02/14/23 17:00	02/17/23 17:43	7440-47-3	D3
Cobalt	<b>0.0091</b>	mg/L	0.0050	0.00039	1	02/14/23 17:00	02/16/23 20:08	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 20:08	7439-92-1	
Lithium	<b>0.016J</b>	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 20:08	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 20:08	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 20:08	7782-49-2	
Thallium	<b>0.00022J</b>	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 20:08	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	02/08/23 15:40	02/09/23 13:53	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>892</b>	mg/L	25.0	25.0	1		02/07/23 18:39		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>85.0</b>	mg/L	1.0	0.60	1		02/07/23 18:23	16887-00-6	
Fluoride	<b>0.086J</b>	mg/L	0.10	0.050	1		02/07/23 18:23	16984-48-8	
Sulfate	<b>341</b>	mg/L	7.0	3.5	7		02/08/23 08:38	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-HGWC-16		Lab ID: 92648451009		Collected: 02/01/23 12:30		Received: 02/03/23 12:05		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		02/09/23 20:48		
pH	<b>7.15</b>	Std. Units			1		02/09/23 20:48		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>216</b>	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 19:49	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	02/14/23 17:00	02/16/23 20:14	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 20:14	7440-38-2	
Barium	<b>0.11</b>	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 20:14	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 20:14	7440-41-7	
Boron	<b>2.8</b>	mg/L	0.20	0.043	5	02/14/23 17:00	02/17/23 17:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 20:14	7440-43-9	
Chromium	ND	mg/L	0.025	0.0055	5	02/14/23 17:00	02/17/23 17:49	7440-47-3	D3
Cobalt	ND	mg/L	0.0050	0.00039	1	02/14/23 17:00	02/16/23 20:14	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 20:14	7439-92-1	
Lithium	<b>0.0036J</b>	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 20:14	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 20:14	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 20:14	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 20:14	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	02/08/23 15:40	02/09/23 13:55	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1030</b>	mg/L	25.0	25.0	1		02/07/23 18:39		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>112</b>	mg/L	5.0	3.0	5		02/08/23 08:54	16887-00-6	
Fluoride	<b>0.053J</b>	mg/L	0.10	0.050	1		02/07/23 18:39	16984-48-8	
Sulfate	<b>257</b>	mg/L	5.0	2.5	5		02/08/23 08:54	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-HGWC-18		Lab ID: 92648451010		Collected: 02/01/23 10:55		Received: 02/03/23 12:05		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		02/09/23 20:51		
pH	<b>4.66</b>	Std. Units			1		02/09/23 20:51		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>288</b>	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 19:54	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	02/14/23 17:00	02/16/23 20:20	7440-36-0	
Arsenic	<b>0.0036J</b>	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 20:20	7440-38-2	
Barium	<b>0.019</b>	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 20:20	7440-39-3	
Beryllium	<b>0.0020</b>	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 20:20	7440-41-7	
Boron	<b>5.9</b>	mg/L	0.20	0.043	5	02/14/23 17:00	02/17/23 17:55	7440-42-8	
Cadmium	<b>0.0010</b>	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 20:20	7440-43-9	
Chromium	ND	mg/L	0.025	0.0055	5	02/14/23 17:00	02/17/23 17:55	7440-47-3	D3
Cobalt	<b>0.11</b>	mg/L	0.0050	0.00039	1	02/14/23 17:00	02/16/23 20:20	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 20:20	7439-92-1	
Lithium	<b>0.0093J</b>	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 20:20	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 20:20	7439-98-7	
Selenium	<b>0.0054</b>	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 20:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 20:20	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	02/08/23 15:40	02/09/23 13:58	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1430</b>	mg/L	25.0	25.0	1		02/07/23 18:39		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>92.7</b>	mg/L	1.0	0.60	1		02/07/23 18:55	16887-00-6	
Fluoride	<b>0.21</b>	mg/L	0.10	0.050	1		02/07/23 18:55	16984-48-8	
Sulfate	<b>776</b>	mg/L	17.0	8.5	17		02/08/23 09:10	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-MW-23D		Lab ID: 92648451011		Collected: 02/01/23 13:20		Received: 02/03/23 12:05		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		02/09/23 20:53		
pH	<b>6.69</b>	Std. Units			1		02/09/23 20:53		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>294</b>	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 19:59	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	02/14/23 17:00	02/16/23 20:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 20:26	7440-38-2	
Barium	<b>0.047</b>	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 20:26	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 20:26	7440-41-7	
Boron	<b>3.0</b>	mg/L	0.20	0.043	5	02/14/23 17:00	02/17/23 18:01	7440-42-8	
Cadmium	<b>0.00012J</b>	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 20:26	7440-43-9	
Chromium	ND	mg/L	0.025	0.0055	5	02/14/23 17:00	02/17/23 18:01	7440-47-3	D3
Cobalt	<b>0.00081J</b>	mg/L	0.0050	0.00039	1	02/14/23 17:00	02/16/23 20:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 20:26	7439-92-1	
Lithium	<b>0.0019J</b>	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 20:26	7439-93-2	
Molybdenum	<b>0.0041J</b>	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 20:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 20:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 20:26	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	02/08/23 15:40	02/09/23 14:00	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1320</b>	mg/L	25.0	25.0	1		02/07/23 18:39		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>137</b>	mg/L	9.0	5.4	9		02/08/23 09:25	16887-00-6	
Fluoride	<b>0.074J</b>	mg/L	0.10	0.050	1		02/07/23 19:11	16984-48-8	
Sulfate	<b>438</b>	mg/L	9.0	4.5	9		02/08/23 09:25	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-MW-35		Lab ID: 92648451012		Collected: 02/01/23 10:02		Received: 02/03/23 12:05		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		02/09/23 20:54		
pH	<b>4.89</b>	Std. Units			1		02/09/23 20:54		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>503</b>	mg/L	5.0	0.61	5	02/13/23 17:06	02/15/23 16:57	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	02/14/23 17:00	02/16/23 20:44	7440-36-0	
Arsenic	<b>0.0060</b>	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 20:44	7440-38-2	
Barium	<b>0.022</b>	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 20:44	7440-39-3	
Beryllium	<b>0.00049J</b>	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 20:44	7440-41-7	
Boron	<b>8.7</b>	mg/L	0.040	0.0086	1	02/14/23 17:00	02/16/23 20:44	7440-42-8	
Cadmium	<b>0.0017</b>	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 20:44	7440-43-9	
Chromium	ND	mg/L	0.025	0.0055	5	02/14/23 17:00	02/17/23 18:06	7440-47-3	D3
Cobalt	<b>0.088</b>	mg/L	0.025	0.0020	5	02/14/23 17:00	02/17/23 18:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 20:44	7439-92-1	
Lithium	<b>0.0034J</b>	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 20:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 20:44	7439-98-7	
Selenium	<b>0.0063</b>	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 20:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 20:44	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	<b>0.00084</b>	mg/L	0.00020	0.00013	1	02/08/23 15:40	02/09/23 14:03	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>2410</b>	mg/L	25.0	25.0	1		02/07/23 18:39		1g
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>189</b>	mg/L	20.0	12.0	20		02/08/23 09:41	16887-00-6	M1
Fluoride	<b>0.10</b>	mg/L	0.10	0.050	1		02/07/23 19:27	16984-48-8	M1
Sulfate	<b>1190</b>	mg/L	20.0	10.0	20		02/08/23 09:41	14808-79-8	M1

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-MW-51		Lab ID: 92648451013		Collected: 02/01/23 11:32		Received: 02/03/23 12:05		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		02/09/23 20:55		
pH	<b>6.37</b>	Std. Units			1		02/09/23 20:55		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>492</b>	mg/L	5.0	0.61	5	02/13/23 17:06	02/15/23 17:02	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	02/14/23 17:00	02/16/23 20:50	7440-36-0	
Arsenic	<b>0.0041J</b>	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 20:50	7440-38-2	
Barium	<b>0.033</b>	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 20:50	7440-39-3	
Beryllium	<b>0.00028J</b>	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 20:50	7440-41-7	
Boron	<b>8.3</b>	mg/L	0.040	0.0086	1	02/14/23 17:00	02/16/23 20:50	7440-42-8	
Cadmium	<b>0.0016</b>	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 20:50	7440-43-9	
Chromium	ND	mg/L	0.025	0.0055	5	02/14/23 17:00	02/17/23 18:12	7440-47-3	D3
Cobalt	<b>0.021J</b>	mg/L	0.025	0.0020	5	02/14/23 17:00	02/17/23 18:12	7440-48-4	D3
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 20:50	7439-92-1	
Lithium	<b>0.0015J</b>	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 20:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 20:50	7439-98-7	
Selenium	<b>0.0021J</b>	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 20:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 20:50	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	02/08/23 15:40	02/09/23 14:11	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>2090</b>	mg/L	25.0	25.0	1		02/07/23 18:40		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>158</b>	mg/L	15.0	9.0	15		02/08/23 11:16	16887-00-6	
Fluoride	<b>0.18</b>	mg/L	0.10	0.050	1		02/07/23 20:15	16984-48-8	
Sulfate	<b>1110</b>	mg/L	15.0	7.5	15		02/08/23 11:16	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92648451

**Sample: HAM-AP2-EB-02**      **Lab ID: 92648451014**      Collected: 02/01/23 14:20      Received: 02/03/23 12:05      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	02/13/23 17:06	02/14/23 20:24	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	02/14/23 17:00	02/16/23 20:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 20:56	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 20:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 20:56	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/14/23 17:00	02/17/23 16:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 20:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/14/23 17:00	02/17/23 16:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/14/23 17:00	02/17/23 16:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 20:56	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 20:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 20:56	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 20:56	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 20:56	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	02/08/23 15:40	02/09/23 14:14	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>28.0</b>	mg/L	25.0	25.0	1		02/07/23 18:40		
<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		02/07/23 21:44	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/07/23 21:44	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/07/23 21:44	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92648451

Sample: HAM-AP2-FB-02		Lab ID: 92648451015		Collected: 02/01/23 14:15		Received: 02/03/23 12:05		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	02/13/23 17:06	02/14/23 20:28	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	02/14/23 17:00	02/16/23 21:02	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 21:02	7440-38-2		
Barium	ND	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 21:02	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 21:02	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	02/14/23 17:00	02/17/23 16:55	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 21:02	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	02/14/23 17:00	02/17/23 16:55	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	02/14/23 17:00	02/17/23 16:55	7440-48-4		
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 21:02	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 21:02	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 21:02	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 21:02	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 21:02	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	02/08/23 15:40	02/09/23 14:16	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	<b>58.0</b>	mg/L	25.0	25.0	1		02/07/23 18:40			
<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		02/07/23 22:00	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		02/07/23 22:00	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		02/07/23 22:00	14808-79-8		

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-AP2-FD-02		Lab ID: 92648451016		Collected: 02/01/23 00:00		Received: 02/03/23 12:05		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>283</b>	mg/L	1.0	0.12	1	02/13/23 17:06	02/14/23 20:33	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	02/14/23 17:00	02/16/23 21:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/14/23 17:00	02/16/23 21:08	7440-38-2	
Barium	<b>0.048</b>	mg/L	0.0050	0.00067	1	02/14/23 17:00	02/16/23 21:08	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/14/23 17:00	02/16/23 21:08	7440-41-7	
Boron	<b>2.8</b>	mg/L	0.040	0.0086	1	02/14/23 17:00	02/16/23 21:08	7440-42-8	
Cadmium	<b>0.00012J</b>	mg/L	0.00050	0.00011	1	02/14/23 17:00	02/16/23 21:08	7440-43-9	
Chromium	ND	mg/L	0.025	0.0055	5	02/14/23 17:00	02/17/23 18:18	7440-47-3	D3
Cobalt	ND	mg/L	0.025	0.0020	5	02/14/23 17:00	02/17/23 18:18	7440-48-4	D3
Lead	ND	mg/L	0.0010	0.00089	1	02/14/23 17:00	02/16/23 21:08	7439-92-1	
Lithium	<b>0.0020J</b>	mg/L	0.030	0.00073	1	02/14/23 17:00	02/16/23 21:08	7439-93-2	
Molybdenum	<b>0.0040J</b>	mg/L	0.010	0.00074	1	02/14/23 17:00	02/16/23 21:08	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/14/23 17:00	02/16/23 21:08	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/14/23 17:00	02/16/23 21:08	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	02/08/23 15:40	02/09/23 14:19	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1400</b>	mg/L	25.0	25.0	1		02/07/23 18:40		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>137</b>	mg/L	9.0	5.4	9		02/08/23 11:32	16887-00-6	
Fluoride	<b>0.063J</b>	mg/L	0.10	0.050	1		02/07/23 22:16	16984-48-8	
Sulfate	<b>441</b>	mg/L	9.0	4.5	9		02/08/23 11:32	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-MW-52		Lab ID: 92648451017		Collected: 02/01/23 13:41		Received: 02/03/23 12:05		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		02/09/23 20:58		
pH	<b>4.25</b>	Std. Units			1		02/09/23 20:58		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	ND	mg/L	0.40	0.30	10	02/14/23 17:00	02/16/23 21:14	7439-89-6	D3
Magnesium	<b>5.7</b>	mg/L	0.50	0.10	10	02/14/23 17:00	02/16/23 21:14	7439-95-4	
Manganese	<b>0.54</b>	mg/L	0.10	0.011	10	02/14/23 17:00	02/16/23 21:14	7439-96-5	
Potassium	<b>1.2</b>	mg/L	1.0	0.47	10	02/14/23 17:00	02/16/23 21:14	7440-09-7	
Sodium	<b>2.6</b>	mg/L	1.0	0.23	10	02/14/23 17:00	02/16/23 21:14	7440-23-5	
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO <sub>3</sub> )	ND	mg/L	5.0	5.0	1		02/07/23 18:37		
Alkalinity, Total as CaCO <sub>3</sub>	ND	mg/L	5.0	5.0	1		02/07/23 18:37		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		02/08/23 03:50	18496-25-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-HGWA-5		Lab ID: 92649378001		Collected: 01/27/23 10:59		Received: 01/30/23 11:58		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		01/30/23 16:41		
pH	<b>6.52</b>	Std. Units			1		01/30/23 16:41		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>28.5</b>	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 18:47	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	02/03/23 11:33	02/07/23 18:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/03/23 11:33	02/07/23 18:08	7440-38-2	
Barium	<b>0.044</b>	mg/L	0.0050	0.00067	1	02/03/23 11:33	02/07/23 18:08	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/03/23 11:33	02/07/23 18:08	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	02/03/23 11:33	02/07/23 18:08	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/03/23 11:33	02/07/23 18:08	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/03/23 11:33	02/07/23 18:08	7440-47-3	
Cobalt	<b>0.00063J</b>	mg/L	0.0050	0.00039	1	02/03/23 11:33	02/07/23 18:08	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/03/23 11:33	02/07/23 18:08	7439-92-1	
Lithium	<b>0.0030J</b>	mg/L	0.030	0.00073	1	02/03/23 11:33	02/07/23 18:08	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/03/23 11:33	02/07/23 18:08	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/03/23 11:33	02/07/23 18:08	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/03/23 11:33	02/07/23 18:08	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	02/08/23 07:30	02/08/23 13:01	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>182</b>	mg/L	25.0	25.0	1		02/02/23 19:17		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>1.6</b>	mg/L	1.0	0.60	1		02/03/23 16:07	16887-00-6	
Fluoride	<b>0.088J</b>	mg/L	0.10	0.050	1		02/03/23 16:07	16984-48-8	
Sulfate	<b>22.7</b>	mg/L	1.0	0.50	1		02/03/23 16:07	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-HGWA-6		Lab ID: 92649378002		Collected: 01/27/23 10:10		Received: 01/30/23 11:58		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		01/30/23 16:41		
pH	<b>7.66</b>	Std. Units			1		01/30/23 16:41		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>55.4</b>	mg/L	1.0	0.12	1	03/20/23 12:41	03/21/23 18:52	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	02/03/23 11:33	02/07/23 18:14	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/03/23 11:33	02/07/23 18:14	7440-38-2	
Barium	<b>0.20</b>	mg/L	0.0050	0.00067	1	02/03/23 11:33	02/07/23 18:14	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/03/23 11:33	02/07/23 18:14	7440-41-7	
Boron	<b>0.013J</b>	mg/L	0.040	0.0086	1	02/03/23 11:33	02/07/23 18:14	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/03/23 11:33	02/07/23 18:14	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/03/23 11:33	02/07/23 18:14	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/03/23 11:33	02/07/23 18:14	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/03/23 11:33	02/07/23 18:14	7439-92-1	
Lithium	<b>0.0096J</b>	mg/L	0.030	0.00073	1	02/03/23 11:33	02/07/23 18:14	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/03/23 11:33	02/07/23 18:14	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/03/23 11:33	02/07/23 18:14	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/03/23 11:33	02/07/23 18:14	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	02/08/23 07:30	02/08/23 13:09	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>229</b>	mg/L	25.0	25.0	1		02/02/23 19:17		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.4</b>	mg/L	1.0	0.60	1		02/03/23 16:33	16887-00-6	
Fluoride	<b>0.067J</b>	mg/L	0.10	0.050	1		02/03/23 16:33	16984-48-8	
Sulfate	<b>35.0</b>	mg/L	1.0	0.50	1		02/03/23 16:33	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-MW-21D		Lab ID: 92649378003		Collected: 01/27/23 17:08		Received: 01/30/23 11:58		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		01/30/23 16:41		
pH	<b>7.31</b>	Std. Units			1		01/30/23 16:41		
<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	02/03/23 11:33	02/07/23 18:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/03/23 11:33	02/07/23 18:20	7440-38-2	
Barium	<b>0.031</b>	mg/L	0.0050	0.00067	1	02/03/23 11:33	02/07/23 18:20	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/03/23 11:33	02/07/23 18:20	7440-41-7	
Boron	<b>3.6</b>	mg/L	0.040	0.0086	1	02/03/23 11:33	02/07/23 18:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/03/23 11:33	02/07/23 18:20	7440-43-9	
Calcium	<b>281</b>	mg/L	0.10	0.038	1	02/03/23 11:33	02/07/23 18:20	7440-70-2	E
Chromium	ND	mg/L	0.0050	0.0011	1	02/03/23 11:33	02/07/23 18:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/03/23 11:33	02/07/23 18:20	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/03/23 11:33	02/07/23 18:20	7439-92-1	
Lithium	<b>0.018J</b>	mg/L	0.030	0.00073	1	02/03/23 11:33	02/07/23 18:20	7439-93-2	
Molybdenum	<b>0.028</b>	mg/L	0.010	0.00074	1	02/03/23 11:33	02/07/23 18:20	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/03/23 11:33	02/07/23 18:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/03/23 11:33	02/07/23 18:20	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	02/08/23 07:30	02/08/23 13:12	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1420</b>	mg/L	25.0	25.0	1		02/02/23 19:17		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>167</b>	mg/L	14.0	8.4	14		02/04/23 00:43	16887-00-6	
Fluoride	<b>0.050J</b>	mg/L	0.10	0.050	1		02/03/23 16:58	16984-48-8	
Sulfate	<b>646</b>	mg/L	14.0	7.0	14		02/04/23 00:43	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
Pace Project No.: 92648451

Sample: HAM-MW-33		Lab ID: 92649378004		Collected: 01/27/23 14:34		Received: 01/30/23 11:58		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		02/18/23 12:54		
pH	<b>5.61</b>	Std. Units			1		02/18/23 12:54		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>371</b>	mg/L	5.0	0.61	5	04/14/23 13:41	04/17/23 13:32	7440-70-2	M1
<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	02/03/23 11:33	02/07/23 18:44	7440-36-0	
Arsenic	<b>0.0031J</b>	mg/L	0.0050	0.0022	1	02/03/23 11:33	02/07/23 18:44	7440-38-2	
Barium	<b>0.018</b>	mg/L	0.0050	0.00067	1	02/03/23 11:33	02/07/23 18:44	7440-39-3	
Beryllium	<b>0.00019J</b>	mg/L	0.00050	0.000054	1	02/03/23 11:33	02/07/23 18:44	7440-41-7	
Boron	<b>4.6</b>	mg/L	0.040	0.0086	1	02/03/23 11:33	02/07/23 18:44	7440-42-8	
Cadmium	<b>0.00017J</b>	mg/L	0.00050	0.00011	1	02/03/23 11:33	02/07/23 18:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/03/23 11:33	02/07/23 18:44	7440-47-3	
Cobalt	<b>0.034</b>	mg/L	0.0050	0.00039	1	02/03/23 11:33	02/07/23 18:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/03/23 11:33	02/07/23 18:44	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	02/03/23 11:33	02/07/23 18:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/03/23 11:33	02/07/23 18:44	7439-98-7	
Selenium	<b>0.015</b>	mg/L	0.0050	0.0014	1	02/03/23 11:33	02/07/23 18:44	7782-49-2	
Thallium	<b>0.00021J</b>	mg/L	0.0010	0.00018	1	02/03/23 11:33	02/07/23 18:44	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	02/08/23 07:30	02/08/23 13:14	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1570</b>	mg/L	25.0	25.0	1		02/02/23 19:18		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>83.4</b>	mg/L	1.0	0.60	1		02/03/23 18:16	16887-00-6	M1
Fluoride	<b>0.087J</b>	mg/L	0.10	0.050	1		02/03/23 18:16	16984-48-8	
Sulfate	<b>895</b>	mg/L	20.0	10.0	20		02/04/23 01:08	14808-79-8	M1

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92648451

QC Batch: 752232

Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A

Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92648451001, 92648451002

METHOD BLANK: 3908779

Matrix: Water

Associated Lab Samples: 92648451001, 92648451002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	01/27/23 18:47	

LABORATORY CONTROL SAMPLE: 3908780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3908781 3908782

Parameter	Units	92648552001		3908781		3908782		% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec				
Calcium	mg/L	22400 ug/L	1	1	22.9	23.1	55	72	75-125	1	20 M1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92648451

QC Batch:	755531	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92648451003, 92648451004, 92648451005, 92648451006, 92648451007, 92648451008, 92648451009, 92648451010, 92648451011, 92648451012, 92648451013, 92648451014, 92648451015, 92648451016

METHOD BLANK: 3925569 Matrix: Water

Associated Lab Samples: 92648451003, 92648451004, 92648451005, 92648451006, 92648451007, 92648451008, 92648451009, 92648451010, 92648451011, 92648451012, 92648451013, 92648451014, 92648451015, 92648451016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/14/23 18:47	

LABORATORY CONTROL SAMPLE: 3925570

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3925571 3925572

Parameter	Units	92648451003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	286	1	1	295	304	925	1800	75-125	3	20	M1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92648451

QC Batch: 762460

Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A

Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92649378001, 92649378002

METHOD BLANK: 3959969

Matrix: Water

Associated Lab Samples: 92649378001, 92649378002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	03/21/23 16:12	

LABORATORY CONTROL SAMPLE: 3959970

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3959971 3959972

Parameter	Units	92649377008		3959972		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	118	1	1	122	124	345	602	75-125	2	20 M1

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 768193	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D ATL
Associated Lab Samples: 92649378004	Laboratory: Pace Analytical Services - Peachtree Corners, GA

METHOD BLANK: 3988443 Matrix: Water  
Associated Lab Samples: 92649378004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	04/14/23 19:30	

LABORATORY CONTROL SAMPLE: 3988444

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3988445 3988446

Parameter	Units	3988445		3988446		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649378004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	371	1	1	381	376	979	455	75-125	1	20 M1

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 752226      Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A      Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92648451001, 92648451002

METHOD BLANK: 3908751      Matrix: Water  
Associated Lab Samples: 92648451001, 92648451002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	01/31/23 12:54	
Arsenic	mg/L	ND	0.0050	0.0022	01/31/23 12:54	
Barium	mg/L	ND	0.0050	0.00067	01/31/23 12:54	
Beryllium	mg/L	ND	0.00050	0.000054	01/31/23 12:54	
Boron	mg/L	ND	0.040	0.0086	01/31/23 12:54	
Cadmium	mg/L	ND	0.00050	0.00011	01/31/23 12:54	
Chromium	mg/L	ND	0.0050	0.0011	01/31/23 12:54	
Cobalt	mg/L	ND	0.0050	0.00039	01/31/23 12:54	
Lead	mg/L	ND	0.0010	0.00089	01/31/23 12:54	
Lithium	mg/L	ND	0.030	0.00073	01/31/23 12:54	
Molybdenum	mg/L	ND	0.010	0.00074	01/31/23 12:54	
Selenium	mg/L	ND	0.0050	0.0014	01/31/23 12:54	
Thallium	mg/L	ND	0.0010	0.00018	01/31/23 12:54	

LABORATORY CONTROL SAMPLE: 3908752

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	103	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3908753      3908754

Parameter	Units	MS Result	MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			MS Spike Conc.	MSD Spike Conc.								
Antimony	mg/L	ND	0.1	0.1	0.12	0.11	115	107	75-125	8	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.10	108	101	75-125	6	20	

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92648451

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3908753 3908754												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92648451001 Result	Spike Conc.	Spike Conc.	MS Result							
Barium	mg/L	0.057	0.1	0.1	0.16	0.16	107	105	75-125	1	20	
Beryllium	mg/L	0.00010J	0.1	0.1	0.10	0.097	102	97	75-125	5	20	
Boron	mg/L	0.023J	1	1	1.0	1.0	101	100	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	2	20	
Cobalt	mg/L	0.00049J	0.1	0.1	0.10	0.10	102	100	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.11	0.10	105	100	75-125	5	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.097	99	97	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	106	101	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	104	100	75-125	4	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 753737 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92649378001, 92649378002, 92649378003, 92649378004

METHOD BLANK: 3916048 Matrix: Water  
Associated Lab Samples: 92649378001, 92649378002, 92649378003, 92649378004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/07/23 17:27	
Arsenic	mg/L	ND	0.0050	0.0022	02/07/23 17:27	
Barium	mg/L	ND	0.0050	0.00067	02/07/23 17:27	
Beryllium	mg/L	ND	0.00050	0.000054	02/07/23 17:27	
Boron	mg/L	ND	0.040	0.0086	02/07/23 17:27	
Cadmium	mg/L	ND	0.00050	0.00011	02/07/23 17:27	
Chromium	mg/L	ND	0.0050	0.0011	02/07/23 17:27	
Cobalt	mg/L	ND	0.0050	0.00039	02/07/23 17:27	
Lead	mg/L	ND	0.0010	0.00089	02/07/23 17:27	
Lithium	mg/L	ND	0.030	0.00073	02/07/23 17:27	
Molybdenum	mg/L	ND	0.010	0.00074	02/07/23 17:27	
Selenium	mg/L	ND	0.0050	0.0014	02/07/23 17:27	
Thallium	mg/L	ND	0.0010	0.00018	02/07/23 17:27	

LABORATORY CONTROL SAMPLE: 3916049

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	118	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.0	104	80-120	
Cadmium	mg/L	0.1	0.10	100	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	107	80-120	
Lithium	mg/L	0.1	0.11	108	80-120	
Molybdenum	mg/L	0.1	0.11	105	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.11	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3916050 3916051

Parameter	Units	92649664001 Result	MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			MS Spike Conc.	MSD Spike Conc.								
Antimony	mg/L	ND	0.1	0.1	0.11	0.12	113	116	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20	

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92648451

Parameter	Units	3916050		3916051		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		92649664001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	24.7J ug/L	0.1	0.1	0.12	0.13	97	102	75-125	4	20		
Beryllium	mg/L	ND	0.1	0.1	0.085	0.092	85	92	75-125	9	20		
Boron	mg/L	29.5J ug/L	1	1	0.88	0.92	85	89	75-125	4	20		
Cadmium	mg/L	ND	0.1	0.1	0.096	0.098	96	98	75-125	2	20		
Chromium	mg/L	1.7J ug/L	0.1	0.1	0.094	0.097	92	95	75-125	4	20		
Cobalt	mg/L	2.7J ug/L	0.1	0.1	0.095	0.097	92	94	75-125	2	20		
Lead	mg/L	ND	0.1	0.1	0.098	0.10	98	101	75-125	3	20		
Lithium	mg/L	11.7J ug/L	0.1	0.1	0.098	0.10	86	93	75-125	7	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	99	103	75-125	4	20		
Selenium	mg/L	ND	0.1	0.1	0.099	0.10	98	99	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92648451

QC Batch: 755827 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92648451007, 92648451008, 92648451009, 92648451010, 92648451011, 92648451012, 92648451013, 92648451014, 92648451015, 92648451016, 92648451017

METHOD BLANK: 3926998 Matrix: Water  
 Associated Lab Samples: 92648451007, 92648451008, 92648451009, 92648451010, 92648451011, 92648451012, 92648451013, 92648451014, 92648451015, 92648451016, 92648451017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/16/23 19:33	
Arsenic	mg/L	ND	0.0050	0.0022	02/16/23 19:33	
Barium	mg/L	ND	0.0050	0.00067	02/16/23 19:33	
Beryllium	mg/L	ND	0.00050	0.000054	02/16/23 19:33	
Boron	mg/L	ND	0.040	0.0086	02/16/23 19:33	
Cadmium	mg/L	ND	0.00050	0.00011	02/16/23 19:33	
Chromium	mg/L	ND	0.0050	0.0011	02/17/23 16:37	
Cobalt	mg/L	ND	0.0050	0.00039	02/16/23 19:33	
Iron	mg/L	ND	0.040	0.030	02/16/23 19:33	
Lead	mg/L	ND	0.0010	0.00089	02/16/23 19:33	
Lithium	mg/L	ND	0.030	0.00073	02/16/23 19:33	
Magnesium	mg/L	ND	0.050	0.010	02/16/23 19:33	
Manganese	mg/L	ND	0.010	0.0011	02/16/23 19:33	
Molybdenum	mg/L	ND	0.010	0.00074	02/16/23 19:33	
Potassium	mg/L	ND	0.10	0.047	02/16/23 19:33	
Selenium	mg/L	ND	0.0050	0.0014	02/16/23 19:33	
Sodium	mg/L	ND	0.10	0.023	02/16/23 19:33	
Thallium	mg/L	ND	0.0010	0.00018	02/16/23 19:33	

LABORATORY CONTROL SAMPLE: 3926999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	111	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.11	112	80-120	
Boron	mg/L	1	1.1	111	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Iron	mg/L	1	1.0	104	80-120	
Lead	mg/L	0.1	0.10	104	80-120	
Lithium	mg/L	0.1	0.12	117	80-120	
Magnesium	mg/L	1	1.1	109	80-120	
Manganese	mg/L	0.1	0.11	109	80-120	
Molybdenum	mg/L	0.1	0.11	109	80-120	
Potassium	mg/L	1	1.1	107	80-120	

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92648451

LABORATORY CONTROL SAMPLE: 3926999

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	0.1	0.10	104	80-120	
Sodium	mg/L	1	1.1	110	80-120	
Thallium	mg/L	0.1	0.11	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3927000 3927001

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		92648451007 Result	Spike Conc.	Spike Conc.	Result							Result
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	108	106	75-125	1	20	
Arsenic	mg/L	0.0040J	0.1	0.1	0.11	0.11	109	109	75-125	0	20	
Barium	mg/L	0.017	0.1	0.1	0.12	0.12	104	102	75-125	2	20	
Beryllium	mg/L	0.00039J	0.1	0.1	0.086	0.084	85	83	75-125	2	20	
Boron	mg/L	7.7	1	1	8.4	8.4	75	74	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.094	0.093	94	93	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Cobalt	mg/L	0.035	0.1	0.1	0.13	0.13	92	90	75-125	1	20	
Iron	mg/L	1.2	1	1	2.2	2.1	94	90	75-125	2	20	
Lead	mg/L	0.0011	0.1	0.1	0.093	0.091	92	90	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.093	0.091	93	91	75-125	2	20	
Magnesium	mg/L	37.3	1	1	37.5	37.9	23	63	75-125	1	20	M1
Manganese	mg/L	3.6	0.1	0.1	3.6	3.6	-51	-46	75-125	0	20	M1
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	3	20	
Potassium	mg/L	10.9	1	1	11.7	11.9	73	92	75-125	2	20	M1
Selenium	mg/L	0.0036J	0.1	0.1	0.11	0.11	110	108	75-125	2	20	
Sodium	mg/L	8.7	1	1	9.7	9.6	96	88	75-125	1	20	
Thallium	mg/L	0.00047J	0.1	0.1	0.096	0.093	95	93	75-125	3	20	

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 756320 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92648451003, 92648451004, 92648451005, 92648451006

METHOD BLANK: 3929306 Matrix: Water  
Associated Lab Samples: 92648451003, 92648451004, 92648451005, 92648451006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/17/23 12:51	
Arsenic	mg/L	ND	0.0050	0.0022	02/17/23 12:51	
Barium	mg/L	ND	0.0050	0.00067	02/17/23 12:51	
Beryllium	mg/L	ND	0.00050	0.000054	02/17/23 12:51	
Boron	mg/L	ND	0.040	0.0086	02/17/23 12:51	
Cadmium	mg/L	ND	0.00050	0.00011	02/17/23 12:51	
Chromium	mg/L	ND	0.0050	0.0011	02/17/23 12:51	
Cobalt	mg/L	ND	0.0050	0.00039	02/17/23 12:51	
Lead	mg/L	ND	0.0010	0.00089	02/17/23 12:51	
Lithium	mg/L	ND	0.030	0.00073	02/17/23 12:51	
Molybdenum	mg/L	ND	0.010	0.00074	02/17/23 12:51	
Selenium	mg/L	ND	0.0050	0.0014	02/17/23 12:51	
Thallium	mg/L	ND	0.0010	0.00018	02/17/23 12:51	

LABORATORY CONTROL SAMPLE: 3929307

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	118	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.11	105	80-120	
Beryllium	mg/L	0.1	0.10	104	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.11	107	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.11	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3929639 3929640

Parameter	Units	MS Result	MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			MS Spike Conc.	MSD Spike Conc.								
Antimony	mg/L	ND	0.1	0.1	0.11	0.12	110	115	75-125	4	20	
Arsenic	mg/L	ND	0.1	0.1	0.11	0.11	106	109	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92648451

Parameter	Units	3929639		3929640		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result								
Barium	mg/L	0.014	0.1	0.1	0.12	0.13	110	111	75-125	1	20		
Beryllium	mg/L	0.000081J	0.1	0.1	0.094	0.095	94	95	75-125	1	20		
Boron	mg/L	2.4	1	1	3.4	3.3	98	89	75-125	3	20		
Cadmium	mg/L	0.0017	0.1	0.1	0.11	0.11	103	105	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Cobalt	mg/L	0.027	0.1	0.1	0.12	0.13	97	99	75-125	2	20		
Lead	mg/L	ND	0.1	0.1	0.10	0.11	105	105	75-125	0	20		
Lithium	mg/L	0.0011J	0.1	0.1	0.097	0.097	96	96	75-125	0	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.11	104	108	75-125	3	20		
Selenium	mg/L	ND	0.1	0.1	0.11	0.11	105	108	75-125	2	20		
Thallium	mg/L	ND	0.1	0.1	0.11	0.11	106	107	75-125	1	20		

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92648451

QC Batch: 752854

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92648451001, 92648451002

METHOD BLANK: 3911513

Matrix: Water

Associated Lab Samples: 92648451001, 92648451002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/01/23 12:44	

LABORATORY CONTROL SAMPLE: 3911514

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3911518 3911519

Parameter	Units	3911518		3911519		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	0.0022	0.0022	88	88	75-125	0	20	

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92648451

QC Batch:	754353	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92649378001, 92649378002, 92649378003, 92649378004

METHOD BLANK: 3918887 Matrix: Water  
Associated Lab Samples: 92649378001, 92649378002, 92649378003, 92649378004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/08/23 12:17	

LABORATORY CONTROL SAMPLE: 3918888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918889 3918890

Parameter	Units	3918889		3918890		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	0.0024	0.0025	98	101	75-125	3	20	

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch:	754637	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92648451003, 92648451004, 92648451005, 92648451006, 92648451007, 92648451008, 92648451009, 92648451010, 92648451011, 92648451012, 92648451013, 92648451014, 92648451015, 92648451016

METHOD BLANK: 3920563 Matrix: Water  
Associated Lab Samples: 92648451003, 92648451004, 92648451005, 92648451006, 92648451007, 92648451008, 92648451009, 92648451010, 92648451011, 92648451012, 92648451013, 92648451014, 92648451015, 92648451016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/09/23 12:58	

LABORATORY CONTROL SAMPLE: 3920564

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3920565 3920566

Parameter	Units	92648451003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0023	0.0025	93	100	75-125	7	20	

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 752254      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: 92648451001, 92648451002

METHOD BLANK: 3908925      Matrix: Water  
Associated Lab Samples: 92648451001, 92648451002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	01/27/23 14:00	

LABORATORY CONTROL SAMPLE: 3908926

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	371	93	80-120	

SAMPLE DUPLICATE: 3908927

Parameter	Units	92648636001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	71.0		10	

SAMPLE DUPLICATE: 3908928

Parameter	Units	92649038017 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	146	147	1	10	

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 753439 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: 92649378001, 92649378002, 92649378003, 92649378004

METHOD BLANK: 3914561 Matrix: Water  
Associated Lab Samples: 92649378001, 92649378002, 92649378003, 92649378004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/02/23 19:13	

LABORATORY CONTROL SAMPLE: 3914562

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	427	107	80-120	

SAMPLE DUPLICATE: 3914563

Parameter	Units	92649377017 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	188	204	8	10	

SAMPLE DUPLICATE: 3914564

Parameter	Units	92649235025 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	433	458	6	10	

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92648451

QC Batch:	753440	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: 92648451003, 92648451004, 92648451005, 92648451006

METHOD BLANK: 3914565 Matrix: Water  
Associated Lab Samples: 92648451003, 92648451004, 92648451005, 92648451006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/02/23 20:25	

LABORATORY CONTROL SAMPLE: 3914566

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

SAMPLE DUPLICATE: 3914567

Parameter	Units	92649235027 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1280	1300	1	10	

SAMPLE DUPLICATE: 3914568

Parameter	Units	92649923004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	459	505	10	10	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92648451

QC Batch: 754118 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: 92648451007, 92648451008, 92648451009, 92648451010, 92648451011, 92648451012, 92648451013,  
 92648451014, 92648451015, 92648451016

METHOD BLANK: 3917651 Matrix: Water  
 Associated Lab Samples: 92648451007, 92648451008, 92648451009, 92648451010, 92648451011, 92648451012, 92648451013,  
 92648451014, 92648451015, 92648451016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/07/23 18:37	

LABORATORY CONTROL SAMPLE: 3917652

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	408	102	80-120	

SAMPLE DUPLICATE: 3917653

Parameter	Units	92648451007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1950	2030	4	10	1g

SAMPLE DUPLICATE: 3917654

Parameter	Units	92649377019 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	528	540	2	10	

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 754305      Analysis Method: SM 2320B-2011  
QC Batch Method: SM 2320B-2011      Analysis Description: 2320B Alkalinity  
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92648451017

METHOD BLANK: 3918541      Matrix: Water  
Associated Lab Samples: 92648451017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	ND	5.0	5.0	02/07/23 16:56	
Alkalinity, Bicarbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	02/07/23 16:56	

LABORATORY CONTROL SAMPLE: 3918542

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	50	53.3	107	80-120	

LABORATORY CONTROL SAMPLE: 3918543

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	50	50.3	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918544      3918545

Parameter	Units	92650219009		3918545		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	69.9	50	50	128	133	116	127	80-120	4	25 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918546      3918547

Parameter	Units	92650219010		3918547		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	118	50	50	163	166	91	98	80-120	2	25

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 754464      Analysis Method: SM 4500-S2D-2011  
QC Batch Method: SM 4500-S2D-2011      Analysis Description: 4500S2D Sulfide Water  
Laboratory: Pace Analytical Services - Asheville  
Associated Lab Samples: 92648451017

METHOD BLANK: 3919731      Matrix: Water  
Associated Lab Samples: 92648451017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	02/08/23 03:49	

LABORATORY CONTROL SAMPLE: 3919732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.50	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3919733      3919734

Parameter	Units	92650515001		MS		MSD		% Rec		Max		Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	
Sulfide	mg/L	ND	0.5	0.5	0.50	0.51	101	102	80-120	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3919735      3919736

Parameter	Units	92650887001		MS		MSD		% Rec		Max		Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	
Sulfide	mg/L	ND	0.5	0.5	0.48	0.50	95	98	80-120	3	10	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92648451

QC Batch:	751618	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: 92648451001, 92648451002

METHOD BLANK: 3905644 Matrix: Water  
Associated Lab Samples: 92648451001, 92648451002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	01/25/23 18:08	
Fluoride	mg/L	ND	0.10	0.050	01/25/23 18:08	
Sulfate	mg/L	ND	1.0	0.50	01/25/23 18:08	

LABORATORY CONTROL SAMPLE: 3905645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.2	106	90-110	
Fluoride	mg/L	2.5	2.7	110	90-110	
Sulfate	mg/L	50	53.3	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3905646 3905647

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92648208001	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	8.7	50	50	57.0	59.0	97	100	90-110	3	10		
Fluoride	mg/L	0.47	2.5	2.5	2.9	3.0	98	102	90-110	3	10		
Sulfate	mg/L	3.9	50	50	52.2	54.1	97	100	90-110	4	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3905648 3905649

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92648324002	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	16.9	50	50	66.5	67.2	99	101	90-110	1	10		
Fluoride	mg/L	0.066J	2.5	2.5	2.6	2.6	101	101	90-110	0	10		
Sulfate	mg/L	19.0	50	50	69.4	69.8	101	102	90-110	1	10		

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 753396 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: 92649378001, 92649378002, 92649378003, 92649378004

METHOD BLANK: 3914289 Matrix: Water  
Associated Lab Samples: 92649378001, 92649378002, 92649378003, 92649378004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/03/23 10:31	
Fluoride	mg/L	ND	0.10	0.050	02/03/23 10:31	
Sulfate	mg/L	ND	1.0	0.50	02/03/23 10:31	

LABORATORY CONTROL SAMPLE: 3914290

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.2	104	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Sulfate	mg/L	50	52.3	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3914291 3914292

Parameter	Units	92649872013		MS Spike Conc.		MSD Spike Conc.		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Conc.	Conc.										
Chloride	mg/L	4.1	50	50	54.2	54.6	100	101	90-110	1	10				
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	100	101	90-110	1	10				
Sulfate	mg/L	2.8	50	50	52.9	53.3	100	101	90-110	1	10				

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3914293 3914294

Parameter	Units	92649378004		MS Spike Conc.		MSD Spike Conc.		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Conc.	Conc.										
Chloride	mg/L	83.4	50	50	124	123	80	80	90-110	0	10 M1				
Fluoride	mg/L	0.087J	2.5	2.5	2.6	2.6	101	101	90-110	0	10				
Sulfate	mg/L	895	50	50	936	932	82	75	90-110	0	10 M1				

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 753665 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: 92648451003, 92648451004, 92648451005, 92648451006

METHOD BLANK: 3915765 Matrix: Water  
Associated Lab Samples: 92648451003, 92648451004, 92648451005, 92648451006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/03/23 16:59	
Fluoride	mg/L	ND	0.10	0.050	02/03/23 16:59	
Sulfate	mg/L	ND	1.0	0.50	02/03/23 16:59	

LABORATORY CONTROL SAMPLE: 3915766

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.2	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	49.4	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3915767 3915768

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649923008	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	1.7	50	50	52.1	53.0	101	103	90-110	2	10		
Fluoride	mg/L	0.098J	2.5	2.5	2.7	2.7	103	105	90-110	2	10		
Sulfate	mg/L	95.7	50	50	142	144	92	97	90-110	2	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3915769 3915770

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649923018	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	ND	50	50	50.3	51.2	101	102	90-110	2	10		
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	104	103	90-110	1	10		
Sulfate	mg/L	ND	50	50	50.5	51.3	101	103	90-110	2	10		

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### QUALITY CONTROL DATA

Project: Hammond AP-2  
Pace Project No.: 92648451

QC Batch: 754257 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: 92648451007, 92648451008, 92648451009, 92648451010, 92648451011, 92648451012, 92648451013, 92648451014, 92648451015, 92648451016

METHOD BLANK: 3918313 Matrix: Water  
Associated Lab Samples: 92648451007, 92648451008, 92648451009, 92648451010, 92648451011, 92648451012, 92648451013, 92648451014, 92648451015, 92648451016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/07/23 15:10	
Fluoride	mg/L	ND	0.10	0.050	02/07/23 15:10	
Sulfate	mg/L	ND	1.0	0.50	02/07/23 15:10	

LABORATORY CONTROL SAMPLE: 3918314

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.7	101	90-110	
Fluoride	mg/L	2.5	2.5	102	90-110	
Sulfate	mg/L	50	50.4	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918315 3918316

Parameter	Units	92650071001		3918316		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	ND	50	50	49.4	50.9	99	102	90-110	3	10
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	94	96	90-110	3	10
Sulfate	mg/L	ND	50	50	48.4	50.1	97	100	90-110	3	10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3918317 3918318

Parameter	Units	92648451012		3918318		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	189	50	50	233	235	88	91	90-110	1	10 M1
Fluoride	mg/L	0.10	2.5	2.5	2.7	2.9	106	112	90-110	5	10 M1
Sulfate	mg/L	1190	50	50	1220	1230	62	80	90-110	1	10 M1

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## QUALIFIERS

Project: Hammond AP-2

Pace Project No.: 92648451

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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

1g Sample residue exceeded method SM 2540C recommended 200 mg.

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

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Hammond AP-2  
Pace Project No.: 92648451

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92648451001	HAM-HGWA-4				
92648451002	HAM-HGWA-42D				
92649378001	HAM-HGWA-5				
92649378002	HAM-HGWA-6				
92649378003	HAM-MW-21D				
92649378004	HAM-MW-33				
92648451003	HAM-HGWC-17				
92648451004	HAM-MW-22				
92648451005	HAM-MW-34D				
92648451006	HAM-MW-37D				
92648451007	HAM-HGWC-14				
92648451008	HAM-HGWC-15				
92648451009	HAM-HGWC-16				
92648451010	HAM-HGWC-18				
92648451011	HAM-MW-23D				
92648451012	HAM-MW-35				
92648451013	HAM-MW-51				
92648451017	HAM-MW-52				
92648451001	HAM-HGWA-4	EPA 3010A	752232	EPA 6010D	752301
92648451002	HAM-HGWA-42D	EPA 3010A	752232	EPA 6010D	752301
92649378001	HAM-HGWA-5	EPA 3010A	762460	EPA 6010D	762514
92649378002	HAM-HGWA-6	EPA 3010A	762460	EPA 6010D	762514
92649378004	HAM-MW-33	EPA 3010A	768193	EPA 6010D	768247
92648451003	HAM-HGWC-17	EPA 3010A	755531	EPA 6010D	755685
92648451004	HAM-MW-22	EPA 3010A	755531	EPA 6010D	755685
92648451005	HAM-MW-34D	EPA 3010A	755531	EPA 6010D	755685
92648451006	HAM-MW-37D	EPA 3010A	755531	EPA 6010D	755685
92648451007	HAM-HGWC-14	EPA 3010A	755531	EPA 6010D	755685
92648451008	HAM-HGWC-15	EPA 3010A	755531	EPA 6010D	755685
92648451009	HAM-HGWC-16	EPA 3010A	755531	EPA 6010D	755685
92648451010	HAM-HGWC-18	EPA 3010A	755531	EPA 6010D	755685
92648451011	HAM-MW-23D	EPA 3010A	755531	EPA 6010D	755685
92648451012	HAM-MW-35	EPA 3010A	755531	EPA 6010D	755685
92648451013	HAM-MW-51	EPA 3010A	755531	EPA 6010D	755685
92648451014	HAM-AP2-EB-02	EPA 3010A	755531	EPA 6010D	755685
92648451015	HAM-AP2-FB-02	EPA 3010A	755531	EPA 6010D	755685
92648451016	HAM-AP2-FD-02	EPA 3010A	755531	EPA 6010D	755685
92648451001	HAM-HGWA-4	EPA 3005A	752226	EPA 6020B	752331
92648451002	HAM-HGWA-42D	EPA 3005A	752226	EPA 6020B	752331
92649378001	HAM-HGWA-5	EPA 3005A	753737	EPA 6020B	753845
92649378002	HAM-HGWA-6	EPA 3005A	753737	EPA 6020B	753845
92649378003	HAM-MW-21D	EPA 3005A	753737	EPA 6020B	753845
92649378004	HAM-MW-33	EPA 3005A	753737	EPA 6020B	753845
92648451003	HAM-HGWC-17	EPA 3005A	756320	EPA 6020B	756469
92648451004	HAM-MW-22	EPA 3005A	756320	EPA 6020B	756469

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2  
Pace Project No.: 92648451

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92648451005	HAM-MW-34D	EPA 3005A	756320	EPA 6020B	756469
92648451006	HAM-MW-37D	EPA 3005A	756320	EPA 6020B	756469
92648451007	HAM-HGWC-14	EPA 3005A	755827	EPA 6020B	755853
92648451008	HAM-HGWC-15	EPA 3005A	755827	EPA 6020B	755853
92648451009	HAM-HGWC-16	EPA 3005A	755827	EPA 6020B	755853
92648451010	HAM-HGWC-18	EPA 3005A	755827	EPA 6020B	755853
92648451011	HAM-MW-23D	EPA 3005A	755827	EPA 6020B	755853
92648451012	HAM-MW-35	EPA 3005A	755827	EPA 6020B	755853
92648451013	HAM-MW-51	EPA 3005A	755827	EPA 6020B	755853
92648451014	HAM-AP2-EB-02	EPA 3005A	755827	EPA 6020B	755853
92648451015	HAM-AP2-FB-02	EPA 3005A	755827	EPA 6020B	755853
92648451016	HAM-AP2-FD-02	EPA 3005A	755827	EPA 6020B	755853
92648451017	HAM-MW-52	EPA 3005A	755827	EPA 6020B	755853
92648451001	HAM-HGWA-4	EPA 7470A	752854	EPA 7470A	753068
92648451002	HAM-HGWA-42D	EPA 7470A	752854	EPA 7470A	753068
92649378001	HAM-HGWA-5	EPA 7470A	754353	EPA 7470A	754496
92649378002	HAM-HGWA-6	EPA 7470A	754353	EPA 7470A	754496
92649378003	HAM-MW-21D	EPA 7470A	754353	EPA 7470A	754496
92649378004	HAM-MW-33	EPA 7470A	754353	EPA 7470A	754496
92648451003	HAM-HGWC-17	EPA 7470A	754637	EPA 7470A	754886
92648451004	HAM-MW-22	EPA 7470A	754637	EPA 7470A	754886
92648451005	HAM-MW-34D	EPA 7470A	754637	EPA 7470A	754886
92648451006	HAM-MW-37D	EPA 7470A	754637	EPA 7470A	754886
92648451007	HAM-HGWC-14	EPA 7470A	754637	EPA 7470A	754886
92648451008	HAM-HGWC-15	EPA 7470A	754637	EPA 7470A	754886
92648451009	HAM-HGWC-16	EPA 7470A	754637	EPA 7470A	754886
92648451010	HAM-HGWC-18	EPA 7470A	754637	EPA 7470A	754886
92648451011	HAM-MW-23D	EPA 7470A	754637	EPA 7470A	754886
92648451012	HAM-MW-35	EPA 7470A	754637	EPA 7470A	754886
92648451013	HAM-MW-51	EPA 7470A	754637	EPA 7470A	754886
92648451014	HAM-AP2-EB-02	EPA 7470A	754637	EPA 7470A	754886
92648451015	HAM-AP2-FB-02	EPA 7470A	754637	EPA 7470A	754886
92648451016	HAM-AP2-FD-02	EPA 7470A	754637	EPA 7470A	754886
92648451001	HAM-HGWA-4	SM 2540C-2015	752254		
92648451002	HAM-HGWA-42D	SM 2540C-2015	752254		
92649378001	HAM-HGWA-5	SM 2540C-2015	753439		
92649378002	HAM-HGWA-6	SM 2540C-2015	753439		
92649378003	HAM-MW-21D	SM 2540C-2015	753439		
92649378004	HAM-MW-33	SM 2540C-2015	753439		
92648451003	HAM-HGWC-17	SM 2540C-2015	753440		
92648451004	HAM-MW-22	SM 2540C-2015	753440		
92648451005	HAM-MW-34D	SM 2540C-2015	753440		
92648451006	HAM-MW-37D	SM 2540C-2015	753440		
92648451007	HAM-HGWC-14	SM 2540C-2015	754118		
92648451008	HAM-HGWC-15	SM 2540C-2015	754118		

### REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2  
Pace Project No.: 92648451

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92648451009	HAM-HGWC-16	SM 2540C-2015	754118		
92648451010	HAM-HGWC-18	SM 2540C-2015	754118		
92648451011	HAM-MW-23D	SM 2540C-2015	754118		
92648451012	HAM-MW-35	SM 2540C-2015	754118		
92648451013	HAM-MW-51	SM 2540C-2015	754118		
92648451014	HAM-AP2-EB-02	SM 2540C-2015	754118		
92648451015	HAM-AP2-FB-02	SM 2540C-2015	754118		
92648451016	HAM-AP2-FD-02	SM 2540C-2015	754118		
92648451017	HAM-MW-52	SM 2320B-2011	754305		
92648451017	HAM-MW-52	SM 4500-S2D-2011	754464		
92648451001	HAM-HGWA-4	EPA 300.0 Rev 2.1 1993	751618		
92648451002	HAM-HGWA-42D	EPA 300.0 Rev 2.1 1993	751618		
92649378001	HAM-HGWA-5	EPA 300.0 Rev 2.1 1993	753396		
92649378002	HAM-HGWA-6	EPA 300.0 Rev 2.1 1993	753396		
92649378003	HAM-MW-21D	EPA 300.0 Rev 2.1 1993	753396		
92649378004	HAM-MW-33	EPA 300.0 Rev 2.1 1993	753396		
92648451003	HAM-HGWC-17	EPA 300.0 Rev 2.1 1993	753665		
92648451004	HAM-MW-22	EPA 300.0 Rev 2.1 1993	753665		
92648451005	HAM-MW-34D	EPA 300.0 Rev 2.1 1993	753665		
92648451006	HAM-MW-37D	EPA 300.0 Rev 2.1 1993	753665		
92648451007	HAM-HGWC-14	EPA 300.0 Rev 2.1 1993	754257		
92648451008	HAM-HGWC-15	EPA 300.0 Rev 2.1 1993	754257		
92648451009	HAM-HGWC-16	EPA 300.0 Rev 2.1 1993	754257		
92648451010	HAM-HGWC-18	EPA 300.0 Rev 2.1 1993	754257		
92648451011	HAM-MW-23D	EPA 300.0 Rev 2.1 1993	754257		
92648451012	HAM-MW-35	EPA 300.0 Rev 2.1 1993	754257		
92648451013	HAM-MW-51	EPA 300.0 Rev 2.1 1993	754257		
92648451014	HAM-AP2-EB-02	EPA 300.0 Rev 2.1 1993	754257		
92648451015	HAM-AP2-FB-02	EPA 300.0 Rev 2.1 1993	754257		
92648451016	HAM-AP2-FD-02	EPA 300.0 Rev 2.1 1993	754257		

### REPORT OF LABORATORY ANALYSIS

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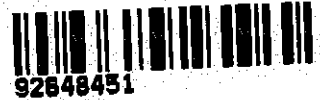
DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mer

WO#: 92648451



92648451

Sample Condition Upon Receipt

Client Name:

G A Power

Project #:

Courier:  Commercial  Fed Ex  Pace  UPS  USPS  Other:  Client

Custody Seal Present?  Yes  No Seals intact?  Yes  No

Date/Initials Person Examining Contents: 1/24/23

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID:

230

Type of Ice:

Wet  Blue  None

Cooler Temp:

4.4

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):

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 maps)?  Yes  No

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92648451

PM: BV

Due Date: 02/07/23

CLIENT: GA-GA Power

Item#	BP40U-125 mL Plastic Unpreserved (N/A) (C-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (C-)	BP3W-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (C-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (C-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (C-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(C-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KG7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 Vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG6U-100 mL Amber Unpreserved (N/A) (C-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1																													
2																													
3																													
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pH Adjustment Log for Preserved Samples

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

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



## CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: 1 of 1	
Company: <b>GA Power</b>		Report To: <b>SCS Contacts</b>		Attention: <b>Southern Co.</b>		<b>REGULATORY AGENCY</b>	
Address: <b>Atlanta, GA</b>		Copy To: <b>Geosyntec Contacts</b>		Company Name:			
Email To: <b>SCS Contacts</b>		Task Code: <b>HAM-CCR-ASSMT-2023S1</b>		Address:		<input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	
Phone:		Purchase Order No.:		Pace Quote Reference:		Site Location STATE: <u>GA</u>	
Fax:		Project Name: <b>Hammond AP-2</b>		Pace Project Manager: <b>Bonnie Vang</b>			
Requested Due Date/FAT: <b>16 Day</b>		Project Number:		Pace Profile #: <b>10839</b>			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOLID/SOLID BL OIL OL WIPE WF AIR AB OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRADE C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)										
					COMPOSITE		COMPOSITE				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test	Chloride, Fluoride, Sulfate	Full App. III and IV metals	MSD 228228	TOC																
					DATE	TIME	DATE	TIME																															
1	HAM-HGWA-4		WG	G	1/23/2023	1704			16	5	2											X	X	X	X										N	OR	pH = 5.62		
2	HAM-HGWA-42D		WG	G	1/23/2023	1806			17	5	2											X	X	X	X										N	OR	pH = 7.55		
3					TJ 1/23/2023																																		
4																																							
5																																							
6																																							
7																																							
8					TJ 1/23/2023																																		
9																																							
10																																							
11																																							
12																																							
ADDITIONAL COMMENTS			RELINQUISHED BY / AFFILIATION			DATE			TIME			ACCEPTED BY / AFFILIATION			DATE			TIME			SAMPLE CONDITIONS																		
HAM-CCR-ASSMT-2023S1			Kyan Williams / Pace			1/24/2023			1040			Kyan Williams / Pace			1/24/2023			1040																					
			Kyan Williams / Pace			1/24/2023			1234			Charles H... / Pace			1/24/23			1235																					

<b>SAMPLER NAME AND SIGNATURE</b>			
PRINT Name of SAMPLER: Thomas Kessler, Anthony Smith, Geosyntec Consultants, Inc			
SIGNATURE of SAMPLER: TK AS			DATE Signed (MM/DD/YY): 1/23/23
Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville

Sample Condition Upon Receipt

Client Name:

GA Power

WO#: 92648451

Due Date: 02/07/23

PM: BV

CLIENT: GA-GA Power

Courier:  Commercial  Fed Ex  Pace  UPS  USPS  Other:  Citi

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 2/11/23 CPH

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:

HI Gun ID:

230

Type of Ice:

Wet  Blue  None

Cooler Temp:

2.8

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):

2.8

USDA Regulated Soil?  N/A, water sample

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92648451

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Pr

PM: BV

Due Date: 02/07/23

CLIENT: GA-GA Power

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

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

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



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

<b>Section A</b> Required Client Information:		<b>Section B</b> Regulated Project Information:		<b>Section C</b> Invoice Information:	
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.	
Address: Atlanta, GA		Copy To: Geosyntec Contacts		Company Name:	
Email To: SCS Contacts		Purchase Order No.:		Address:	
Phone: _____ Fax: _____		Project Name: Hammond AP-2		Pace Quote Reference:	
Requested Due Date (AT): 10 Day		Project Number:		Pace Project Manager: Bonnie Vang	
				Pace Profile #: 10839	
				<b>REGULATORY AGENCY</b>	
				<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER CCR	
				Site Location: _____	
				STATE: GA	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX CODE (see initial codes to left)	SAMPLE TYPE (S-B, B, C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.		
					DATE	TIME	DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	H <sub>2</sub> O <sub>2</sub>	NH <sub>4</sub> OH					NH <sub>4</sub> SCN	Methanol
1	HAM-HGWC-17	WG	G	G	1/30/2023	1850			19	3	2	3					X	X	X	X	N	pH = 6.44 <i>003</i>
2	HAM-MW-22	WG	G	G	1/30/2023	1815			17	3	2	3					X	X	X	X	N	pH = 5.47 <i>003</i>
3	HAM-MW-34D	WG	G	G	1/30/2023	1305			18	2	2	3					X	X	X	X	N	pH = 6.98 <i>003</i>
4	HAM-MW-37D	WG	G	G	1/30/2023	1811			17	2	2	3					X	X	X	X	N	pH = 7.55 <i>006</i>
5					TJ 1/30/2023																	
6					TJ 1/30/2023																	
7																						
8																						
9					TJ 1/30/2023																	
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSM1-202351	<i>Erin Raus</i>	<i>2/1/23</i>	<i>1435</i>	<i>Kyan Williams / Pace</i>	<i>2/1/23</i>	<i>1245</i>	
	<i>Kyan Williams / Pace</i>	<i>2/1/23</i>	<i>1435</i>	<i>Erin Raus</i>	<i>2/1/23</i>	<i>1435</i>	

SAMPLER NAME AND SIGNATURE		Temp in °C	Incubated at Temp (Y/N)	Custody Transfer Complete (Y/N)	Sample Intact (Y/N)
PRINT Name of SAMPLER: <i>Bonnie Vang</i>	SIGNATURE OF SAMPLER: <i>[Signature]</i>				
DATE SIGNED (MM/DD/YYYY): <i>2/1/23</i>					

# WO#: 92648451

PM: BV      Due Date: 02/07/23  
 CLIENT: GA-GA Power

Price and shipping to site charges of 1.5% per month for any samples not picked up within 30 days.

F-ALL-Q-020 Rev 07, 15-Feb-2007



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
Upon Receipt

Client Name:

Project #:

WO#: 92648451

PM: BV

Due Date: 02/07/23

CLIENT: GA-GA Power

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

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 2/3/23  
CJH

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:

TR Gun ID: 214 Type of Ice:  Wet  Blue  None

Cooler Temp: 23 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 2.4

USDA Regulated Soil (  N/A, water sample)

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

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

Comments/Discrepancy:

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

Sample HAM-AP-2-FD-02 present but not listed on COC

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_

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

Project Manager SRF Review: \_\_\_\_\_

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





DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92648451

PM: BV

Due Date: 02/07/23

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP9U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	D694-40 mL Amber NH4Cl (N/A)(Cl-)	D69H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	D69V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG6U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	D69U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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BPIN

HAMAD-250g

pH Adjustment Log for Preserved Samples

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

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



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.	
Address: Atlanta, GA		Copy To: Geosyntec Contacts		Company Name:	
Email To: SCS Contacts		Purchase Order No.:		Address:	
Phone: Fax:		Project Name: Hammond AP-2		Pace Quote Reference: Bonnie Vang	
Requested Due Date/TAT: 16 Day		Project Number:		Pace Project Manager: Bonnie Vang	
				Pace Profile #: 10839	
				Site Location: GA	
				STATE: GA	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	Preservatives								Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.		
				COMPOSITE		COMPOSITE			# OF CONTAINERS	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Methanol	Other	Analysis Test	Chloride, Fluoride, Sulfate	Full App. III and IV metals			RAD 226/228	OS
				DATE	TIME	DATE	TIME																	
1	HAM-HGWC-14	WG	G	2/1/2023	1455			19	5	2	3							X	X	X	X	N	pH = 4.93 <i>659</i>	
2	HAM-HGWC-15	WG	G	2/1/2023	1444			19	5	2	3							X	X	X	X	N	pH = 8.22 <i>659</i>	
3	HAM-HGWC-16	WG	G	2/1/2023	1230			18	5	2	3							X	X	X	X	N	pH = 7.15 <i>659</i>	
4	HAM-HGWC-18	WG	G	2/1/2023	1055			18	5	2	3							X	X	X	X	N	pH = 4.88 <i>610</i>	
5	HAM-MW-23D	WG	G	2/1/2023	1320			18	5	2	3							X	X	X	X	N	pH = 6.89 <i>611</i>	
6	HAM-MW-35	WG	G	2/1/2023	1002			15	5	2	3							X	X	X	X	N	pH = 4.89 <i>612</i>	
7	HAM-MW-51	WG	G	2/1/2023	1132			14	5	2	3							X	X	X	X	N	pH = 8.37 <i>613</i>	
8	HAM-AP-2-EB-02	WD	G	2/1/2023	1420			17	5	2	3							X	X	X	X	N	N/A <i>614</i>	
9	HAM-AP-2-FB-02	WD	G	2/1/2023	1415			17	5	2	3							X	X	X	X	N	N/A <i>615</i>	
10																							Last sample	
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-202301	<i>Thomas Hester / Geosyntec</i>	<i>2/3/2023</i>	<i>1230</i>	<i>Christine Hester</i>	<i>2/3/23</i>	<i>1230</i>	
	<i>Christine Hester / Geosyntec</i>	<i>2/3/2023</i>	<i>1250</i>	<i>Ryan Williams / Pace</i>	<i>2/3/23</i>	<i>1250</i>	
	<i>Ryan Williams / Pace</i>	<i>2/3/2023</i>	<i>1400</i>	<i>Debra Hester</i>	<i>2/3/23</i>	<i>1400</i>	

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on Ion (Y/N)	Custody Sealed Cooler (Y/N)	Samples Used (Y/N)
PRINT Name of SAMPLER: <i>Thomas Hester, Anthony Stewart, Carrie Cox / Geosyntec Consultants, Inc</i>					
SIGNATURE of SAMPLER: <i>[Signature]</i>					
DATE Signed (MM/DD/YY): <i>02/01/2023</i>					

*oke*  
**HAM-AP-2-FD-02**

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



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

Project #:

WO#: 92648451

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

PM: BV Due Date: 02/07/23  
CLIENT: GA-GA Power

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 2/3/23  
LGH

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:

IR Gun ID: 214 Type of Ice:  Wet  Blue  None

Cooler Temp: 23 Correction Factor: Add/Subtract (°C) +0.1

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

Cooler Temp Corrected (°C): 2.4

USDA Regulated Soil (  N/A, water sample)

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

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

Comments/Discrepancy:

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_

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

Project Manager SRF Review: \_\_\_\_\_

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



DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project **WO# : 92648451**

PM: BV

Due Date: 02/07/23

CLIENT: GA-GA Power

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

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

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





DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

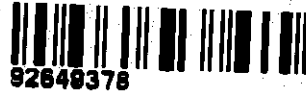
Sample Condition Upon Receipt

Client Name:

GA power

Project #:

WO#: 92649378



Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: MT

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer:

IR Gun ID: 230

Type of Ice:  Wet  Blue  None

Biological Tissue Frozen?

Yes  No  N/A

Cooler Temp: 4.1 Correction Factor: Add/Subtract (°C) ±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): 4.1

USDA Regulated Soil (  N/A, water sample)

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

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

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input 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: WG			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92649378

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

Project #

PM: BV

Due Date: 02/13/23

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

CLIENT: GA-GA Power

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1M-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
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11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

**pH Adjustment Log for Preserved Samples**

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

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



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

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: 1 of 1			
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.		<b>REGULATORY AGENCY</b>			
Address: Atlanta, GA		Copy To: Geosyntec Contacts		Company Name:				<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER    CCR—	
Email To: SCS Contacts		Purchase Order No.:		Address:				Site Location: _____	
Phone: _____ Fax: _____		Project Name: Hammond AP-2		Pace Quote Reference: Pace Project Manager: Bonnie Yang				STATE: GA	
Requested Due Date/TAT: 10 Day		Project Number:		Pace Profile #: 10839					

ITEM #	Sample ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Matrix Code	COLLECTED				SAMPLE TEMP AT COLLECTION	Requested Analysis Filtered (Y/N)											Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.						
			COMPOSITE		COMPOSITE			# OF CONTAINERS	Preservatives																	
			DATE	TIME	DATE	TIME			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	NH <sub>3</sub> -S <sub>2</sub> O <sub>8</sub>	Methanol	Other	Aspirin/Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Chloride			Fluoride	Sulfide	Full App. III and IV metals	RAO 228229	TDS	
1	HAM-HGWA-5	WG G	1/27/2023	1059			18	5	2	3														N	pH = 6.52	
2	HAM-HGWA-6	WG G	1/27/2023	1010			15	5	2	3															N	pH = 7.66
3	HAM-MW-21D	WG G	1/27/2023	1708			17	5	2	3															N	pH = 7.31
4	HAM-MW-33	WG G	1/27/2023	1434			16	5	2	3															N	pH = 6.81
5			TJ 1/27/2023																							
6			TJ 1/27/2023																							
7			TJ 1/27/2023																							
8			TJ 1/27/2023																							
9			TJ 1/27/2023																							
10			TJ 1/27/2023																							
11			TJ 1/27/2023																							
12			TJ 1/27/2023																							

Task Code: HAM-COR-ASSMT-2023S1	RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS	
		Anthony Sargent / Geosyntec		1/30/2023	11:50	Ryan Williams / Pace		1/10/2023	11:50	
	Ryan Williams / Pace		1/10/2023	1438	Anthony Sargent / Geosyntec		1/27/2023	1438		

<b>SAMPLER NAME AND SIGNATURE</b>			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Anthony Sargent, Geosyntec Consultants, Inc						
SIGNATURE of SAMPLER: <i>Anthony Sargent</i> DATE Signed (MM/DD/YYYY): 01/27/2023						

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





DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

Courier:  Fed Ex  Pace  UPS  USPS  Other:  Client  Commercial

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 2/11/23  
CJH

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Cooler Temp: 2.8 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): 2.8

USDA Regulated Soil (  N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

Project #

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG6U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
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11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	

**pH Adjustment Log for Preserved Samples**

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

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



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

**Section A**  
Required Client Information:

Company: GA Power  
Address: Atlanta, GA  
Email To: SCS Contacts  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Requested Due Date(TAT): 15 Day

**Section B**  
Required Project Information:

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

**Section C**  
Invoice Information:

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

**REGULATORY AGENCY**

NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER CEA

Site Location: GA  
STATE: GA

ITEM #	Section D Required Client Information  <b>SAMPLE ID</b> (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes <b>MATRIX CODE</b> DOMESTIC WATER WASTE WATER PRODUCT SOLID SLURRY AIR OTHER YSARE	Valid Matrix Codes <b>EDGE</b> DN WS PW P DL CL WF AR OT TB	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							ANALYSIS TEST	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Face Project No./ Lab I.D.												
				COMPOSITE		COMPOSITE				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub>	Methanol					Other	Chloride, Fluoride, Sulfate	Full App. II and IV metals	RAD 200228	TDS							
				DATE	TIME	DATE	TIME																			N	N	N	N	N		
1	HAM-HGWC-17	WG	G	1/30/2023	1550			19	5	2	3					X	X	X	X	X	N	pH = 6.44										
2	HAM-MW-22	WG	G	1/30/2023	1815			17	5	2	3					X	X	X	X	X	N	pH = 5.47										
3	HAM-MW-34D	WG	G	1/30/2023	1305			18	5	2	3					X	X	X	X	X	N	pH = 6.99										
4	HAM-MW-37D	WG	G	1/30/2023	1611			17	6	2	3					X	X	X	X	X	N	pH = 7.56										
5	TJ 1/30/2023																															
6	TJ 1/30/2023																															
7	TJ 1/30/2023																															
8	TJ 1/30/2023																															
9	TJ 1/30/2023																															
10	TJ 1/30/2023																															
11	TJ 1/30/2023																															
12	TJ 1/30/2023																															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-20231	Raymond Marshall / Geosyntec	2/1/2023	1245	Lynn Williams / Pric	2/1/2023	1245	
	Kyan Williams / Pric	2/1/2023	1435	Charles Park	2/1/23	1435	

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Geosyntec Consultants, Inc / Geosyntec Consultants, Inc  
SIGNATURE of SAMPLER: [Signature]  
DATE Signed (MM/DD/YYYY): 01/30/2023

Temp in °C: \_\_\_\_\_  
Received on Ice (Y/N): \_\_\_\_\_  
Custody Sealed Container (Y/N): \_\_\_\_\_  
Sample Intact (Y/N): \_\_\_\_\_

Important Note: By signing this form you are accepting Face's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.  
F-ALL-Q-020rev.07, 15-Feb-2007

March 28, 2023

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

RE: Project: Hammond AP-2 - RADS  
Pace Project No.: 92648450

Dear Joju Abraham:

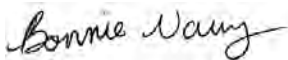
Enclosed are the analytical results for sample(s) received by the laboratory between January 24, 2023 and February 03, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,



Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Noelia Gangi, Georgia Power  
Ben Hodges, Georgia Power-CCR  
Christine Hug, Geosyntec Consultants, Inc.  
Kristen Jurinko  
Thomas Kessler, Geosyntec  
Whitney Law, Geosyntec Consultants  
Laura Midkiff, Georgia Power  
Michael Smilley, Georgia Power  
Tina Sullivan, ERM  
Anthony Szwast, Geosyntec



## REPORT OF LABORATORY ANALYSIS

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

## CERTIFICATIONS

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

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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-2 - RADS

Pace Project No.: 92648450

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92648450001	HAM-HGWA-4	Water	01/23/23 17:04	01/24/23 12:38
92648450002	HAM-HGWA-42D	Water	01/23/23 18:06	01/24/23 12:38
92648450003	HAM-HGWA-5	Water	01/27/23 10:59	01/30/23 11:50
92648450004	HAM-HGWA-6	Water	01/27/23 10:10	01/30/23 11:50
92648450005	HAM-MW-21D	Water	01/27/23 17:06	01/30/23 11:50
92648450006	HAM-MW-33	Water	01/27/23 14:34	01/30/23 11:50
92648450007	HAM-HGWC-17	Water	01/30/23 15:50	02/01/23 12:45
92648450008	HAM-MW-22	Water	01/30/23 15:15	02/01/23 12:45
92648450009	HAM-MW-34D	Water	01/30/23 13:06	02/01/23 12:45
92648450010	HAM-MW-37D	Water	01/30/23 15:11	02/01/23 12:45
92648450011	HAM-HGWC-14	Water	02/01/23 14:55	02/03/23 12:50
92648450012	HAM-HGWC-15	Water	02/01/23 14:44	02/03/23 12:50
92648450013	HAM-HGWC-16	Water	02/01/23 12:30	02/03/23 12:50
92648450014	HAM-HGWC-18	Water	02/01/23 10:55	02/03/23 12:50
92648450015	HAM-MW-23D	Water	02/01/23 13:20	02/03/23 12:50
92648450016	HAM-MW-35	Water	02/01/23 10:02	02/03/23 12:50
92648450017	HAM-MW-51	Water	02/01/23 11:32	02/03/23 12:50
92648450018	HAM-AP-2-EB-02	Water	02/01/23 14:20	02/03/23 12:50
92648450019	HAM-AP-2-FB-02	Water	02/01/23 14:15	02/03/23 12:50
92648450020	HAM-AP-2-FD-02	Water	02/01/23 00:00	02/03/23 12:50

## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: Hammond AP-2 - RADS  
Pace Project No.: 92648450

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92648450001	HAM-HGWA-4	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450002	HAM-HGWA-42D	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450003	HAM-HGWA-5	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450004	HAM-HGWA-6	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450005	HAM-MW-21D	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450006	HAM-MW-33	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450007	HAM-HGWC-17	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450008	HAM-MW-22	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450009	HAM-MW-34D	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450010	HAM-MW-37D	EPA 9315	RMS	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450011	HAM-HGWC-14	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450012	HAM-HGWC-15	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648450013	HAM-HGWC-16	EPA 9315	RMS	1	PASI-PA

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92648450014	HAM-HGWC-18	EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
92648450015	HAM-MW-23D	EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
92648450016	HAM-MW-35	EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
92648450017	HAM-MW-51	EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
92648450018	HAM-AP-2-EB-02	EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
92648450019	HAM-AP-2-FB-02	EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA
92648450020	HAM-AP-2-FD-02	EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	RMS	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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### SUMMARY OF DETECTION

Project: Hammond AP-2 - RADS  
Pace Project No.: 92648450

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92648450001</b>	<b>HAM-HGWA-4</b>					
EPA 9315	Radium-226	0.164 ± 0.117 (0.187)	pCi/L		02/14/23 19:09	
EPA 9320	Radium-228	C:96% T:NA 0.797 ± 0.389 (0.656)	pCi/L		02/13/23 11:52	
Total Radium Calculation	Total Radium	C:83% T:79% 0.961 ± 0.506 (0.843)	pCi/L		03/21/23 16:16	
<b>92648450002</b>	<b>HAM-HGWA-42D</b>					
EPA 9315	Radium-226	0.353 ± 0.156 (0.178)	pCi/L		02/14/23 19:09	
EPA 9320	Radium-228	C:100% T:NA 0.771 ± 0.414 (0.738)	pCi/L		02/13/23 11:52	
Total Radium Calculation	Total Radium	C:87% T:77% 1.12 ± 0.570 (0.916)	pCi/L		03/21/23 16:16	
<b>92648450003</b>	<b>HAM-HGWA-5</b>					
EPA 9315	Radium-226	-0.0582 ± 0.311 (0.893)	pCi/L		02/17/23 19:46	
EPA 9320	Radium-228	C:96% T:NA 1.47 ± 0.549 (0.788)	pCi/L		02/14/23 13:14	
Total Radium Calculation	Total Radium	C:80% T:92% 1.47 ± 0.860 (1.68)	pCi/L		02/21/23 11:35	
<b>92648450004</b>	<b>HAM-HGWA-6</b>					
EPA 9315	Radium-226	0.479 ± 0.412 (0.753)	pCi/L		02/17/23 19:40	
EPA 9320	Radium-228	C:98% T:NA 0.322 ± 0.416 (0.885)	pCi/L		02/14/23 13:14	
Total Radium Calculation	Total Radium	C:82% T:89% 0.801 ± 0.828 (1.64)	pCi/L		02/21/23 11:35	

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### SUMMARY OF DETECTION

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92648450005</b>	<b>HAM-MW-21D</b>					
EPA 9315	Radium-226	0.0914 ± 0.293 (0.730) C:100% T:NA	pCi/L		02/17/23 19:41	
EPA 9320	Radium-228	0.165 ± 0.408 (0.909) C:79% T:81%	pCi/L		02/14/23 13:14	
Total Radium Calculation	Total Radium	0.256 ± 0.701 (1.64)	pCi/L		02/21/23 11:36	
<b>92648450006</b>	<b>HAM-MW-33</b>					
EPA 9315	Radium-226	0.407 ± 0.412 (0.808) C:99% T:NA	pCi/L		02/17/23 19:42	
EPA 9320	Radium-228	1.03 ± 0.507 (0.859) C:87% T:85%	pCi/L		02/14/23 13:14	
Total Radium Calculation	Total Radium	1.44 ± 0.919 (1.67)	pCi/L		02/21/23 11:36	
<b>92648450007</b>	<b>HAM-HGWC-17</b>					
EPA 9315	Radium-226	0.0472 ± 0.128 (0.310) C:75% T:NA	pCi/L		02/28/23 08:38	
EPA 9320	Radium-228	0.453 ± 0.622 (1.33) C:39% T:80%	pCi/L		02/28/23 12:38	
Total Radium Calculation	Total Radium	0.500 ± 0.750 (1.64)	pCi/L		02/28/23 16:08	
<b>92648450008</b>	<b>HAM-MW-22</b>					
EPA 9315	Radium-226	0.0748 ± 0.136 (0.310) C:67% T:NA	pCi/L		02/28/23 08:39	
EPA 9320	Radium-228	0.546 ± 0.360 (0.674) C:79% T:81%	pCi/L		02/28/23 12:38	
Total Radium Calculation	Total Radium	0.621 ± 0.496 (0.984)	pCi/L		02/28/23 16:08	

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### SUMMARY OF DETECTION

Project: Hammond AP-2 - RADS  
Pace Project No.: 92648450

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92648450009</b>	<b>HAM-MW-34D</b>					
EPA 9315	Radium-226	0.207 ± 0.148 (0.238)	pCi/L		02/28/23 08:39	
EPA 9320	Radium-228	C:94% T:NA 0.482 ± 0.358 (0.699)	pCi/L		02/28/23 12:38	
Total Radium Calculation	Total Radium	C:73% T:90% 0.689 ± 0.506 (0.937)	pCi/L		02/28/23 16:08	
<b>92648450010</b>	<b>HAM-MW-37D</b>					
EPA 9315	Radium-226	0.231 ± 0.170 (0.287)	pCi/L		02/28/23 08:39	
EPA 9320	Radium-228	C:83% T:NA 0.0776 ± 0.262 (0.594)	pCi/L		02/28/23 12:38	
Total Radium Calculation	Total Radium	C:84% T:85% 0.309 ± 0.432 (0.881)	pCi/L		02/28/23 16:08	
<b>92648450011</b>	<b>HAM-HGWC-14</b>					
EPA 9315	Radium-226	0.302 ± 0.149 (0.182)	pCi/L		02/27/23 19:32	
EPA 9320	Radium-228	C:90% T:NA 0.831 ± 0.445 (0.821)	pCi/L		02/21/23 11:57	
Total Radium Calculation	Total Radium	C:84% T:90% 1.13 ± 0.594 (1.00)	pCi/L		02/28/23 15:11	
<b>92648450012</b>	<b>HAM-HGWC-15</b>					
EPA 9315	Radium-226	0.0323 ± 0.0924 (0.224)	pCi/L		02/27/23 19:32	
EPA 9320	Radium-228	C:97% T:NA 0.594 ± 0.417 (0.816)	pCi/L		02/21/23 11:57	
Total Radium Calculation	Total Radium	C:85% T:82% 0.626 ± 0.509 (1.04)	pCi/L		02/28/23 15:11	

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### SUMMARY OF DETECTION

Project: Hammond AP-2 - RADS  
Pace Project No.: 92648450

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92648450013</b>	<b>HAM-HGWC-16</b>					
EPA 9315	Radium-226	0.217 ± 0.129 (0.174) C:91% T:NA	pCi/L		02/27/23 19:32	
EPA 9320	Radium-228	0.540 ± 0.449 (0.908) C:83% T:77%	pCi/L		02/21/23 11:58	
Total Radium Calculation	Total Radium	0.757 ± 0.578 (1.08)	pCi/L		02/28/23 15:11	
<b>92648450014</b>	<b>HAM-HGWC-18</b>					
EPA 9315	Radium-226	0.370 ± 0.156 (0.157) C:101% T:NA	pCi/L		02/27/23 19:32	
EPA 9320	Radium-228	0.501 ± 0.344 (0.668) C:88% T:97%	pCi/L		02/21/23 15:12	
Total Radium Calculation	Total Radium	0.871 ± 0.500 (0.825)	pCi/L		02/28/23 15:11	
<b>92648450015</b>	<b>HAM-MW-23D</b>					
EPA 9315	Radium-226	0.115 ± 0.0994 (0.168) C:88% T:NA	pCi/L		02/27/23 19:32	
EPA 9320	Radium-228	0.291 ± 0.323 (0.675) C:90% T:87%	pCi/L		02/21/23 15:12	
Total Radium Calculation	Total Radium	0.406 ± 0.422 (0.843)	pCi/L		02/28/23 15:11	
<b>92648450016</b>	<b>HAM-MW-35</b>					
EPA 9315	Radium-226	0.136 ± 0.138 (0.279) C:89% T:NA	pCi/L		02/27/23 19:16	
EPA 9320	Radium-228	1.10 ± 0.446 (0.703) C:89% T:83%	pCi/L		02/21/23 15:12	
Total Radium Calculation	Total Radium	1.24 ± 0.584 (0.982)	pCi/L		02/28/23 15:11	

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### SUMMARY OF DETECTION

Project: Hammond AP-2 - RADS  
Pace Project No.: 92648450

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92648450017</b>	<b>HAM-MW-51</b>					
EPA 9315	Radium-226	0.122 ± 0.124 (0.246) C:95% T:NA	pCi/L		02/27/23 19:17	
EPA 9320	Radium-228	0.698 ± 0.434 (0.824) C:85% T:83%	pCi/L		02/21/23 15:12	
Total Radium Calculation	Total Radium	0.820 ± 0.558 (1.07)	pCi/L		02/28/23 15:11	
<b>92648450018</b>	<b>HAM-AP-2-EB-02</b>					
EPA 9315	Radium-226	-0.0133 ± 0.0872 (0.252) C:78% T:NA	pCi/L		02/27/23 19:18	
EPA 9320	Radium-228	0.262 ± 0.303 (0.639) C:89% T:100%	pCi/L		02/21/23 15:12	
Total Radium Calculation	Total Radium	0.262 ± 0.390 (0.891)	pCi/L		02/28/23 15:11	
<b>92648450019</b>	<b>HAM-AP-2-FB-02</b>					
EPA 9315	Radium-226	-0.0106 ± 0.0729 (0.218) C:75% T:NA	pCi/L		02/27/23 19:19	
EPA 9320	Radium-228	0.434 ± 0.373 (0.753) C:85% T:84%	pCi/L		02/21/23 15:12	
Total Radium Calculation	Total Radium	0.434 ± 0.446 (0.971)	pCi/L		02/28/23 15:11	
<b>92648450020</b>	<b>HAM-AP-2-FD-02</b>					
EPA 9315	Radium-226	0.0564 ± 0.0930 (0.207) C:92% T:NA	pCi/L		02/27/23 19:20	
EPA 9320	Radium-228	0.747 ± 0.393 (0.699) C:85% T:87%	pCi/L		02/21/23 15:12	
Total Radium Calculation	Total Radium	0.803 ± 0.486 (0.906)	pCi/L		02/28/23 15:11	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-4</b> <b>Lab ID: 92648450001</b> Collected: 01/23/23 17:04      Received: 01/24/23 12:38      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.164 ± 0.117 (0.187)</b> <b>C:96% T:NA</b>	pCi/L	02/14/23 19:09	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.797 ± 0.389 (0.656)</b> <b>C:83% T:79%</b>	pCi/L	02/13/23 11:52	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.961 ± 0.506 (0.843)</b>	pCi/L	03/21/23 16:16	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-42D</b> <b>Lab ID: 92648450002</b> Collected: 01/23/23 18:06      Received: 01/24/23 12:38      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.353 ± 0.156 (0.178)</b> <b>C:100% T:NA</b>	pCi/L	02/14/23 19:09	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.771 ± 0.414 (0.738)</b> <b>C:87% T:77%</b>	pCi/L	02/13/23 11:52	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.12 ± 0.570 (0.916)</b>	pCi/L	03/21/23 16:16	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-5</b> <b>Lab ID: 92648450003</b> Collected: 01/27/23 10:59      Received: 01/30/23 11:50      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>-0.0582 ± 0.311 (0.893)</b> <b>C:96% T:NA</b>	pCi/L	02/17/23 19:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.47 ± 0.549 (0.788)</b> <b>C:80% T:92%</b>	pCi/L	02/14/23 13:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.47 ± 0.860 (1.68)</b>	pCi/L	02/21/23 11:35	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-6</b> <b>Lab ID: 92648450004</b> Collected: 01/27/23 10:10      Received: 01/30/23 11:50      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.479 ± 0.412 (0.753)</b> <b>C:98% T:NA</b>	pCi/L	02/17/23 19:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.322 ± 0.416 (0.885)</b> <b>C:82% T:89%</b>	pCi/L	02/14/23 13:14	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.801 ± 0.828 (1.64)</b>	pCi/L	02/21/23 11:35	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-21D</b> <b>Lab ID: 92648450005</b> Collected: 01/27/23 17:06      Received: 01/30/23 11:50      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0914 ± 0.293 (0.730)</b> <b>C:100% T:NA</b>	pCi/L	02/17/23 19:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.165 ± 0.408 (0.909)</b> <b>C:79% T:81%</b>	pCi/L	02/14/23 13:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.256 ± 0.701 (1.64)</b>	pCi/L	02/21/23 11:36	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-33</b> <b>Lab ID: 92648450006</b> Collected: 01/27/23 14:34      Received: 01/30/23 11:50      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.407 ± 0.412 (0.808)</b> <b>C:99% T:NA</b>	pCi/L	02/17/23 19:42	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>1.03 ± 0.507 (0.859)</b> <b>C:87% T:85%</b>	pCi/L	02/14/23 13:14	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.44 ± 0.919 (1.67)</b>	pCi/L	02/21/23 11:36	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWC-17</b> <b>Lab ID: 92648450007</b> Collected: 01/30/23 15:50      Received: 02/01/23 12:45      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0472 ± 0.128 (0.310)</b> C:75% T:NA	pCi/L	02/28/23 08:38	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.453 ± 0.622 (1.33)</b> C:39% T:80%	pCi/L	02/28/23 12:38	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.500 ± 0.750 (1.64)</b>	pCi/L	02/28/23 16:08	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS  
Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0748 ± 0.136 (0.310)</b> C:67% T:NA	pCi/L	02/28/23 08:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.546 ± 0.360 (0.674)</b> C:79% T:81%	pCi/L	02/28/23 12:38	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.621 ± 0.496 (0.984)</b>	pCi/L	02/28/23 16:08	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-34D</b> <b>Lab ID: 92648450009</b> Collected: 01/30/23 13:06      Received: 02/01/23 12:45      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.207 ± 0.148 (0.238)</b> <b>C:94% T:NA</b>	pCi/L	02/28/23 08:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.482 ± 0.358 (0.699)</b> <b>C:73% T:90%</b>	pCi/L	02/28/23 12:38	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.689 ± 0.506 (0.937)</b>	pCi/L	02/28/23 16:08	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-37D</b> <b>Lab ID: 92648450010</b> Collected: 01/30/23 15:11      Received: 02/01/23 12:45      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.231 ± 0.170 (0.287)</b> <b>C:83% T:NA</b>	pCi/L	02/28/23 08:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.0776 ± 0.262 (0.594)</b> <b>C:84% T:85%</b>	pCi/L	02/28/23 12:38	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.309 ± 0.432 (0.881)</b>	pCi/L	02/28/23 16:08	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWC-14</b> <b>Lab ID: 92648450011</b> Collected: 02/01/23 14:55      Received: 02/03/23 12:50      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.302 ± 0.149 (0.182)</b> <b>C:90% T:NA</b>	pCi/L	02/27/23 19:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.831 ± 0.445 (0.821)</b> <b>C:84% T:90%</b>	pCi/L	02/21/23 11:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.13 ± 0.594 (1.00)</b>	pCi/L	02/28/23 15:11	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWC-15</b> <b>Lab ID: 92648450012</b> Collected: 02/01/23 14:44      Received: 02/03/23 12:50      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0323 ± 0.0924 (0.224)</b> <b>C:97% T:NA</b>	pCi/L	02/27/23 19:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.594 ± 0.417 (0.816)</b> <b>C:85% T:82%</b>	pCi/L	02/21/23 11:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.626 ± 0.509 (1.04)</b>	pCi/L	02/28/23 15:11	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWC-16</b> <b>Lab ID: 92648450013</b> Collected: 02/01/23 12:30      Received: 02/03/23 12:50      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.217 ± 0.129 (0.174)</b> <b>C:91% T:NA</b>	pCi/L	02/27/23 19:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.540 ± 0.449 (0.908)</b> <b>C:83% T:77%</b>	pCi/L	02/21/23 11:58	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.757 ± 0.578 (1.08)</b>	pCi/L	02/28/23 15:11	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWC-18</b> <b>Lab ID: 92648450014</b> Collected: 02/01/23 10:55      Received: 02/03/23 12:50      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.370 ± 0.156 (0.157)</b> <b>C:101% T:NA</b>	pCi/L	02/27/23 19:32	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.501 ± 0.344 (0.668)</b> <b>C:88% T:97%</b>	pCi/L	02/21/23 15:12	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.871 ± 0.500 (0.825)</b>	pCi/L	02/28/23 15:11	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-23D</b> <b>Lab ID: 92648450015</b> Collected: 02/01/23 13:20      Received: 02/03/23 12:50      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.115 ± 0.0994 (0.168)</b> <b>C:88% T:NA</b>	pCi/L	02/27/23 19:32	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.291 ± 0.323 (0.675)</b> <b>C:90% T:87%</b>	pCi/L	02/21/23 15:12	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.406 ± 0.422 (0.843)</b>	pCi/L	02/28/23 15:11	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-35</b> <b>Lab ID: 92648450016</b> Collected: 02/01/23 10:02      Received: 02/03/23 12:50      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.136 ± 0.138 (0.279)</b> <b>C:89% T:NA</b>	pCi/L	02/27/23 19:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.10 ± 0.446 (0.703)</b> <b>C:89% T:83%</b>	pCi/L	02/21/23 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.24 ± 0.584 (0.982)</b>	pCi/L	02/28/23 15:11	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-51</b> <b>Lab ID: 92648450017</b> Collected: 02/01/23 11:32      Received: 02/03/23 12:50      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.122 ± 0.124 (0.246)</b> <b>C:95% T:NA</b>	pCi/L	02/27/23 19:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.698 ± 0.434 (0.824)</b> <b>C:85% T:83%</b>	pCi/L	02/21/23 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.820 ± 0.558 (1.07)</b>	pCi/L	02/28/23 15:11	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-AP-2-EB-02</b> <b>Lab ID: 92648450018</b> Collected: 02/01/23 14:20      Received: 02/03/23 12:50      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>-0.0133 ± 0.0872 (0.252)</b> <b>C:78% T:NA</b>	pCi/L	02/27/23 19:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.262 ± 0.303 (0.639)</b> <b>C:89% T:100%</b>	pCi/L	02/21/23 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.262 ± 0.390 (0.891)</b>	pCi/L	02/28/23 15:11	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-AP-2-FB-02</b> <b>Lab ID: 92648450019</b> Collected: 02/01/23 14:15      Received: 02/03/23 12:50      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>-0.0106 ± 0.0729 (0.218)</b> <b>C:75% T:NA</b>	pCi/L	02/27/23 19:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.434 ± 0.373 (0.753)</b> <b>C:85% T:84%</b>	pCi/L	02/21/23 15:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.434 ± 0.446 (0.971)</b>	pCi/L	02/28/23 15:11	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-AP-2-FD-02</b> <b>Lab ID: 92648450020</b> Collected: 02/01/23 00:00      Received: 02/03/23 12:50      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0564 ± 0.0930 (0.207)</b> <b>C:92% T:NA</b>	pCi/L	02/27/23 19:20	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.747 ± 0.393 (0.699)</b> <b>C:85% T:87%</b>	pCi/L	02/21/23 15:12	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.803 ± 0.486 (0.906)</b>	pCi/L	02/28/23 15:11	7440-14-4	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

QC Batch: 565966

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92648450007, 92648450008, 92648450009, 92648450010

METHOD BLANK: 2748589

Matrix: Water

Associated Lab Samples: 92648450007, 92648450008, 92648450009, 92648450010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.221 ± 0.151 (0.221) C:84% T:NA	pCi/L	02/28/23 09:30	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

QC Batch: 565964

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92648450011, 92648450012, 92648450013, 92648450014, 92648450015, 92648450016, 92648450017, 92648450018, 92648450019, 92648450020

METHOD BLANK: 2748587

Matrix: Water

Associated Lab Samples: 92648450011, 92648450012, 92648450013, 92648450014, 92648450015, 92648450016, 92648450017, 92648450018, 92648450019, 92648450020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0712 ± 0.0809 (0.156) C:99% T:NA	pCi/L	02/27/23 19:32	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

QC Batch: 565967

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92648450007, 92648450008, 92648450009, 92648450010

METHOD BLANK: 2748590

Matrix: Water

Associated Lab Samples: 92648450007, 92648450008, 92648450009, 92648450010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.409 ± 0.324 (0.634) C:77% T:88%	pCi/L	02/28/23 12:36	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

QC Batch: 565965

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92648450011, 92648450012, 92648450013, 92648450014, 92648450015, 92648450016, 92648450017, 92648450018, 92648450019, 92648450020

METHOD BLANK: 2748588

Matrix: Water

Associated Lab Samples: 92648450011, 92648450012, 92648450013, 92648450014, 92648450015, 92648450016, 92648450017, 92648450018, 92648450019, 92648450020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.343 ± 0.275 (0.547) C:87% T:103%	pCi/L	02/21/23 11:58	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

QC Batch: 565151

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92648450003, 92648450004, 92648450005, 92648450006

METHOD BLANK: 2743953

Matrix: Water

Associated Lab Samples: 92648450003, 92648450004, 92648450005, 92648450006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0640 ± 0.166 (0.397) C:100% T:NA	pCi/L	02/17/23 19:36	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

QC Batch: 565150

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92648450003, 92648450004, 92648450005, 92648450006

METHOD BLANK: 2743952

Matrix: Water

Associated Lab Samples: 92648450003, 92648450004, 92648450005, 92648450006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.323 ± 0.277 (0.553) C:86% T:88%	pCi/L	02/14/23 13:14	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

QC Batch: 564276

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92648450001, 92648450002

METHOD BLANK: 2740044

Matrix: Water

Associated Lab Samples: 92648450001, 92648450002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.422 ± 0.346 (0.687) C:78% T:87%	pCi/L	02/09/23 13:53	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

QC Batch: 564275

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92648450001, 92648450002

METHOD BLANK: 2740043

Matrix: Water

Associated Lab Samples: 92648450001, 92648450002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0752 ± 0.0913 (0.184) C:91% T:NA	pCi/L	02/14/23 19:09	

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## QUALIFIERS

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

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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 AP-2 - RADS  
Pace Project No.: 92648450

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92648450001	HAM-HGWA-4	EPA 9315	564275		
92648450002	HAM-HGWA-42D	EPA 9315	564275		
92648450003	HAM-HGWA-5	EPA 9315	565151		
92648450004	HAM-HGWA-6	EPA 9315	565151		
92648450005	HAM-MW-21D	EPA 9315	565151		
92648450006	HAM-MW-33	EPA 9315	565151		
92648450007	HAM-HGWC-17	EPA 9315	565966		
92648450008	HAM-MW-22	EPA 9315	565966		
92648450009	HAM-MW-34D	EPA 9315	565966		
92648450010	HAM-MW-37D	EPA 9315	565966		
92648450011	HAM-HGWC-14	EPA 9315	565964		
92648450012	HAM-HGWC-15	EPA 9315	565964		
92648450013	HAM-HGWC-16	EPA 9315	565964		
92648450014	HAM-HGWC-18	EPA 9315	565964		
92648450015	HAM-MW-23D	EPA 9315	565964		
92648450016	HAM-MW-35	EPA 9315	565964		
92648450017	HAM-MW-51	EPA 9315	565964		
92648450018	HAM-AP-2-EB-02	EPA 9315	565964		
92648450019	HAM-AP-2-FB-02	EPA 9315	565964		
92648450020	HAM-AP-2-FD-02	EPA 9315	565964		
92648450001	HAM-HGWA-4	EPA 9320	564276		
92648450002	HAM-HGWA-42D	EPA 9320	564276		
92648450003	HAM-HGWA-5	EPA 9320	565150		
92648450004	HAM-HGWA-6	EPA 9320	565150		
92648450005	HAM-MW-21D	EPA 9320	565150		
92648450006	HAM-MW-33	EPA 9320	565150		
92648450007	HAM-HGWC-17	EPA 9320	565967		
92648450008	HAM-MW-22	EPA 9320	565967		
92648450009	HAM-MW-34D	EPA 9320	565967		
92648450010	HAM-MW-37D	EPA 9320	565967		
92648450011	HAM-HGWC-14	EPA 9320	565965		
92648450012	HAM-HGWC-15	EPA 9320	565965		
92648450013	HAM-HGWC-16	EPA 9320	565965		
92648450014	HAM-HGWC-18	EPA 9320	565965		
92648450015	HAM-MW-23D	EPA 9320	565965		
92648450016	HAM-MW-35	EPA 9320	565965		
92648450017	HAM-MW-51	EPA 9320	565965		
92648450018	HAM-AP-2-EB-02	EPA 9320	565965		
92648450019	HAM-AP-2-FB-02	EPA 9320	565965		
92648450020	HAM-AP-2-FD-02	EPA 9320	565965		
92648450001	HAM-HGWA-4	Total Radium Calculation	575358		
92648450002	HAM-HGWA-42D	Total Radium Calculation	575358		
92648450003	HAM-HGWA-5	Total Radium Calculation	568699		
92648450004	HAM-HGWA-6	Total Radium Calculation	568699		

### REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2 - RADS

Pace Project No.: 92648450

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92648450005	HAM-MW-21D	Total Radium Calculation	568700		
92648450006	HAM-MW-33	Total Radium Calculation	568700		
92648450007	HAM-HGWC-17	Total Radium Calculation	570512		
92648450008	HAM-MW-22	Total Radium Calculation	570512		
92648450009	HAM-MW-34D	Total Radium Calculation	570512		
92648450010	HAM-MW-37D	Total Radium Calculation	570512		
92648450011	HAM-HGWC-14	Total Radium Calculation	570492		
92648450012	HAM-HGWC-15	Total Radium Calculation	570492		
92648450013	HAM-HGWC-16	Total Radium Calculation	570492		
92648450014	HAM-HGWC-18	Total Radium Calculation	570492		
92648450015	HAM-MW-23D	Total Radium Calculation	570492		
92648450016	HAM-MW-35	Total Radium Calculation	570492		
92648450017	HAM-MW-51	Total Radium Calculation	570492		
92648450018	HAM-AP-2-EB-02	Total Radium Calculation	570492		
92648450019	HAM-AP-2-FB-02	Total Radium Calculation	570492		
92648450020	HAM-AP-2-FD-02	Total Radium Calculation	570492		

### REPORT OF LABORATORY ANALYSIS

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



DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

*G A Power*

Project #:

WO#: 92648450

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



Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *12/23/22*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Cooler Temp: 4.4 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): 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 maps)?  Yes  No

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92648450

PM: BV

Due Date: 02/14/23

CLIENT: GA-GA Power

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

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

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





DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: GA power

Project #:

WO#: 92648450

PM: BV

Due Date: 02/14/23

CLIENT: GA-GA Power

Date/Initials Person Examining Contents: MJ

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer:

IR Gun ID: 230

Type of Ice:  Wet  Blue  None

Biological Tissue Frozen?  Yes  No  N/A

Cooler Temp: 4.1

Correction Factor: Add/Subtract (°C) +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): 4.1

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  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 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 type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissoived 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: WG	
Headspace in VOA Vials (>5.6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:





DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

**WO#: 92648450**

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

Project #

PM: BV

Due Date: 02/14/23

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

CLIENT: GA-GA Power

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

\*\*\*Check all unpreserved Nitrates for chlorine

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

**pH Adjustment Log for Preserved Samples**

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

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



### CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: 1 of 1
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.		
Address: Atlanta, GA		Copy To: Geosyntec Contacts		Company Name:		
Email To: SCS Contacts		Purchase Order No.:		Address:		<b>REGULATORY AGENCY</b>
Phone: / Fax:		Project Name: Hammond AP-2		Pace Quote Reference:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER
Requested Due Date/TAT: 10 Day		Project Number:		Pace Project Manager: Bonnie Vang		<input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER CCR
				Pace Profile #: 10839		Site Location: _____ STATE: GA

ITEM #	SAMPLE ID (A-Z, 0-9 / .)	Matrix Codes MATRIX CODE	Sample Type (G-GRAB, C-COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)				
				COMPOSITE		COMPOSITE				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Methanol	Other	Chlorine, Fluoride, Sulfate	Full App. III and IV metals				RAD 228/228	TDS		
				DATE	TIME	DATE	TIME																			
1	HAM-HGWA-5	WG G	G	1/27/2023	1650			18	5	2	3								X	X	X	X		N		
2	HAM-HGWA-6	WG G	G	1/27/2023	1010			18	5	2	3								X	X	X	X		N		
3	HAM-MW-21D	WG G	G	1/27/2023	1708			17	5	2	3								X	X	X	X		N		
4	HAM-MW-33	WG G	G	1/27/2023	1434			18	5	2	3								X	X	X	X		N		
5																										
6																										
7																										
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9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR ASSMT-2023S1	<i>Anthony Spant / Geosyntec</i>	1/30/2023	11:50	<i>Ryan Williams / Pace</i>	1/30/2023	11:50	
	<i>Ryan Williams / Pace</i>	1/30/2023	1438	<i>Ryan Williams / Pace</i>	1/30/2023	1738	

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on Ice (Y/N)	Cooling Spigot Cooler (Y/N)	Sample Intact (Y/N)
PRINT Name of SAMPLER: <i>Anthony Spant, Geosyntec Consultants, Inc</i>					
SIGNATURE of SAMPLER: <i>Anthony Spant, Geosyntec</i>		DATE Signed (MM/DD/YYYY): <i>01/27/2023</i>			



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

GA Power

Project #:

WO#: 92648450

Courier:  Commercial  Fed Ex  Pace  UPS  USPS  Other:  Client

PM: BV Due Date: 02/14/23 CLIENT: GA-GA Power

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 2/11/23 C 2/11

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID: 230

Type of Ice:  wet  Blue  None

Cooler Temp: 2.8 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): 2.8

USDA Regulated Soil (  N/A, water sample)

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

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

Comments/Discrepancy:

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

**WO# : 92648450**

PM: BV

Due Date: 02/14/23

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (-9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP9R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

**pH Adjustment Log for Preserved Samples**

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

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



### CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:			
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.			
Address: Atlanta, GA		Copy To: Geosyntec Contacts		Company Name:		<b>REGULATORY AGENCY</b>	
Email To: SCS Contacts		Purchase Order No.:		Address:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER	
Phone:      Fax:		Project Name: Hammond AP-2		Pace Quote Reference: Bonnie Vang		Site Location: GA	
Requested Due Date/TAT: 10 Day		Project Number:		Pace Project Manager:		STATE: GA	
				Pace Profile #: 10839			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX CODE (see valid codes to unit)	SAMPLE TYPE (E=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analyte Test	Residual Chlorine (Y/N)					
					COMPOSITE		COMPOSITE				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Ascorbic Acid	Other			Y/N	N	N	N	N
					DATE	TIME	DATE	TIME																	
1	HAM-HGWC-17	WG	G	1/30/2023	1550				17	5	2	3				X	X	X	X	N	pH = 6.44 007				
2	HAM-MW-22	WG	G	1/30/2023	1616				17	5	2	3				X	X	X	X	N	pH = 5.47 008				
3	HAM-MW-34D	WG	G	1/30/2023	1305				18	5	2	3				X	X	X	X	N	pH = 6.99 009				
4	HAM-MW-37D	WG	G	1/30/2023	1611				17	5	2	3				X	X	X	X	N	pH = 7.58 010				
5				TJ 1/30/2023																					
6				TJ 1/30/2023																					
7				TJ 1/30/2023																					
8				TJ 1/30/2023																					
9				TJ 1/30/2023																					
10				TJ 1/30/2023																					
11				TJ 1/30/2023																					
12				TJ 1/30/2023																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASGMT-2023B1	<i>Theresa Marshall / Geosyntec</i>	2/1/2023	1245	<i>Ryan Williams / Pace</i>	2/1/2023	1245	
	<i>Ryan Williams / Pace</i>	2/1/2023	1435	<i>Charles Park</i>	2/1/23	1435	

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Refrigerated on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>Theresa Marshall</i>	DATE Signed (MM/DD/YYYY): <i>01/30/2023</i>				
SIGNATURE of SAMPLER: <i>[Signature]</i>					

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



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

GA Power

Project #:

WO#: 92648450

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

PM: BV Due Date: 02/14/23  
CLIENT: GA-GA Power

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 2/3/23  
LGH

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 214 Type of Ice:  Wet  Blue  None

Cooler Temp: 23 Correction Factor: Add/Subtract (°C) +0.1

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

Cooler Temp Corrected (°C): 2.4

USDA Regulated Soil (  N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Sample HAA1-AP-2-FD-02 present but not listed on COC

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92648450

PM: BV

Due Date: 02/14/23

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG6U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

B PIN

2/11/23

HAMAN, AFD

pH Adjustment Log for Preserved Samples

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

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



### CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: GA Power	Address: Atlanta, GA	Report To: SCS Contacts	Copy To: Geosyntec Contacts	Attention: Southern Co.	Company Name:
Email To: SCS Contacts	Phone:	Purchase Order No.:	Project Name: Hammond AP-2	Face Quote Reference:	Face Project Manager: Bonnie Vang
Requested Due Date/TAT: 19 Day	Fax:	Project Number:	Face Profile #: 10838	Address:	Face Profile #:

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

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (S=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.				
					COMPOSITE		COMPOSITE				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Methanol	Other	Chloride, Fluoride, Sulfate	Pb, Ag, Bi and IV metals					WAD 226/228	TDS		
					DATE	TIME	DATE	TIME																				
1	HAM-HGWC-14	WG	G	G	2/1/2023	1455			19	5	2	3							X	X	X	X			N	011	pH = 4.93	
2	HAM-HGWC-15	WG	G	G	2/1/2023	1444			18	5	2	3							X	X	X	X			N	012	pH = 6.22	
3	HAM-HGWC-16	WG	G	G	2/1/2023	1230			18	5	2	3							X	X	X	X			N	013	pH = 7.15	
4	HAM-HGWC-18	WG	G	G	2/1/2023	1055			18	5	2	3							X	X	X	X			N	014	pH = 4.66	
5	HAM-MW-23D	WG	G	G	2/1/2023	1320			18	5	2	3							X	X	X	X			N	015	pH = 6.89	
6	HAM-MW-35	WG	G	G	2/1/2023	1002			15	5	2	3							X	X	X	X			N	016	pH = 4.89	
7	HAM-MW-51	WG	G	G	2/1/2023	1132			14	5	2	3							X	X	X	X			N	017	pH = 6.37	
8	HAM-AP-2-EB-02	WG	G	G	2/1/2023	1420			17	5	2	3							X	X	X	X			N	018	N/A	
9	HAM-AP-2-FB-02	WG	G	G	2/1/2023	1415	TJ	2/1/2023	17	5	2	3							X	X	X	X			N	019	N/A	
10																												
11																												
12							TJ	2/1/2023																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-2033S1	Christine Hays / Geosyntec	2/1/2023	1230	Christine Hays	2/3/23	1230	
	Ryan Williams / Pace	2/1/2023	1250	Ryan Williams / Pace	2/3/23	1250	
	Ryan Williams / Pace	2/1/2023	1400	Ryan Williams / Pace	2/3/23	1400	

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Christine Hays / Geosyntec Consultants, Inc				
SIGNATURE of SAMPLER:	[Signature]	DATE Signed (MM/DD/YYYY):	02/16/2023		

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

HAM-AP-2-PD-02



March 23, 2023

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

RE: Project: Plant Hammond Pooled - RADS  
Pace Project No.: 92648448

Dear Joju Abraham:

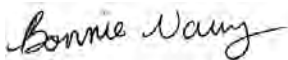
Enclosed are the analytical results for sample(s) received by the laboratory between January 24, 2023 and January 26, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,



Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Noelia Gangi, Georgia Power  
Ben Hodges, Georgia Power-CCR  
Christine Hug, Geosyntec Consultants, Inc.  
Kristen Jurinko  
Thomas Kessler, Geosyntec  
Whitney Law, Geosyntec Consultants  
Laura Midkiff, Georgia Power  
Michael Smilley, Georgia Power  
Tina Sullivan, ERM  
Anthony Szwast, Geosyntec



## REPORT OF LABORATORY ANALYSIS

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

## CERTIFICATIONS

Project: Plant Hammond Pooled - RADS  
Pace Project No.: 92648448

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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: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92648448001	HAM-HGWA-3	Water	01/23/23 16:49	01/24/23 12:38
92648448002	HAM-HGWA-2	Water	01/24/23 09:35	01/26/23 11:15
92648448003	HAM-HGWA-43D	Water	01/24/23 10:55	01/26/23 11:15
92648448004	HAM-HGWA-44D	Water	01/24/23 10:57	01/26/23 11:15
92648448005	HAM-HGWA-1	Water	01/24/23 09:35	01/26/23 11:15

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92648448001	HAM-HGWA-3	EPA 9315	RMS	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648448002	HAM-HGWA-2	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648448003	HAM-HGWA-43D	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648448004	HAM-HGWA-44D	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92648448005	HAM-HGWA-1	EPA 9315	RMS	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Plant Hammond Pooled - RADS  
Pace Project No.: 92648448

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92648448001</b>	<b>HAM-HGWA-3</b>					
EPA 9315	Radium-226	0.0154 ± 0.0951 (0.254) C:94% T:NA	pCi/L		02/20/23 10:18	
EPA 9320	Radium-228	0.296 ± 0.260 (0.535) C:94% T:91%	pCi/L		02/06/23 14:48	
Total Radium Calculation	Total Radium	0.311 ± 0.355 (0.789)	pCi/L		03/21/23 16:16	
<b>92648448002</b>	<b>HAM-HGWA-2</b>					
EPA 9315	Radium-226	0.230 ± 0.165 (0.266) C:92% T:NA	pCi/L		02/20/23 10:18	
EPA 9320	Radium-228	0.599 ± 0.364 (0.677) C:84% T:89%	pCi/L		02/08/23 14:36	
Total Radium Calculation	Total Radium	0.829 ± 0.529 (0.943)	pCi/L		03/21/23 16:16	
<b>92648448003</b>	<b>HAM-HGWA-43D</b>					
EPA 9315	Radium-226	0.304 ± 0.186 (0.279) C:95% T:NA	pCi/L		02/20/23 10:18	
EPA 9320	Radium-228	0.950 ± 0.437 (0.730) C:81% T:84%	pCi/L		02/08/23 14:36	
Total Radium Calculation	Total Radium	1.25 ± 0.623 (1.01)	pCi/L		03/21/23 16:16	
<b>92648448004</b>	<b>HAM-HGWA-44D</b>					
EPA 9315	Radium-226	0.112 ± 0.122 (0.232) C:96% T:NA	pCi/L		02/20/23 10:18	
EPA 9320	Radium-228	0.309 ± 0.319 (0.657) C:83% T:82%	pCi/L		02/08/23 14:39	
Total Radium Calculation	Total Radium	0.421 ± 0.441 (0.889)	pCi/L		03/21/23 16:16	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92648448005</b>	<b>HAM-HGWA-1</b>					
EPA 9315	Radium-226	0.0747 ± 0.114 (0.248) C:96% T:NA	pCi/L		02/20/23 10:18	
EPA 9320	Radium-228	0.474 ± 0.314 (0.587) C:84% T:86%	pCi/L		02/08/23 14:39	
Total Radium Calculation	Total Radium	0.549 ± 0.428 (0.835)	pCi/L		03/21/23 16:16	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-3</b> <b>Lab ID: 92648448001</b> Collected: 01/23/23 16:49      Received: 01/24/23 12:38      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0154 ± 0.0951 (0.254)</b> <b>C:94% T:NA</b>	pCi/L	02/20/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.296 ± 0.260 (0.535)</b> <b>C:94% T:91%</b>	pCi/L	02/06/23 14:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.311 ± 0.355 (0.789)</b>	pCi/L	03/21/23 16:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-2</b> <b>Lab ID: 92648448002</b> Collected: 01/24/23 09:35      Received: 01/26/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.230 ± 0.165 (0.266)</b> <b>C:92% T:NA</b>	pCi/L	02/20/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.599 ± 0.364 (0.677)</b> <b>C:84% T:89%</b>	pCi/L	02/08/23 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.829 ± 0.529 (0.943)</b>	pCi/L	03/21/23 16:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

**Sample: HAM-HGWA-43D**      **Lab ID: 92648448003**      Collected: 01/24/23 10:55      Received: 01/26/23 11:15      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>0.304 ± 0.186 (0.279)</b> <b>C:95% T:NA</b>	pCi/L	02/20/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.950 ± 0.437 (0.730)</b> <b>C:81% T:84%</b>	pCi/L	02/08/23 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.25 ± 0.623 (1.01)</b>	pCi/L	03/21/23 16:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

**Sample: HAM-HGWA-44D**      **Lab ID: 92648448004**      Collected: 01/24/23 10:57      Received: 01/26/23 11:15      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>0.112 ± 0.122 (0.232)</b> <b>C:96% T:NA</b>	pCi/L	02/20/23 10:18	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.309 ± 0.319 (0.657)</b> <b>C:83% T:82%</b>	pCi/L	02/08/23 14:39	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.421 ± 0.441 (0.889)</b>	pCi/L	03/21/23 16:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-1</b> <b>Lab ID: 92648448005</b> Collected: 01/24/23 09:35      Received: 01/26/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0747 ± 0.114 (0.248)</b> <b>C:96% T:NA</b>	pCi/L	02/20/23 10:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.474 ± 0.314 (0.587)</b> <b>C:84% T:86%</b>	pCi/L	02/08/23 14:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.549 ± 0.428 (0.835)</b>	pCi/L	03/21/23 16:16	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

QC Batch: 567003

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92648448001, 92648448002, 92648448003, 92648448004, 92648448005

METHOD BLANK: 2753256

Matrix: Water

Associated Lab Samples: 92648448001, 92648448002, 92648448003, 92648448004, 92648448005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0414 ± 0.0994 (0.240) C:92% T:NA	pCi/L	02/20/23 10:18	

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

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

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QC Batch:	567029	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92648448001, 92648448002, 92648448003, 92648448004, 92648448005

---

METHOD BLANK: 2753383 Matrix: Water

Associated Lab Samples: 92648448001, 92648448002, 92648448003, 92648448004, 92648448005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.482 ± 0.308 (0.572) C:92% T:84%	pCi/L	02/06/23 14:47	

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

### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

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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: Plant Hammond Pooled - RADS

Pace Project No.: 92648448

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92648448001	HAM-HGWA-3	EPA 9315	567003		
92648448002	HAM-HGWA-2	EPA 9315	567003		
92648448003	HAM-HGWA-43D	EPA 9315	567003		
92648448004	HAM-HGWA-44D	EPA 9315	567003		
92648448005	HAM-HGWA-1	EPA 9315	567003		
92648448001	HAM-HGWA-3	EPA 9320	567029		
92648448002	HAM-HGWA-2	EPA 9320	567029		
92648448003	HAM-HGWA-43D	EPA 9320	567029		
92648448004	HAM-HGWA-44D	EPA 9320	567029		
92648448005	HAM-HGWA-1	EPA 9320	567029		
92648448001	HAM-HGWA-3	Total Radium Calculation	575358		
92648448002	HAM-HGWA-2	Total Radium Calculation	575358		
92648448003	HAM-HGWA-43D	Total Radium Calculation	575358		
92648448004	HAM-HGWA-44D	Total Radium Calculation	575358		
92648448005	HAM-HGWA-1	Total Radium Calculation	575358		

### REPORT OF LABORATORY ANALYSIS

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DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

*E A Power*

Project #:

WO#: 92648448



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

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *1/24/23*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID:

*230*

Type of Ice:

Wet  Blue  None

Cooler Temp:

*4.4*

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):

*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 maps)?  Yes  No

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

		Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-includes Date/Time/ID/Analysis Matrix:	<i>W</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 SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_





DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92648448

PM: BV

Due Date: 02/14/23

CLIENT: GA-GA Power

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

pH Adjustment Log for Preserved Samples

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

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



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: GA Power	Address: Atlanta, GA	Report To: SCS Contacts	Copy To: Geosynthetic Contacts	Attention: Southern Co.	Company Name: Southern Co.
Address: Atlanta, GA	Task Code: HAM-COR-ASSMT-2023S1	Purchase Order No.:	Address:	Company Name:	Address:
Email To: SCS Contacts	Project Name: Plant Hammond Pooled Upgradient	Project Number:	Price Quote:	Price Project Manager:	Price Profile #:
Phone:	Requested Due Date/TAT: 10 Day	Project Number:	Reference:	Nicole D'Onofrio	10839
REGULATORY AGENCY		Requested Analysis Filtered (Y/N)		REGULATORY AGENCY	
<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input checked="" type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER CCR		Y/N N N N N N N N N N N N N N N N N N N N N		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input checked="" type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER CCR	
Site Location: GA		Residual Chlorine (Y/N)		Site Location: GA	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	Sample Type (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives			Analysis Test	Requested Analysis Filtered (Y/N)	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
				DATE	TIME			DATE	TIME	H <sub>2</sub> SO <sub>4</sub>						
1	HAM-HGWA-3		G	1/23/2023	1849		17	5	2	3	X	N				
2											X	N				
3											X	N				
4											X	N				
5											X	N				
6											X	N				
7											X	N				
8											X	N				
9											X	N				
10											X	N				
11											X	N				
12											X	N				

RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME	
Kwame Boadi / Geosynthetic		1/24/2023		1238		Ryan Wilton / Pace		1/24/2023		1040	
Lyan Wilton / Pace		1/24/2023		1238		Ryan Wilton / Pace		1/24/2023		1040	



DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: Georgia Power Project #:

WO#: 92648448

PM: BV Due Date: 02/09/23 CLIENT: GA-GA Power

Courier:  Commercial  Fed Ex  UPS  USPS  Other:  Client  Pace

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 1/26/23 Jm

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Cooler Temp: 1.3 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): 1.3

USDA Regulated Soil (  N/A, water sample)

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

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

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
-Includes Date/Time/ID/Analysis Matrix: <u>W6/WQ</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92648448

PM: BV

Due Date: 02/09/23

CLIENT: GA-GA Power

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

Project #

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9W-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

pH Adjustment Log for Preserved Samples

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

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



CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A: Requested Client Information: Company: GA Power, Address: Atlanta, GA, Project Name: Plant Hammond Pooled Upgrade

Section B: Required Project Information: Report To: SCS Contacts, Copy To: Geosyntec Contacts, Project Number: 10839

Section C: Invoice Information: Customer: Southern Co., Company Name: Southern Co., Address: Atlanta, GA, Project Manager: Bonnie Vang, State: GA

Main data table with columns: ITEM #, Matrix Code, Sample Type, Date, Time, Sample Temp, # of Containers, Analysis Test, Residual Chlorine, etc.

Additional Comments, Relinquished by, Accepted by, Sampler Name and Signature, Date Signed

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

April 27, 2023

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

RE: Project: Plant Hammond Pooled Upgradient  
Pace Project No.: 92648446

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between January 24, 2023 and January 26, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,



Stephanie Knott for  
Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

cc: Noelia Gangi, Georgia Power  
Ben Hodges, Georgia Power-CCR  
Christine Hug, Geosyntec Consultants, Inc.  
Kristen Jurinko  
Thomas Kessler, Geosyntec  
Whitney Law, Geosyntec Consultants  
Laura Midkiff, Georgia Power  
Michael Smilley, Georgia Power  
Tina Sullivan, ERM

Anthony Szwast, Geosyntec



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

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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: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92648446001	HAM-HGWA-3	Water	01/23/23 16:49	01/24/23 12:38
92648446002	HAM-HGWA-2	Water	01/24/23 09:35	01/26/23 11:15
92648446003	HAM-HGWA-43D	Water	01/24/23 10:55	01/26/23 11:15
92648446004	HAM-HGWA-44D	Water	01/24/23 10:57	01/26/23 11:15
92648446005	HAM-HGWA-1	Water	01/24/23 09:35	01/26/23 11:15

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92648446001	HAM-HGWA-3	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92648446002	HAM-HGWA-2	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92648446003	HAM-HGWA-43D	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92648446004	HAM-HGWA-44D	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92648446005	HAM-HGWA-1	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville

PASI-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: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92648446001</b>	<b>HAM-HGWA-3</b>					
	Performed by	Customer			02/15/23 10:56	
	pH	7.32	Std. Units		02/15/23 10:56	
EPA 6010D	Calcium	85.0	mg/L	1.0	01/30/23 23:50	M1
EPA 6020B	Barium	0.13	mg/L	0.0050	02/02/23 18:47	
EPA 6020B	Boron	0.012J	mg/L	0.040	02/02/23 18:47	
EPA 6020B	Lithium	0.0030J	mg/L	0.030	02/02/23 18:47	
SM 2540C-2015	Total Dissolved Solids	293	mg/L	25.0	01/27/23 14:04	
EPA 300.0 Rev 2.1 1993	Chloride	5.6	mg/L	1.0	01/25/23 23:05	
EPA 300.0 Rev 2.1 1993	Fluoride	0.061J	mg/L	0.10	01/25/23 23:05	
EPA 300.0 Rev 2.1 1993	Sulfate	39.5	mg/L	1.0	01/25/23 23:05	
<b>92648446002</b>	<b>HAM-HGWA-2</b>					
	Performed by	Customer			02/15/23 10:56	
	pH	5.22	Std. Units		02/15/23 10:56	
EPA 6010D	Calcium	29.4	mg/L	1.0	02/02/23 21:19	
EPA 6020B	Barium	0.088	mg/L	0.0050	02/01/23 18:48	
EPA 6020B	Beryllium	0.00016J	mg/L	0.00050	02/01/23 18:48	
EPA 6020B	Boron	0.046	mg/L	0.040	02/01/23 18:48	
EPA 6020B	Cadmium	0.00021J	mg/L	0.00050	02/01/23 18:48	
EPA 6020B	Cobalt	0.024	mg/L	0.0050	02/01/23 18:48	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	02/01/23 18:48	
SM 2540C-2015	Total Dissolved Solids	164	mg/L	25.0	01/27/23 14:08	
EPA 300.0 Rev 2.1 1993	Chloride	7.1	mg/L	1.0	01/29/23 17:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.053J	mg/L	0.10	01/29/23 17:10	
EPA 300.0 Rev 2.1 1993	Sulfate	79.7	mg/L	1.0	01/29/23 17:10	
<b>92648446003</b>	<b>HAM-HGWA-43D</b>					
	Performed by	Customer			02/15/23 10:57	
	pH	7.56	Std. Units		02/15/23 10:57	
EPA 6010D	Calcium	56.6	mg/L	1.0	02/02/23 21:33	
EPA 6020B	Barium	0.28	mg/L	0.0050	02/01/23 18:54	
EPA 6020B	Boron	0.037J	mg/L	0.040	02/01/23 18:54	
EPA 6020B	Lithium	0.0020J	mg/L	0.030	02/01/23 18:54	
EPA 6020B	Molybdenum	0.0027J	mg/L	0.010	02/01/23 18:54	
SM 2540C-2015	Total Dissolved Solids	271	mg/L	25.0	01/27/23 14:08	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	01/29/23 17:34	
EPA 300.0 Rev 2.1 1993	Fluoride	0.23	mg/L	0.10	01/29/23 17:34	
EPA 300.0 Rev 2.1 1993	Sulfate	34.7	mg/L	1.0	01/29/23 17:34	
<b>92648446004</b>	<b>HAM-HGWA-44D</b>					
	Performed by	Customer			02/15/23 10:57	
	pH	8.22	Std. Units		02/15/23 10:57	
EPA 6010D	Calcium	13.2	mg/L	1.0	02/02/23 21:38	
EPA 6020B	Arsenic	0.0027J	mg/L	0.0050	02/01/23 19:00	
EPA 6020B	Barium	0.18	mg/L	0.0050	02/01/23 19:00	
EPA 6020B	Boron	0.44	mg/L	0.040	02/01/23 19:00	
EPA 6020B	Lithium	0.064	mg/L	0.030	02/01/23 19:00	
EPA 6020B	Molybdenum	0.0026J	mg/L	0.010	02/01/23 19:00	
SM 2540C-2015	Total Dissolved Solids	363	mg/L	25.0	01/27/23 14:08	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92648446004</b>	<b>HAM-HGWA-44D</b>					
EPA 300.0 Rev 2.1 1993	Chloride	24.9	mg/L	1.0	01/31/23 01:07	
EPA 300.0 Rev 2.1 1993	Fluoride	1.3	mg/L	0.10	01/31/23 01:07	
EPA 300.0 Rev 2.1 1993	Sulfate	10.1	mg/L	1.0	01/31/23 01:07	
<b>92648446005</b>	<b>HAM-HGWA-1</b>					
	Performed by	Customer			02/15/23 10:58	
	pH	6.76	Std. Units		02/15/23 10:58	
EPA 6010D	Calcium	117	mg/L	1.0	02/02/23 21:43	
EPA 6020B	Barium	0.033	mg/L	0.0050	02/01/23 19:06	
EPA 6020B	Boron	0.015J	mg/L	0.040	02/01/23 19:06	
EPA 6020B	Lithium	0.00092J	mg/L	0.030	02/01/23 19:06	
SM 2540C-2015	Total Dissolved Solids	369	mg/L	25.0	01/27/23 14:08	
EPA 300.0 Rev 2.1 1993	Chloride	9.0	mg/L	1.0	01/31/23 01:33	
EPA 300.0 Rev 2.1 1993	Fluoride	0.089J	mg/L	0.10	01/31/23 01:33	
EPA 300.0 Rev 2.1 1993	Sulfate	48.3	mg/L	1.0	01/31/23 01:33	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

Sample: HAM-HGWA-3		Lab ID: 92648446001		Collected: 01/23/23 16:49		Received: 01/24/23 12:38		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		02/15/23 10:56		
pH	<b>7.32</b>	Std. Units			1		02/15/23 10:56		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>85.0</b>	mg/L	1.0	0.12	1	01/30/23 15:10	01/30/23 23:50	7440-70-2	M1
<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	01/30/23 12:30	02/02/23 18:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	01/30/23 12:30	02/02/23 18:47	7440-38-2	
Barium	<b>0.13</b>	mg/L	0.0050	0.00067	1	01/30/23 12:30	02/02/23 18:47	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	01/30/23 12:30	02/02/23 18:47	7440-41-7	
Boron	<b>0.012J</b>	mg/L	0.040	0.0086	1	01/30/23 12:30	02/02/23 18:47	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	01/30/23 12:30	02/02/23 18:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	01/30/23 12:30	02/02/23 18:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	01/30/23 12:30	02/02/23 18:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	01/30/23 12:30	02/02/23 18:47	7439-92-1	
Lithium	<b>0.0030J</b>	mg/L	0.030	0.00073	1	01/30/23 12:30	02/02/23 18:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	01/30/23 12:30	02/02/23 18:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	01/30/23 12:30	02/02/23 18:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	01/30/23 12:30	02/02/23 18:47	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	02/01/23 08:00	02/01/23 13:37	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>293</b>	mg/L	25.0	25.0	1		01/27/23 14:04		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>5.6</b>	mg/L	1.0	0.60	1		01/25/23 23:05	16887-00-6	
Fluoride	<b>0.061J</b>	mg/L	0.10	0.050	1		01/25/23 23:05	16984-48-8	
Sulfate	<b>39.5</b>	mg/L	1.0	0.50	1		01/25/23 23:05	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

Sample: HAM-HGWA-2		Lab ID: 92648446002		Collected: 01/24/23 09:35		Received: 01/26/23 11:15		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		02/15/23 10:56		
pH	<b>5.22</b>	Std. Units			1		02/15/23 10:56		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>29.4</b>	mg/L	1.0	0.12	1	01/31/23 17:09	02/02/23 21:19	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	02/01/23 10:17	02/01/23 18:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 10:17	02/01/23 18:48	7440-38-2	
Barium	<b>0.088</b>	mg/L	0.0050	0.00067	1	02/01/23 10:17	02/01/23 18:48	7440-39-3	
Beryllium	<b>0.00016J</b>	mg/L	0.00050	0.000054	1	02/01/23 10:17	02/01/23 18:48	7440-41-7	
Boron	<b>0.046</b>	mg/L	0.040	0.0086	1	02/01/23 10:17	02/01/23 18:48	7440-42-8	
Cadmium	<b>0.00021J</b>	mg/L	0.00050	0.00011	1	02/01/23 10:17	02/01/23 18:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 10:17	02/01/23 18:48	7440-47-3	
Cobalt	<b>0.024</b>	mg/L	0.0050	0.00039	1	02/01/23 10:17	02/01/23 18:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 10:17	02/01/23 18:48	7439-92-1	
Lithium	<b>0.0014J</b>	mg/L	0.030	0.00073	1	02/01/23 10:17	02/01/23 18:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/01/23 10:17	02/01/23 18:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 10:17	02/01/23 18:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 10:17	02/01/23 18:48	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	02/01/23 08:00	02/01/23 13:40	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>164</b>	mg/L	25.0	25.0	1		01/27/23 14:08		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>7.1</b>	mg/L	1.0	0.60	1		01/29/23 17:10	16887-00-6	
Fluoride	<b>0.053J</b>	mg/L	0.10	0.050	1		01/29/23 17:10	16984-48-8	
Sulfate	<b>79.7</b>	mg/L	1.0	0.50	1		01/29/23 17:10	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

Sample: HAM-HGWA-43D		Lab ID: 92648446003		Collected: 01/24/23 10:55		Received: 01/26/23 11:15		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		02/15/23 10:57		
pH	<b>7.56</b>	Std. Units			1		02/15/23 10:57		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>56.6</b>	mg/L	1.0	0.12	1	01/31/23 17:09	02/02/23 21:33	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	02/01/23 10:17	02/01/23 18:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 10:17	02/01/23 18:54	7440-38-2	
Barium	<b>0.28</b>	mg/L	0.0050	0.00067	1	02/01/23 10:17	02/01/23 18:54	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 10:17	02/01/23 18:54	7440-41-7	
Boron	<b>0.037J</b>	mg/L	0.040	0.0086	1	02/01/23 10:17	02/01/23 18:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 10:17	02/01/23 18:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 10:17	02/01/23 18:54	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 10:17	02/01/23 18:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 10:17	02/01/23 18:54	7439-92-1	
Lithium	<b>0.0020J</b>	mg/L	0.030	0.00073	1	02/01/23 10:17	02/01/23 18:54	7439-93-2	
Molybdenum	<b>0.0027J</b>	mg/L	0.010	0.00074	1	02/01/23 10:17	02/01/23 18:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 10:17	02/01/23 18:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 10:17	02/01/23 18:54	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	02/01/23 08:00	02/01/23 13:42	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>271</b>	mg/L	25.0	25.0	1		01/27/23 14:08		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>4.3</b>	mg/L	1.0	0.60	1		01/29/23 17:34	16887-00-6	
Fluoride	<b>0.23</b>	mg/L	0.10	0.050	1		01/29/23 17:34	16984-48-8	
Sulfate	<b>34.7</b>	mg/L	1.0	0.50	1		01/29/23 17:34	14808-79-8	

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### ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

**Sample: HAM-HGWA-44D**      **Lab ID: 92648446004**      Collected: 01/24/23 10:57      Received: 01/26/23 11:15      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	<b>Customer</b>				1		02/15/23 10:57		
pH	<b>8.22</b>	Std. Units			1		02/15/23 10:57		

**6010D ATL ICP**

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

Calcium	<b>13.2</b>	mg/L	1.0	0.12	1	01/31/23 17:09	02/02/23 21:38	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	02/01/23 10:17	02/01/23 19:00	7440-36-0	
Arsenic	<b>0.0027J</b>	mg/L	0.0050	0.0022	1	02/01/23 10:17	02/01/23 19:00	7440-38-2	
Barium	<b>0.18</b>	mg/L	0.0050	0.00067	1	02/01/23 10:17	02/01/23 19:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 10:17	02/01/23 19:00	7440-41-7	
Boron	<b>0.44</b>	mg/L	0.040	0.0086	1	02/01/23 10:17	02/01/23 19:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 10:17	02/01/23 19:00	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 10:17	02/01/23 19:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 10:17	02/01/23 19:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 10:17	02/01/23 19:00	7439-92-1	
Lithium	<b>0.064</b>	mg/L	0.030	0.00073	1	02/01/23 10:17	02/01/23 19:00	7439-93-2	
Molybdenum	<b>0.0026J</b>	mg/L	0.010	0.00074	1	02/01/23 10:17	02/01/23 19:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 10:17	02/01/23 19:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 10:17	02/01/23 19:00	7440-28-0	

**7470 Mercury**

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

Mercury	ND	mg/L	0.00020	0.00013	1	02/01/23 08:00	02/01/23 13:45	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>363</b>	mg/L	25.0	25.0	1		01/27/23 14:08		
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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>24.9</b>	mg/L	1.0	0.60	1		01/31/23 01:07	16887-00-6	
Fluoride	<b>1.3</b>	mg/L	0.10	0.050	1		01/31/23 01:07	16984-48-8	
Sulfate	<b>10.1</b>	mg/L	1.0	0.50	1		01/31/23 01:07	14808-79-8	

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### ANALYTICAL RESULTS

Project: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

Sample: HAM-HGWA-1		Lab ID: 92648446005		Collected: 01/24/23 09:35		Received: 01/26/23 11:15		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		02/15/23 10:58		
pH	<b>6.76</b>	Std. Units			1		02/15/23 10:58		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>117</b>	mg/L	1.0	0.12	1	01/31/23 17:09	02/02/23 21:43	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	02/01/23 10:17	02/01/23 19:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0022	1	02/01/23 10:17	02/01/23 19:06	7440-38-2	
Barium	<b>0.033</b>	mg/L	0.0050	0.00067	1	02/01/23 10:17	02/01/23 19:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	02/01/23 10:17	02/01/23 19:06	7440-41-7	
Boron	<b>0.015J</b>	mg/L	0.040	0.0086	1	02/01/23 10:17	02/01/23 19:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	02/01/23 10:17	02/01/23 19:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	02/01/23 10:17	02/01/23 19:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	02/01/23 10:17	02/01/23 19:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	02/01/23 10:17	02/01/23 19:06	7439-92-1	
Lithium	<b>0.00092J</b>	mg/L	0.030	0.00073	1	02/01/23 10:17	02/01/23 19:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	02/01/23 10:17	02/01/23 19:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	02/01/23 10:17	02/01/23 19:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	02/01/23 10:17	02/01/23 19:06	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	02/01/23 08:00	02/01/23 13:47	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>369</b>	mg/L	25.0	25.0	1		01/27/23 14:08		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>9.0</b>	mg/L	1.0	0.60	1		01/31/23 01:33	16887-00-6	
Fluoride	<b>0.089J</b>	mg/L	0.10	0.050	1		01/31/23 01:33	16984-48-8	
Sulfate	<b>48.3</b>	mg/L	1.0	0.50	1		01/31/23 01:33	14808-79-8	

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### QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

QC Batch: 752651

Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A

Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92648446001

METHOD BLANK: 3910594

Matrix: Water

Associated Lab Samples: 92648446001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	01/30/23 23:40	

LABORATORY CONTROL SAMPLE: 3910595

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: 3910596 3910597

Parameter	Units	3910596		3910597		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	85.0	1	80.4	83.9	-467	-112	75-125	4	20	M1

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### QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

QC Batch:	752956	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92648446002, 92648446003, 92648446004, 92648446005

METHOD BLANK: 3912342 Matrix: Water  
Associated Lab Samples: 92648446002, 92648446003, 92648446004, 92648446005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	02/02/23 20:40	

LABORATORY CONTROL SAMPLE: 3912343

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: 3912344 3912345

Parameter	Units	3912344		3912345		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	1	1	4.1	4.3	96	117	75-125	5	20	

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### QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

QC Batch: 752599 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92648446001

METHOD BLANK: 3910295 Matrix: Water  
Associated Lab Samples: 92648446001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/02/23 18:35	
Arsenic	mg/L	ND	0.0050	0.0022	02/02/23 18:35	
Barium	mg/L	ND	0.0050	0.00067	02/02/23 18:35	
Beryllium	mg/L	ND	0.00050	0.000054	02/02/23 18:35	
Boron	mg/L	ND	0.040	0.0086	02/02/23 18:35	
Cadmium	mg/L	ND	0.00050	0.00011	02/02/23 18:35	
Chromium	mg/L	ND	0.0050	0.0011	02/02/23 18:35	
Cobalt	mg/L	ND	0.0050	0.00039	02/02/23 18:35	
Lead	mg/L	ND	0.0010	0.00089	02/02/23 18:35	
Lithium	mg/L	ND	0.030	0.00073	02/02/23 18:35	
Molybdenum	mg/L	ND	0.010	0.00074	02/02/23 18:35	
Selenium	mg/L	ND	0.0050	0.0014	02/02/23 18:35	
Thallium	mg/L	ND	0.0010	0.00018	02/02/23 18:35	

LABORATORY CONTROL SAMPLE: 3910296

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	0.098	98	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.0	104	80-120	
Cadmium	mg/L	0.1	0.10	101	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	0.098	98	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3910297 3910298

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

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**QUALITY CONTROL DATA**

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

Parameter	Units	3910297		3910298		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		92648446001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.13	0.1	0.1	0.22	0.22	97	90	75-125	3	20		
Beryllium	mg/L	ND	0.1	0.1	0.089	0.089	89	89	75-125	0	20		
Boron	mg/L	0.012J	1	1	0.92	0.93	91	92	75-125	2	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	3	20		
Chromium	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	3	20		
Cobalt	mg/L	ND	0.1	0.1	0.098	0.097	98	97	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.097	0.095	97	95	75-125	2	20		
Lithium	mg/L	0.0030J	0.1	0.1	0.092	0.091	89	88	75-125	1	20		
Molybdenum	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Thallium	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20		

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### QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

QC Batch: 753097 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92648446002, 92648446003, 92648446004, 92648446005

METHOD BLANK: 3912787 Matrix: Water  
Associated Lab Samples: 92648446002, 92648446003, 92648446004, 92648446005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	02/01/23 17:13	
Arsenic	mg/L	ND	0.0050	0.0022	02/01/23 17:13	
Barium	mg/L	ND	0.0050	0.00067	02/01/23 17:13	
Beryllium	mg/L	ND	0.00050	0.000054	02/01/23 17:13	
Boron	mg/L	ND	0.040	0.0086	02/01/23 17:13	
Cadmium	mg/L	ND	0.00050	0.00011	02/01/23 17:13	
Chromium	mg/L	ND	0.0050	0.0011	02/01/23 17:13	
Cobalt	mg/L	ND	0.0050	0.00039	02/01/23 17:13	
Lead	mg/L	ND	0.0010	0.00089	02/01/23 17:13	
Lithium	mg/L	ND	0.030	0.00073	02/01/23 17:13	
Molybdenum	mg/L	ND	0.010	0.00074	02/01/23 17:13	
Selenium	mg/L	ND	0.0050	0.0014	02/01/23 17:13	
Thallium	mg/L	ND	0.0010	0.00018	02/01/23 17:13	

LABORATORY CONTROL SAMPLE: 3912788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.094	94	80-120	
Lead	mg/L	0.1	0.10	103	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.10	104	80-120	
Thallium	mg/L	0.1	0.10	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3912789 3912790

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649067001	Spike Conc.	Spike Conc.	Conc.								
Antimony	mg/L	3.4 ug/L	0.1	0.1	0.11	0.11	105	102	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	99	75-125	1	20		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

Parameter	Units	3912789		3912790		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649067001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	47.9 ug/L	0.1	0.1	0.15	0.15	104	99	75-125	3	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Boron	mg/L	ND	1	1	1.0	1.0	103	102	75-125	1	20		
Cadmium	mg/L	1.2 ug/L	0.1	0.1	0.10	0.097	99	96	75-125	3	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	104	100	75-125	4	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	98	75-125	3	20		
Lead	mg/L	81.8 ug/L	0.1	0.1	0.19	0.18	105	101	75-125	2	20		
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	2	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20		

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### QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

QC Batch: 752854

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92648446001, 92648446002, 92648446003, 92648446004, 92648446005

METHOD BLANK: 3911513

Matrix: Water

Associated Lab Samples: 92648446001, 92648446002, 92648446003, 92648446004, 92648446005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	02/01/23 12:44	

LABORATORY CONTROL SAMPLE: 3911514

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3911518 3911519

Parameter	Units	3911518		3911519		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	0.0022	0.0022	88	88	75-125	0	20	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

QC Batch: 752254 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: 92648446001, 92648446002, 92648446003, 92648446004, 92648446005

METHOD BLANK: 3908925 Matrix: Water  
Associated Lab Samples: 92648446001, 92648446002, 92648446003, 92648446004, 92648446005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	01/27/23 14:00	

LABORATORY CONTROL SAMPLE: 3908926

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	371	93	80-120	

SAMPLE DUPLICATE: 3908927

Parameter	Units	92648636001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	71.0		10	

SAMPLE DUPLICATE: 3908928

Parameter	Units	92649038017 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	146	147	1	10	

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### QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

QC Batch: 751618 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: 92648446001

METHOD BLANK: 3905644 Matrix: Water  
Associated Lab Samples: 92648446001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	01/25/23 18:08	
Fluoride	mg/L	ND	0.10	0.050	01/25/23 18:08	
Sulfate	mg/L	ND	1.0	0.50	01/25/23 18:08	

LABORATORY CONTROL SAMPLE: 3905645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.2	106	90-110	
Fluoride	mg/L	2.5	2.7	110	90-110	
Sulfate	mg/L	50	53.3	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3905646 3905647

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92648208001	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	8.7	50	50	57.0	59.0	97	100	90-110	3	10		
Fluoride	mg/L	0.47	2.5	2.5	2.9	3.0	98	102	90-110	3	10		
Sulfate	mg/L	3.9	50	50	52.2	54.1	97	100	90-110	4	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3905648 3905649

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92648324002	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	16.9	50	50	66.5	67.2	99	101	90-110	1	10		
Fluoride	mg/L	0.066J	2.5	2.5	2.6	2.6	101	101	90-110	0	10		
Sulfate	mg/L	19.0	50	50	69.4	69.8	101	102	90-110	1	10		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

QC Batch: 752456 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: 92648446002, 92648446003

METHOD BLANK: 3909761 Matrix: Water

Associated Lab Samples: 92648446002, 92648446003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	01/29/23 05:16	
Fluoride	mg/L	ND	0.10	0.050	01/29/23 05:16	
Sulfate	mg/L	ND	1.0	0.50	01/29/23 05:16	

LABORATORY CONTROL SAMPLE: 3909762

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.7	101	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Sulfate	mg/L	50	50.7	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3909763 3909764

Parameter	Units	92649224020		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual	
Chloride	mg/L	ND	50	50	50.7	51.2	101	102	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	105	105	90-110	0	10		
Sulfate	mg/L	ND	50	50	50.3	50.7	101	101	90-110	1	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3909765 3909766

Parameter	Units	92649038010		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual	
Chloride	mg/L	6.0	50	50	57.0	57.6	102	103	90-110	1	10		
Fluoride	mg/L	0.052J	2.5	2.5	2.6	2.6	100	102	90-110	1	10		
Sulfate	mg/L	228	50	50	269	270	83	84	90-110	0	10 M1		

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### QUALITY CONTROL DATA

Project: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

QC Batch: 752690 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: 92648446004, 92648446005

METHOD BLANK: 3910852 Matrix: Water  
Associated Lab Samples: 92648446004, 92648446005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	01/30/23 22:32	
Fluoride	mg/L	ND	0.10	0.050	01/30/23 22:32	
Sulfate	mg/L	ND	1.0	0.50	01/30/23 22:32	

LABORATORY CONTROL SAMPLE: 3910853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.6	99	90-110	
Fluoride	mg/L	2.5	2.6	104	90-110	
Sulfate	mg/L	50	49.7	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3910854 3910855

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92648913001 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	2.7	50	50	52.0	52.7	99	100	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	98	100	90-110	1	10		
Sulfate	mg/L	ND	50	50	48.5	49.4	97	99	90-110	2	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3910856 3910857

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649042009 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	ND	50	50	51.0	51.2	102	102	90-110	0	10		
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	103	104	90-110	1	10		
Sulfate	mg/L	ND	50	50	50.4	50.7	101	101	90-110	1	10		

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## QUALIFIERS

Project: Plant Hammond Pooled Upgradien

Pace Project No.: 92648446

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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: Plant Hammond Pooled Upgradien  
Pace Project No.: 92648446

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92648446001	HAM-HGWA-3				
92648446002	HAM-HGWA-2				
92648446003	HAM-HGWA-43D				
92648446004	HAM-HGWA-44D				
92648446005	HAM-HGWA-1				
92648446001	HAM-HGWA-3	EPA 3010A	752651	EPA 6010D	752696
92648446002	HAM-HGWA-2	EPA 3010A	752956	EPA 6010D	753082
92648446003	HAM-HGWA-43D	EPA 3010A	752956	EPA 6010D	753082
92648446004	HAM-HGWA-44D	EPA 3010A	752956	EPA 6010D	753082
92648446005	HAM-HGWA-1	EPA 3010A	752956	EPA 6010D	753082
92648446001	HAM-HGWA-3	EPA 3005A	752599	EPA 6020B	752695
92648446002	HAM-HGWA-2	EPA 3005A	753097	EPA 6020B	753234
92648446003	HAM-HGWA-43D	EPA 3005A	753097	EPA 6020B	753234
92648446004	HAM-HGWA-44D	EPA 3005A	753097	EPA 6020B	753234
92648446005	HAM-HGWA-1	EPA 3005A	753097	EPA 6020B	753234
92648446001	HAM-HGWA-3	EPA 7470A	752854	EPA 7470A	753068
92648446002	HAM-HGWA-2	EPA 7470A	752854	EPA 7470A	753068
92648446003	HAM-HGWA-43D	EPA 7470A	752854	EPA 7470A	753068
92648446004	HAM-HGWA-44D	EPA 7470A	752854	EPA 7470A	753068
92648446005	HAM-HGWA-1	EPA 7470A	752854	EPA 7470A	753068
92648446001	HAM-HGWA-3	SM 2540C-2015	752254		
92648446002	HAM-HGWA-2	SM 2540C-2015	752254		
92648446003	HAM-HGWA-43D	SM 2540C-2015	752254		
92648446004	HAM-HGWA-44D	SM 2540C-2015	752254		
92648446005	HAM-HGWA-1	SM 2540C-2015	752254		
92648446001	HAM-HGWA-3	EPA 300.0 Rev 2.1 1993	751618		
92648446002	HAM-HGWA-2	EPA 300.0 Rev 2.1 1993	752456		
92648446003	HAM-HGWA-43D	EPA 300.0 Rev 2.1 1993	752456		
92648446004	HAM-HGWA-44D	EPA 300.0 Rev 2.1 1993	752690		
92648446005	HAM-HGWA-1	EPA 300.0 Rev 2.1 1993	752690		

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DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Knoxville

Sample Condition Upon Receipt

Client Name:

*E A Power*

Project #:

WO#: 92648446



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

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *1/24/23*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:

IR Gun ID: *230* Type of Ice:  Wet  Blue  None

Cooler Temp: *4.4* 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): *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 maps)?  Yes  No

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

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

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

Project #

**WO# : 92648446**

PM: BV

Due Date: 02/07/23

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

CLIENT: GA-GA Power

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

\*\*\*Check all unpreserved Nitrates for chlorine

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

**pH Adjustment Log for Preserved Samples**

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

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



# CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information: Company: GA Power Address: Atlanta, GA	<b>Section B</b> Required Project Information: Report To: SCS Contacts Copy To: Geosynlec Contacts Task Code: HAM-CCR-ASSMNT-2023S1
<b>Section C</b> Invoice Information: Attention: Southern Co. Company Name: Address: P.O. Box: Reference: Project Name: Project Profile #: 10839	<b>REGULATORY AGENCY</b> <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER CCR

<b>Section D</b> Required Clean Information Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WATER WW WASTE WATER P PRODUCT SOLIDID SL OIL OK WPE W AIR AR AIR OT OTHER TS Sample IDs MUST BE UNIQUE (A-Z, 0-9 / -)	Requested Analysis Filtered (Y/N) Chloride, Fluoride, Sulfate N N N N Full App. III and IV metals N N N N RAD 228/228 N N N N TDS N N N N
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------

ITEM #	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives			Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	pH = 7.32	G2648446
			DATE	TIME			DATE	TIME	H <sub>2</sub> SO <sub>4</sub>					
1	HAM-HGWA-3	WG	1/23/2023	1649		5								
2						2								
3						3								
4														
5														
6														
7														
8														
9														
10														
11														
12														

<b>ADDITIONAL COMMENTS</b> I-LAM-CCR-ASSMNT-2023S1 Kwon Heejae/Geosynlec Lyan William/Pace	<b>REMOVED BY / AFFILIATION</b> Kwon Heejae/Geosynlec Lyan William/Pace Date: 1/23/2023 Time: 12:36 Accepted by: Lyan William/Pace Date: 1/23/2023 Time: 10:40
-----------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<b>SAMPLER NAME AND SIGNATURE</b> PRINT Name of SAMPLER: [Signature] SIGNATURE of SAMPLER: [Signature]	DATE Signed (MM/DD/YY): 1/23/23 Geosynlec Consultants, Inc.
--------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------

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

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





DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mecklenburg

WO#: 92648446

PM: BV Due Date: 02/07/23  
CLIENT: GA-GA Power

Sample Condition Upon Receipt

Client Name: Georgia Power Project #:

Courier:  Fed Ex  UPS  USPS  Client  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

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

Cooler Temp Corrected (°C): 1.3

USDA Regulated Soil (  N/A, water sample)

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

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

Date/Initials Person Examining Contents: 1/26/23 Jm

Biological Tissue Frozen?  Yes  No  N/A

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

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
-Includes Date/Time/ID/Analysis Matrix:	W6/W6		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92648446

PM: BV

Due Date: 02/07/23

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG6U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1																													
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pH Adjustment Log for Preserved Samples

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

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



### CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: 1 of 1
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.		<b>REGULATORY AGENCY</b> <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER CCR
Address: Atlanta, GA		Copy To: Geosyntec Contacts		Company Name:		
Email To: SCS Contacts		Purchase Order No.:		Address:		Site Location: <u>GA</u> STATE: <u>GA</u>
Phone:	Fax:	Project Name: Plant Hammond Pooled Upgradient		Pace Quote Reference: Bonnie Vang		
Requested Due Date/TAT: 10 Day		Project Number:		Pace Project Manager: 10839		

ITEM #	Section D Required Client Information  SAMPLE ID (A-Z, 0-9 / .) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOL/SOLID SL OIL OL WPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test Chloride Fluoride Sulfate Full App. III and IV metals RAD 226/228 TDS	Residual Chlorine (Y/N)	Pace Project No / Lab I.D.					
					COMPOSITE		COMPOSITE				Unpreserved H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub>	Methanol				Other	N	N	N	N
					DATE	TIME	DATE	TIME																
1	HAM-HGWA-2		WG	G	1/24/2023	0935			16	5	2	3					X	X	X	X	N	002 pH = 5.22		
2	HAM-HGWA-43D		WG	G	1/24/2023	1055			18	6	2	3					X	X	X	X	N	003 pH = 7.56		
3	HAM-HGWA-44D		WG	G	1/24/2023	1057			15	6	2	3					X	X	X	X	N	004 pH = 8.22		
4	<del>HAM-HGWA-4-1</del>		WT	G	<del>1/24/2023</del>	<del>1057</del>			<del>16</del>	<del>5</del>	<del>2</del>	<del>3</del>					<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>N</del>	<del>005 pH = 6.76</del>		
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Task Code: HAM-CCR-ASSMT-202351	Thomas Hester / Geosyntec	1/24/23	1100	Ryan Williams / Pace	1/26/23	1435	
	Kyle / Geosyntec	1/24/23	1115	Ryan Williams / Pace	1/26/23	1435	

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Coolbox Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Thomas Hester / Geosyntec Consultants, Inc.					
SIGNATURE of SAMPLER: <i>[Signature]</i>		DATE Signed (MM/DD/YY): 1/24/2023			

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

# SURFACE WATER (JANUARY 2023)

February 14, 2023

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.: 92649594

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on January 31, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

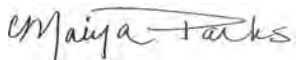
The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

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

Rev. 1 - This replaces the February 8, 2023 final report, see Project Narrative.

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  
Laura Midkiff, Georgia Power  
Tina Sullivan, ERM



## REPORT OF LABORATORY ANALYSIS

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

## CERTIFICATIONS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649594

---

### **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

---

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649594

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92649594001	HAM-AP2-Up	Water	01/30/23 12:25	01/31/23 14:24
92649594002	HAM-AP2-Mid	Water	01/30/23 12:05	01/31/23 14:24
92649594003	HAM-AP2-Down	Water	01/30/23 11:11	01/31/23 14:24

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649594

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92649594001	HAM-AP2-Up	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	3	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92649594002	HAM-AP2-Mid	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	3	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92649594003	HAM-AP2-Down	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	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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## PROJECT NARRATIVE

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649594

---

**Date:** February 14, 2023

Georgia Power EQulS Database Manager requested Pace Project Manager correct to each Sample ID from:

"AP2 Up" to "HAM-AP2-UP"

"AP2 Mid" to "HAM-AP2-MID"

"AP2 Down" to "HAM-AP2-DOWN"

These updates ensure the sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQulS database.

## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report  
Pace Project No.: 92649594

Sample: HAM-AP2-Up	Lab ID: 92649594001	Collected: 01/30/23 12:25	Received: 01/31/23 14:24	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	2.2	mg/L	0.20	1	02/02/23 12:14	02/07/23 14:30	7440-09-7	
Sodium	1.6	mg/L	1.0	1	02/02/23 12:14	02/07/23 14:30	7440-23-5	
Calcium	17.4	mg/L	1.0	1	02/02/23 12:14	02/07/23 14:30	7440-70-2	
Magnesium	2.6	mg/L	0.050	1	02/02/23 12:14	02/07/23 14:30	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	02/01/23 10:17	02/01/23 19:18	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/01/23 10:17	02/01/23 19:18	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	75.0	mg/L	25.0	1		02/02/23 19:20		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	45.7	mg/L	5.0	1		02/01/23 12:08		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		02/01/23 12:08		
Alkalinity, Total as CaCO3	45.7	mg/L	5.0	1		02/01/23 12:08		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	1.1	mg/L	1.0	1		02/02/23 16:44	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/02/23 16:44	16984-48-8	
Sulfate	6.3	mg/L	1.0	1		02/02/23 16:44	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report  
Pace Project No.: 92649594

Sample: HAM-AP2-Mid	Lab ID: 92649594002	Collected: 01/30/23 12:05	Received: 01/31/23 14:24	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	1.4	mg/L	0.20	1	02/02/23 12:14	02/07/23 14:35	7440-09-7	
Sodium	1.5	mg/L	1.0	1	02/02/23 12:14	02/07/23 14:35	7440-23-5	
Calcium	15.4	mg/L	1.0	1	02/02/23 12:14	02/07/23 14:35	7440-70-2	
Magnesium	2.0	mg/L	0.050	1	02/02/23 12:14	02/07/23 14:35	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	02/01/23 10:17	02/01/23 19:36	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/01/23 10:17	02/01/23 19:36	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	76.0	mg/L	25.0	1		02/02/23 19:20		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO <sub>3</sub> )	41.4	mg/L	5.0	1		02/01/23 12:28		
Alkalinity, Carbonate (CaCO <sub>3</sub> )	ND	mg/L	5.0	1		02/01/23 12:28		
Alkalinity, Total as CaCO <sub>3</sub>	41.4	mg/L	5.0	1		02/01/23 12:28		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	1.3	mg/L	1.0	1		02/02/23 17:09	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/02/23 17:09	16984-48-8	
Sulfate	7.3	mg/L	1.0	1		02/02/23 17:09	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649594

Sample: HAM-AP2-Down	Lab ID: 92649594003	Collected: 01/30/23 11:11	Received: 01/31/23 14:24	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	1.5	mg/L	0.20	1	02/02/23 12:14	02/07/23 14:39	7440-09-7	
Sodium	1.5	mg/L	1.0	1	02/02/23 12:14	02/07/23 14:39	7440-23-5	
Calcium	14.7	mg/L	1.0	1	02/02/23 12:14	02/07/23 14:39	7440-70-2	
Magnesium	2.1	mg/L	0.050	1	02/02/23 12:14	02/07/23 14:39	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	02/01/23 10:17	02/01/23 19:42	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/01/23 10:17	02/01/23 19:42	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	96.0	mg/L	25.0	1		02/02/23 19:20		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	38.8	mg/L	5.0	1		02/01/23 12:48		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		02/01/23 12:48		
Alkalinity, Total as CaCO3	38.8	mg/L	5.0	1		02/01/23 12:48		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	1.2	mg/L	1.0	1		02/02/23 18:26	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/02/23 18:26	16984-48-8	M1
Sulfate	7.0	mg/L	1.0	1		02/02/23 18:26	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.: 92649594

QC Batch: 753463 Analysis Method: EPA 6010D  
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92649594001, 92649594002, 92649594003

METHOD BLANK: 3914676 Matrix: Water  
Associated Lab Samples: 92649594001, 92649594002, 92649594003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	02/07/23 14:20	
Magnesium	mg/L	ND	0.050	02/07/23 14:20	
Potassium	mg/L	ND	0.20	02/07/23 14:20	
Sodium	mg/L	ND	1.0	02/07/23 14:20	

LABORATORY CONTROL SAMPLE: 3914677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	.96J	96	80-120	
Magnesium	mg/L	1	0.98	98	80-120	
Potassium	mg/L	1	1.1	107	80-120	
Sodium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3914678 3914679

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649600001 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	10.5	1	1	12.1	11.4	154	87	75-125	6	20 M1
Magnesium	mg/L	2.8	1	1	3.8	3.7	100	82	75-125	5	20
Potassium	mg/L	2.8	1	1	3.4	3.4	61	60	75-125	0	20 M1
Sodium	mg/L	ND	1	1	5.3	4.9J	137	105	75-125		20 M1

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

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond-Revised Report  
Pace Project No.: 92649594

QC Batch: 753097 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92649594001, 92649594002, 92649594003

METHOD BLANK: 3912787 Matrix: Water  
Associated Lab Samples: 92649594001, 92649594002, 92649594003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	02/01/23 17:13	
Cobalt	mg/L	ND	0.0050	02/01/23 17:13	

LABORATORY CONTROL SAMPLE: 3912788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	1.0	101	80-120	
Cobalt	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3912789 3912790

Parameter	Units	92649067001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	1.0	1.0	103	102	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	98	75-125	3	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.: 92649594

QC Batch: 753439 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: 92649594001, 92649594002, 92649594003

METHOD BLANK: 3914561 Matrix: Water  
Associated Lab Samples: 92649594001, 92649594002, 92649594003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	02/02/23 19:13	

LABORATORY CONTROL SAMPLE: 3914562

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	427	107	80-120	

SAMPLE DUPLICATE: 3914563

Parameter	Units	92649377017 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	188	204	8	10	

SAMPLE DUPLICATE: 3914564

Parameter	Units	92649235025 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	433	458	6	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.: 92649594

QC Batch: 753106 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92649594001, 92649594002, 92649594003

METHOD BLANK: 3912854 Matrix: Water

Associated Lab Samples: 92649594001, 92649594002, 92649594003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	02/01/23 11:49	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	02/01/23 11:49	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	02/01/23 11:49	

LABORATORY CONTROL SAMPLE: 3912855

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.4	99	80-120	

LABORATORY CONTROL SAMPLE: 3912856

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	48.8	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3912857 3912858

Parameter	Units	3912857		3912858		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	45.7	50	50	94.7	98	105	80-120	4	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3912859 3912860

Parameter	Units	3912859		3912860		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	41.4	50	50	91.0	99	102	80-120	2	25	

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### QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond-Revised Report  
Pace Project No.: 92649594

QC Batch: 753289 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: 92649594001, 92649594002, 92649594003

METHOD BLANK: 3913938 Matrix: Water  
Associated Lab Samples: 92649594001, 92649594002, 92649594003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	02/02/23 11:08	
Fluoride	mg/L	ND	0.10	02/02/23 11:08	
Sulfate	mg/L	ND	1.0	02/02/23 11:08	

LABORATORY CONTROL SAMPLE: 3913939

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	54.2	108	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	53.0	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3913940 3913941

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649318006	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	ND	50	50	50	53.2	54.3	106	109	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.7	2.7	107	107	90-110	0	10	
Sulfate	mg/L	ND	50	50	50	52.1	53.1	104	106	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3913942 3913943

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649594003	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	1.2	50	50	50	55.0	54.8	108	107	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.8	2.8	111	110	90-110	0	10 M1	
Sulfate	mg/L	7.0	50	50	50	60.8	60.5	108	107	90-110	0	10	

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### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649594

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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: Plant Hammond-CCR Ash Pond-Revised Report  
Pace Project No.: 92649594

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92649594001	HAM-AP2-Up	EPA 3010A	753463	EPA 6010D	753528
92649594002	HAM-AP2-Mid	EPA 3010A	753463	EPA 6010D	753528
92649594003	HAM-AP2-Down	EPA 3010A	753463	EPA 6010D	753528
92649594001	HAM-AP2-Up	EPA 3005A	753097	EPA 6020B	753234
92649594002	HAM-AP2-Mid	EPA 3005A	753097	EPA 6020B	753234
92649594003	HAM-AP2-Down	EPA 3005A	753097	EPA 6020B	753234
92649594001	HAM-AP2-Up	SM 2540C-2015	753439		
92649594002	HAM-AP2-Mid	SM 2540C-2015	753439		
92649594003	HAM-AP2-Down	SM 2540C-2015	753439		
92649594001	HAM-AP2-Up	SM 2320B-2011	753106		
92649594002	HAM-AP2-Mid	SM 2320B-2011	753106		
92649594003	HAM-AP2-Down	SM 2320B-2011	753106		
92649594001	HAM-AP2-Up	EPA 300.0 Rev 2.1 1993	753289		
92649594002	HAM-AP2-Mid	EPA 300.0 Rev 2.1 1993	753289		
92649594003	HAM-AP2-Down	EPA 300.0 Rev 2.1 1993	753289		

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b>		<b>Section B</b>		<b>Section C</b>	
<b>Required Client Information:</b>		<b>Required Project Information:</b>		<b>Invoice Information:</b>	
Company:	ARCADIS - Atlanta	Report To:	Kristen Juriko; Ben Hodges	Attention:	Kristen Juriko
Address:	2839 Paces Ferry Rd Atlanta, GA 30339	Copy To:	Warren Johnson	Company Name:	GPC
Email:	Warren.Johnson@arcadis.com	Purchase Order #:	SCS10392776	Address:	
Phone:	878.496.5298	Project Name:	Plant Hammond - AP2	Pace Quote:	
Requested Due Date:	5 day TAT	Project #:		Pace Project Manager:	Mevia.Parks@gpc-silabs.com
				Pace Profile #:	2239
				Regulatory Agency:	GA

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9, /, -) Sample IDs must be unique</small>	MATRIX CODE <small>(see valid codes to left)</small>	SAMPLE TYPE <small>(G=GRAB C=COMP)</small>	COLLECTED		DATE	TIME	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	Preservatives							Analyses Test	Residual Chlorine (Y/N)							
				START	END			DATE	TIME		Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol			Other						
1	AP2 UP	WS	G	1/30/2023	1225					3	2	1							X	X	X					
2	AP2 MD	WS	G	1/30/2023	1205					3	2	1							X	X	X					
3	AP2 Down	WS	G	1/30/2023	1111					3	2	1							X	X	X					
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										

<b>ADDITIONAL COMMENTS</b>		<b>RELINQUISHED BY / AFFILIATION</b>		<b>DATE</b>	<b>TIME</b>	<b>ACCEPTED BY / AFFILIATION</b>		<b>DATE</b>	<b>TIME</b>	<b>SAMPLE CONDITIONS</b>			
CCR Appendix III - B, Ca, Cl, F, Sulfide, Total Dissolved Solids (TDS)		Garrett Grabowski / Arcadis		01/31/2023	1429	Mevia Parks		1/31/23	1429	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Major Ions - Mg, Na, K, total alkalinity, bicarbonate alkalinity													

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: \_\_\_\_\_

SIGNATURE of SAMPLER:

Garrett Grabowski

DATE Signed: 01/30/2023

WO#: 92649594

92649594



DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: Arcadis

Project #:

WO#: 92649594

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

PM: MP Due Date: 02/08/23

CLIENT: GA-ArcadAtI

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 1/31/23 [initials]

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID: 214

Type of Ice:  Wet  Blue  None

Cooler Temp: 5.1

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

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 5.2

USDA Regulated Soil (  N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_

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

Project Manager SRF Review: \_\_\_\_\_

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



DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

**WO# : 92649594**

PM: MP

Due Date: 02/08/23

CLIENT: GA-ArcadAtI

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

**pH Adjustment Log for Preserved Samples**

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

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

February 14, 2023

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.: 92649600

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on January 31, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

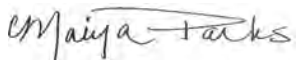
The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

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

Rev. 1 - This replaces the February 8, 2023 final report, see Project Narrative.

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  
Laura Midkiff, Georgia Power  
Tina Sullivan, ERM



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649600

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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

---

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649600

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92649600001	HAM-H+0.25	Water	01/30/23 11:30	01/31/23 14:24
92649600002	HAM-H+0.35	Water	01/30/23 11:20	01/31/23 14:24
92649600003	HAM-H+0.75	Water	01/30/23 11:00	01/31/23 14:24

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649600

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92649600001	HAM-H+0.25	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	3	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92649600002	HAM-H+0.35	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	3	PASI-A
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
92649600003	HAM-H+0.75	EPA 6010D	DRB	4	PASI-GA
		EPA 6020B	CW1	2	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	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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## PROJECT NARRATIVE

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649600

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**Date:** February 14, 2023

Georgia Power EQUIS Database Manager requested Pace Project Manager add "HAM-" to each Sample ID.

These updates ensure the sample nomenclature is followed on final PDF and EDD for successful upload of laboratory data into the Georgia Power EQUIS database.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report  
Pace Project No.: 92649600

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: HAM-H+0.25      Lab ID: 92649600001      Collected: 01/30/23 11:30      Received: 01/31/23 14:24      Matrix: Water</b>								
<b>6010D ATL ICP</b>								
Analytical Method: EPA 6010D    Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	<b>2.8</b>	mg/L	1.0	5	02/02/23 12:14	02/07/23 14:44	7440-09-7	M1
Sodium	ND	mg/L	5.0	5	02/02/23 12:14	02/07/23 14:44	7440-23-5	M1
Calcium	<b>10.5</b>	mg/L	5.0	5	02/02/23 12:14	02/07/23 14:44	7440-70-2	M1
Magnesium	<b>2.8</b>	mg/L	0.25	5	02/02/23 12:14	02/07/23 14:44	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	02/01/23 10:17	02/01/23 19:48	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/01/23 10:17	02/01/23 19:48	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	<b>135</b>	mg/L	25.0	1		02/02/23 19:20		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	<b>33.1</b>	mg/L	5.0	1		02/01/23 13:04		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		02/01/23 13:04		
Alkalinity, Total as CaCO3	<b>33.1</b>	mg/L	5.0	1		02/01/23 13:04		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	<b>4.4</b>	mg/L	1.0	1		02/02/23 19:42	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/02/23 19:42	16984-48-8	
Sulfate	<b>5.8</b>	mg/L	1.0	1		02/02/23 19:42	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649600

Sample: HAM-H+0.35	Lab ID: 92649600002	Collected: 01/30/23 11:20	Received: 01/31/23 14:24	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	1.9	mg/L	0.20	1	02/02/23 12:14	02/07/23 15:03	7440-09-7	
Sodium	4.1	mg/L	1.0	1	02/02/23 12:14	02/07/23 15:03	7440-23-5	
Calcium	10.8	mg/L	1.0	1	02/02/23 12:14	02/07/23 15:03	7440-70-2	
Magnesium	2.7	mg/L	0.050	1	02/02/23 12:14	02/07/23 15:03	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Boron	ND	mg/L	0.040	1	02/01/23 10:17	02/01/23 19:54	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/01/23 10:17	02/01/23 19:54	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	57.0	mg/L	25.0	1		02/02/23 19:20		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	33.4	mg/L	5.0	1		02/01/23 13:11		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		02/01/23 13:11		
Alkalinity, Total as CaCO3	33.4	mg/L	5.0	1		02/01/23 13:11		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	4.3	mg/L	1.0	1		02/02/23 20:08	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/02/23 20:08	16984-48-8	
Sulfate	5.8	mg/L	1.0	1		02/02/23 20:08	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond-Revised Report  
Pace Project No.: 92649600

Sample: HAM-H+0.75	Lab ID: 92649600003	Collected: 01/30/23 11:00	Received: 01/31/23 14:24	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	1.9	mg/L	0.20	1	02/02/23 12:14	02/07/23 15:33	7440-09-7	
Sodium	4.5	mg/L	1.0	1	02/02/23 12:14	02/07/23 15:33	7440-23-5	
Calcium	10.3	mg/L	1.0	1	02/02/23 12:14	02/07/23 15:33	7440-70-2	
Magnesium	2.6	mg/L	0.050	1	02/02/23 12:14	02/07/23 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	ND	mg/L	0.040	1	02/01/23 10:17	02/01/23 20:00	7440-42-8	
Cobalt	ND	mg/L	0.0050	1	02/01/23 10:17	02/01/23 20:00	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	166	mg/L	25.0	1		02/02/23 19:20		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity, Bicarbonate (CaCO <sub>3</sub> )	33.6	mg/L	5.0	1		02/01/23 13:17		
Alkalinity, Carbonate (CaCO <sub>3</sub> )	ND	mg/L	5.0	1		02/01/23 13:17		
Alkalinity, Total as CaCO <sub>3</sub>	33.6	mg/L	5.0	1		02/01/23 13:17		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0 Rev 2.1 1993								
Pace Analytical Services - Asheville								
Chloride	4.3	mg/L	1.0	1		02/02/23 20:33	16887-00-6	
Fluoride	ND	mg/L	0.10	1		02/02/23 20:33	16984-48-8	
Sulfate	6.7	mg/L	1.0	1		02/02/23 20:33	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.: 92649600

QC Batch:	753463	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92649600001, 92649600002, 92649600003

METHOD BLANK: 3914676 Matrix: Water

Associated Lab Samples: 92649600001, 92649600002, 92649600003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	02/07/23 14:20	
Magnesium	mg/L	ND	0.050	02/07/23 14:20	
Potassium	mg/L	ND	0.20	02/07/23 14:20	
Sodium	mg/L	ND	1.0	02/07/23 14:20	

LABORATORY CONTROL SAMPLE: 3914677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	.96J	96	80-120	
Magnesium	mg/L	1	0.98	98	80-120	
Potassium	mg/L	1	1.1	107	80-120	
Sodium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3914678 3914679

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649600001 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	10.5	1	1	12.1	11.4	154	87	75-125	6	20 M1
Magnesium	mg/L	2.8	1	1	3.8	3.7	100	82	75-125	5	20
Potassium	mg/L	2.8	1	1	3.4	3.4	61	60	75-125	0	20 M1
Sodium	mg/L	ND	1	1	5.3	4.9J	137	105	75-125		20 M1

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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.: 92649600

QC Batch: 753097 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92649600001, 92649600002, 92649600003

METHOD BLANK: 3912787 Matrix: Water  
 Associated Lab Samples: 92649600001, 92649600002, 92649600003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	02/01/23 17:13	
Cobalt	mg/L	ND	0.0050	02/01/23 17:13	

LABORATORY CONTROL SAMPLE: 3912788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	1.0	101	80-120	
Cobalt	mg/L	0.1	0.094	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3912789 3912790

Parameter	Units	92649067001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	1.0	1.0	103	102	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	98	75-125	3	20	

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### QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649600

QC Batch:	753439	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: 92649600001, 92649600002, 92649600003

METHOD BLANK: 3914561 Matrix: Water

Associated Lab Samples: 92649600001, 92649600002, 92649600003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	02/02/23 19:13	

LABORATORY CONTROL SAMPLE: 3914562

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	427	107	80-120	

SAMPLE DUPLICATE: 3914563

Parameter	Units	92649377017 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	188	204	8	10	

SAMPLE DUPLICATE: 3914564

Parameter	Units	92649235025 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	433	458	6	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.: 92649600

QC Batch: 753106 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92649600001, 92649600002, 92649600003

METHOD BLANK: 3912854 Matrix: Water

Associated Lab Samples: 92649600001, 92649600002, 92649600003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	02/01/23 11:49	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	02/01/23 11:49	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	02/01/23 11:49	

LABORATORY CONTROL SAMPLE: 3912855

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.4	99	80-120	

LABORATORY CONTROL SAMPLE: 3912856

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	48.8	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3912857 3912858

Parameter	Units	3912857		3912858		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	45.7	50	50	94.7	98	105	80-120	4	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3912859 3912860

Parameter	Units	3912859		3912860		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	41.4	50	50	91.0	99	102	80-120	2	25	

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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.: 92649600

QC Batch: 753289 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: 92649600001, 92649600002, 92649600003

METHOD BLANK: 3913938 Matrix: Water  
 Associated Lab Samples: 92649600001, 92649600002, 92649600003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	02/02/23 11:08	
Fluoride	mg/L	ND	0.10	02/02/23 11:08	
Sulfate	mg/L	ND	1.0	02/02/23 11:08	

LABORATORY CONTROL SAMPLE: 3913939

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	54.2	108	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	53.0	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3913940 3913941

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649318006	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	ND	50	50	50	53.2	54.3	106	109	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.7	2.7	107	107	90-110	0	10	
Sulfate	mg/L	ND	50	50	50	52.1	53.1	104	106	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3913942 3913943

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92649594003	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	1.2	50	50	50	55.0	54.8	108	107	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.8	2.8	111	110	90-110	0	10 M1	
Sulfate	mg/L	7.0	50	50	50	60.8	60.5	108	107	90-110	0	10	

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**REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: Plant Hammond-CCR Ash Pond-Revised Report

Pace Project No.: 92649600

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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: Plant Hammond-CCR Ash Pond-Revised Report  
Pace Project No.: 92649600

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92649600001	HAM-H+0.25	EPA 3010A	753463	EPA 6010D	753528
92649600002	HAM-H+0.35	EPA 3010A	753463	EPA 6010D	753528
92649600003	HAM-H+0.75	EPA 3010A	753463	EPA 6010D	753528
92649600001	HAM-H+0.25	EPA 3005A	753097	EPA 6020B	753234
92649600002	HAM-H+0.35	EPA 3005A	753097	EPA 6020B	753234
92649600003	HAM-H+0.75	EPA 3005A	753097	EPA 6020B	753234
92649600001	HAM-H+0.25	SM 2540C-2015	753439		
92649600002	HAM-H+0.35	SM 2540C-2015	753439		
92649600003	HAM-H+0.75	SM 2540C-2015	753439		
92649600001	HAM-H+0.25	SM 2320B-2011	753106		
92649600002	HAM-H+0.35	SM 2320B-2011	753106		
92649600003	HAM-H+0.75	SM 2320B-2011	753106		
92649600001	HAM-H+0.25	EPA 300.0 Rev 2.1 1993	753289		
92649600002	HAM-H+0.35	EPA 300.0 Rev 2.1 1993	753289		
92649600003	HAM-H+0.75	EPA 300.0 Rev 2.1 1993	753289		

### REPORT OF LABORATORY ANALYSIS

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## CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b>	<b>Section B</b>	<b>Section C</b>	
<b>Required Client Information:</b>	<b>Required Project Information:</b>	<b>Invoice Information:</b>	
Company: <b>ARCADIS - Atlanta</b>	Report To: <b>Kristen Jurinko, Ben Hodges</b>	Attention: <b>Kristen Jurinko</b>	
Address: <b>2839 Paces Ferry Rd Atlanta, GA 30339</b>	Copy To: <b>Warren Johnson</b>	Company Name: <b>GPC</b>	
Mail: <b>warren.johnson@arcadis.com</b>	Purchase Order #: <b>SCS10382775</b>	Address:	
Phone: <b>678.485.5298</b> Fax:	Project Name: <b>Plant Hammond - AP-2</b>	Address:	<b>Regulatory Agency</b>
Requested Due Date: <b>5 day TAT</b>	Project #:	Pace Quote:	
		Pace Project Manager: <b>Mitval.Parks@pacelabs.com</b>	<b>State / Location</b>
		Pace Profile #: <b>2239</b>	<b>GA</b>

ITEM #	SAMPLE ID <small>One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique</small>	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analysis Test	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)			
				DATE	TIME	DATE	TIME			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other		CCR Appendix III1	Major Ions2	Cobalt											
2	H+0.25	WS	G	1/30/2023	1130				3	2	1								X	X	X											
3	H+0.35	WS	G	1/30/2023	1120				3	2	1								X	X	X											
4	H+0.75	WS	G	1/30/2023	1100				3	2	1								X	X	X											
5																																
6																																
6																																
7																																
8																																
9																																
10																																
11																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
CR Appendix III1 - B, Ca, Cl, F, Sulfate, Total Dissolved Solids (TDS)	Garrett Grabowski / Arcadis	01/31/2023	1424	Maguile Jimmon	1/31/23	14:24	
Major Ions2 - Mg, Na, K, total alkalinity, bicarbonate alkalinity							

**WO# : 92649600**



92649600

<b>SAMPLER NAME AND SIGNATURE</b>		TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples intact (Y/N)
PRINT Name of SAMPLER:	Garrett Grabowski				
SIGNATURE of SAMPLER:	DATE Signed: 01/30/2023				



DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
Upon Receipt

Client Name:

*Arcady*

Project #:

WO#: 92649600

PM: MP

Due Date: 02/08/23

CLIENT: GA-ArcadAt1

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

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *11/31/23*  
*MP*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID:

*214*

Type of Ice:

Wet  Blue  None

Cooler Temp:

*5.1*

Correction Factor:

Add/Subtract (°C)

*+0.1*

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C):

*5.2*

USDA Regulated Soil (  N/A, water sample)

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

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

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

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

Project Manager SRF Review: \_\_\_\_\_

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



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

**WO# : 92649600**

Project #

PM: MP

Due Date: 02/08/23

CLIENT: GA-ArcadAt1

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP2N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1			2			1																							
2			2			1																							
3			2			1																							
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

**pH Adjustment Log for Preserved Samples**

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

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



August 2023



August 30, 2023

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

RE: Project: Hammond AP-2  
Pace Project No.: 92681886

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between August 09, 2023 and August 14, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

Revision 1: Samples ID's amended.

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

Sincerely,

Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Hammond AP-2

Pace Project No.: 92681886

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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

Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Hammond AP-2

Pace Project No.: 92681886

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92681886001	HAM-HGWA-4	Water	08/08/23 12:56	08/09/23 11:40
92681886002	HAM-HGWA-5	Water	08/08/23 14:03	08/09/23 11:40
92681886003	HAM-HGWA-6	Water	08/08/23 16:12	08/09/23 11:40
92681886004	HAM-HGWA-42D	Water	08/08/23 12:51	08/09/23 11:40
92681886005	HAM-HGWC-14	Water	08/13/23 10:25	08/14/23 11:15
92681886006	HAM-HGWC-15	Water	08/13/23 12:45	08/14/23 11:15
92681886007	HAM-HGWC-16	Water	08/13/23 11:17	08/14/23 11:15
92681886008	HAM-HGWC-17	Water	08/13/23 14:16	08/14/23 11:15
92681886009	HAM-HGWC-18	Water	08/13/23 09:18	08/14/23 11:15
92681886010	HAM-MW-22	Water	08/13/23 16:03	08/14/23 11:15
92681886011	HAM-MW-23D	Water	08/13/23 14:41	08/14/23 11:15
92681886012	HAM-MW-33	Water	08/13/23 09:28	08/14/23 11:15
92681886013	HAM-MW-37D	Water	08/13/23 12:00	08/14/23 11:15
92681886014	HAM-AP2-FB-02	Water	08/13/23 13:00	08/14/23 11:15
92681886015	HAM-AP2-EB-02	Water	08/13/23 13:10	08/14/23 11:15
92681886016	HAM-AP2-FD-02	Water	08/13/23 00:00	08/14/23 11:15
92682572001	HAM-MW-21D	Water	08/12/23 16:07	08/14/23 11:15
92682572002	HAM-MW-34D	Water	08/12/23 16:50	08/14/23 11:15
92682572003	HAM-MW-35	Water	08/12/23 09:39	08/14/23 11:15
92682572004	HAM-MW-51	Water	08/12/23 11:24	08/14/23 11:15

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92681886

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92681886001	HAM-HGWA-4	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92681886002	HAM-HGWA-5	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92681886003	HAM-HGWA-6	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92681886004	HAM-HGWA-42D	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92681886005	HAM-HGWC-14	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92681886006	HAM-HGWC-15	EPA 6010D	MS	6
		EPA 6020B	CW1	13

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92681886

Lab ID	Sample ID	Method	Analysts	Analytes Reported		
92681886007	HAM-HGWC-16	EPA 7470A	VB	1		
		SM 2540C-2015	DL1	1		
		SM 2320B-2011	SMS	3		
		SM 4500-S2D-2011	JP1	1		
		EPA 300.0 Rev 2.1 1993	CDC	3		
		EPA 6010D	MS	6		
		EPA 6020B	CW1	13		
		EPA 7470A	VB	1		
		SM 2540C-2015	DL1	1		
		SM 2320B-2011	SMS	3		
92681886008	HAM-HGWC-17	SM 4500-S2D-2011	JP1	1		
		EPA 300.0 Rev 2.1 1993	CDC	3		
		EPA 6010D	MS	6		
		EPA 6020B	CW1	13		
		EPA 7470A	VB	1		
		SM 2540C-2015	DL1	1		
		SM 2320B-2011	YEG	3		
		SM 4500-S2D-2011	JP1	1		
		EPA 300.0 Rev 2.1 1993	CDC	3		
		92681886009	HAM-HGWC-18	EPA 6010D	MS	6
EPA 6020B	CW1			13		
EPA 7470A	VB			1		
SM 2540C-2015	DL1			1		
SM 2320B-2011	YEG			3		
SM 4500-S2D-2011	JP1			1		
EPA 300.0 Rev 2.1 1993	CDC			3		
92681886010	HAM-MW-22			EPA 6010D	MS	6
				EPA 6020B	CW1	13
				EPA 7470A	VB	1
		SM 2540C-2015	DL1	1		
		SM 2320B-2011	YEG	3		
		SM 4500-S2D-2011	JP1	1		
		EPA 300.0 Rev 2.1 1993	CDC	3		
		92681886011	HAM-MW-23D	EPA 6010D	MS	6
				EPA 6020B	CW1	13
				EPA 7470A	VB	1
SM 2540C-2015	DL1			1		

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92681886

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92681886012	HAM-MW-33	SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
92681886013	HAM-MW-37D	SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
92681886014	HAM-AP2-FB-02	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92681886015	HAM-AP2-EB-02	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
92681886016	HAM-AP2-FD-02	EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
92682572001	HAM-MW-21D	SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92681886

Lab ID	Sample ID	Method	Analysts	Analytes Reported		
92682572002	HAM-MW-34D	SM 2540C-2015	DL1	1		
		SM 2320B-2011	SMS	3		
		SM 4500-S2D-2011	JP1	1		
		EPA 300.0 Rev 2.1 1993	CDC	3		
		EPA 6010D	DRB, MS	6		
		EPA 6020B	CW1	13		
		EPA 7470A	VB	1		
		SM 2540C-2015	DL1	1		
		SM 2320B-2011	SMS	3		
		SM 4500-S2D-2011	JP1	1		
92682572003	HAM-MW-35	EPA 300.0 Rev 2.1 1993	CDC	3		
		EPA 6010D	DRB, MS	6		
		EPA 6020B	CW1	13		
		EPA 7470A	VB	1		
		SM 2540C-2015	DL1	1		
		SM 2320B-2011	SMS	3		
		SM 4500-S2D-2011	JP1	1		
		EPA 300.0 Rev 2.1 1993	CDC	3		
		92682572004	HAM-MW-51	EPA 6010D	DRB, MS	6
				EPA 6020B	CW1	13
EPA 7470A	VB			1		
SM 2540C-2015	DL1			1		
SM 2320B-2011	SMS			3		
SM 4500-S2D-2011	JP1			1		
EPA 300.0 Rev 2.1 1993	CDC			3		

PASI-A = Pace Analytical Services - Asheville

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

### REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92681886

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681886001</b>	<b>HAM-HGWA-4</b>					
EPA 6010D	Manganese	0.024J	mg/L	0.040	08/12/23 06:48	
EPA 6010D	Potassium	1.2	mg/L	0.50	08/12/23 06:48	
EPA 6010D	Sodium	8.0	mg/L	1.0	08/12/23 06:48	
EPA 6010D	Calcium	35.7	mg/L	1.0	08/12/23 06:48	
EPA 6010D	Magnesium	3.6	mg/L	0.050	08/12/23 06:48	
EPA 6020B	Barium	0.039	mg/L	0.0050	08/22/23 18:54	
EPA 6020B	Beryllium	0.000067J	mg/L	0.00050	08/22/23 18:54	
EPA 6020B	Boron	0.029J	mg/L	0.040	08/22/23 18:54	
EPA 6020B	Cobalt	0.00041J	mg/L	0.0050	08/22/23 18:54	
SM 2540C-2015	Total Dissolved Solids	141	mg/L	25.0	08/14/23 13:17	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	87.7	mg/L	5.0	08/15/23 11:50	
SM 2320B-2011	Alkalinity, Total as CaCO3	87.7	mg/L	5.0	08/15/23 11:50	
EPA 300.0 Rev 2.1 1993	Chloride	2.6	mg/L	1.0	08/12/23 22:07	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	08/12/23 22:07	
EPA 300.0 Rev 2.1 1993	Sulfate	16.8	mg/L	1.0	08/12/23 22:07	
<b>92681886002</b>	<b>HAM-HGWA-5</b>					
EPA 6010D	Iron	0.25	mg/L	0.040	08/12/23 06:53	
EPA 6010D	Manganese	0.068	mg/L	0.040	08/12/23 06:53	
EPA 6010D	Potassium	0.64	mg/L	0.50	08/12/23 06:53	
EPA 6010D	Sodium	7.8	mg/L	1.0	08/12/23 06:53	
EPA 6010D	Calcium	54.4	mg/L	1.0	08/12/23 06:53	
EPA 6010D	Magnesium	10.1	mg/L	0.050	08/12/23 06:53	
EPA 6020B	Antimony	0.0030	mg/L	0.0030	08/22/23 19:17	
EPA 6020B	Barium	0.18	mg/L	0.0050	08/22/23 19:17	
EPA 6020B	Boron	0.025J	mg/L	0.040	08/22/23 19:17	
EPA 6020B	Lithium	0.0095J	mg/L	0.030	08/22/23 19:17	
SM 2540C-2015	Total Dissolved Solids	225	mg/L	25.0	08/14/23 13:17	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	168	mg/L	5.0	08/15/23 11:59	
SM 2320B-2011	Alkalinity, Total as CaCO3	168	mg/L	5.0	08/15/23 11:59	
EPA 300.0 Rev 2.1 1993	Chloride	1.3	mg/L	1.0	08/12/23 22:22	
EPA 300.0 Rev 2.1 1993	Fluoride	0.059J	mg/L	0.10	08/12/23 22:22	
EPA 300.0 Rev 2.1 1993	Sulfate	32.7	mg/L	1.0	08/12/23 22:22	
<b>92681886003</b>	<b>HAM-HGWA-6</b>					
EPA 6010D	Iron	1.9	mg/L	0.040	08/12/23 06:57	
EPA 6010D	Manganese	0.064	mg/L	0.040	08/12/23 06:57	
EPA 6010D	Potassium	0.76	mg/L	0.50	08/12/23 06:57	
EPA 6010D	Sodium	6.3	mg/L	1.0	08/12/23 06:57	
EPA 6010D	Calcium	27.9	mg/L	1.0	08/12/23 06:57	
EPA 6010D	Magnesium	5.7	mg/L	0.050	08/12/23 06:57	
EPA 6020B	Antimony	0.0013J	mg/L	0.0030	08/22/23 19:23	
EPA 6020B	Barium	0.048	mg/L	0.0050	08/22/23 19:23	
EPA 6020B	Boron	0.017J	mg/L	0.040	08/22/23 19:23	
EPA 6020B	Lithium	0.0028J	mg/L	0.030	08/22/23 19:23	
SM 2540C-2015	Total Dissolved Solids	125	mg/L	25.0	08/14/23 13:17	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	88.3	mg/L	5.0	08/15/23 12:09	
SM 2320B-2011	Alkalinity, Total as CaCO3	88.3	mg/L	5.0	08/15/23 12:09	

## REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92681886

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92681886003</b>	<b>HAM-HGWA-6</b>					
EPA 300.0 Rev 2.1 1993	Chloride	2.1	mg/L	1.0	08/12/23 22:37	
EPA 300.0 Rev 2.1 1993	Fluoride	0.072J	mg/L	0.10	08/12/23 22:37	
EPA 300.0 Rev 2.1 1993	Sulfate	18.8	mg/L	1.0	08/12/23 22:37	
<b>92681886004</b>	<b>HAM-HGWA-42D</b>					
EPA 6010D	Iron	0.43	mg/L	0.040	08/12/23 07:02	
EPA 6010D	Manganese	0.027J	mg/L	0.040	08/12/23 07:02	
EPA 6010D	Potassium	0.40J	mg/L	0.50	08/12/23 07:02	
EPA 6010D	Sodium	8.1	mg/L	1.0	08/12/23 07:02	
EPA 6010D	Calcium	40.7	mg/L	1.0	08/12/23 07:02	
EPA 6010D	Magnesium	6.8	mg/L	0.050	08/12/23 07:02	
EPA 6020B	Barium	0.21	mg/L	0.0050	08/22/23 19:29	
EPA 6020B	Boron	0.048	mg/L	0.040	08/22/23 19:29	
EPA 6020B	Lithium	0.010J	mg/L	0.030	08/22/23 19:29	
SM 2540C-2015	Total Dissolved Solids	175	mg/L	25.0	08/14/23 13:23	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	153	mg/L	5.0	08/15/23 12:18	
SM 2320B-2011	Alkalinity, Total as CaCO3	153	mg/L	5.0	08/15/23 12:18	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	08/12/23 22:51	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	08/12/23 22:51	
EPA 300.0 Rev 2.1 1993	Sulfate	10.5	mg/L	1.0	08/12/23 22:51	
<b>92681886005</b>	<b>HAM-HGWC-14</b>					
EPA 6010D	Calcium	418	mg/L	5.0	08/25/23 18:53	M1
EPA 6010D	Iron	1.0	mg/L	0.040	08/23/23 22:30	
EPA 6010D	Manganese	3.4	mg/L	0.040	08/23/23 22:30	
EPA 6010D	Potassium	10.8	mg/L	0.50	08/23/23 22:30	M1
EPA 6010D	Sodium	9.3	mg/L	1.0	08/23/23 22:30	M1
EPA 6010D	Magnesium	37.4	mg/L	0.050	08/23/23 22:30	M1
EPA 6020B	Antimony	0.0032	mg/L	0.0030	08/24/23 16:04	BC
EPA 6020B	Arsenic	0.0048J	mg/L	0.010	08/24/23 16:04	
EPA 6020B	Barium	0.016	mg/L	0.0050	08/24/23 16:04	
EPA 6020B	Beryllium	0.00040J	mg/L	0.00050	08/24/23 16:04	
EPA 6020B	Boron	6.9	mg/L	0.040	08/24/23 16:04	
EPA 6020B	Cobalt	0.036	mg/L	0.0050	08/24/23 16:04	
EPA 6020B	Lead	0.00079J	mg/L	0.0010	08/24/23 16:04	
EPA 6020B	Selenium	0.0038J	mg/L	0.0050	08/24/23 16:04	
EPA 6020B	Thallium	0.00026J	mg/L	0.0010	08/24/23 16:04	
SM 2540C-2015	Total Dissolved Solids	1960	mg/L	25.0	08/18/23 17:07	
EPA 300.0 Rev 2.1 1993	Chloride	95.8	mg/L	19.0	08/17/23 07:16	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	08/16/23 18:03	
EPA 300.0 Rev 2.1 1993	Sulfate	935	mg/L	19.0	08/17/23 07:16	
<b>92681886006</b>	<b>HAM-HGWC-15</b>					
EPA 6010D	Calcium	182	mg/L	5.0	08/24/23 16:10	
EPA 6010D	Manganese	3.2	mg/L	0.040	08/23/23 22:52	
EPA 6010D	Potassium	0.91	mg/L	0.50	08/23/23 22:52	
EPA 6010D	Sodium	12.7	mg/L	1.0	08/23/23 22:52	
EPA 6010D	Magnesium	31.2	mg/L	0.050	08/23/23 22:52	
EPA 6020B	Antimony	0.0027J	mg/L	0.0030	08/24/23 16:10	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92681886

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92681886006</b>	<b>HAM-HGWC-15</b>					
EPA 6020B	Barium	0.011	mg/L	0.0050	08/24/23 16:10	
EPA 6020B	Boron	1.6	mg/L	0.040	08/24/23 16:10	
EPA 6020B	Cadmium	0.00033J	mg/L	0.00050	08/24/23 16:10	
EPA 6020B	Cobalt	0.0016J	mg/L	0.0050	08/24/23 16:10	
EPA 6020B	Lithium	0.0047J	mg/L	0.030	08/24/23 16:10	
SM 2540C-2015	Total Dissolved Solids	881	mg/L	25.0	08/18/23 17:07	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	246	mg/L	5.0	08/18/23 09:25	
SM 2320B-2011	Alkalinity, Total as CaCO3	246	mg/L	5.0	08/18/23 09:25	
EPA 300.0 Rev 2.1 1993	Chloride	78.2	mg/L	1.0	08/16/23 18:17	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	08/16/23 18:17	
EPA 300.0 Rev 2.1 1993	Sulfate	281	mg/L	6.0	08/17/23 07:31	
<b>92681886007</b>	<b>HAM-HGWC-16</b>					
EPA 6010D	Calcium	187	mg/L	5.0	08/24/23 16:15	
EPA 6010D	Iron	1.4	mg/L	0.040	08/23/23 22:57	
EPA 6010D	Manganese	0.049	mg/L	0.040	08/23/23 22:57	
EPA 6010D	Potassium	0.72	mg/L	0.50	08/23/23 22:57	
EPA 6010D	Sodium	10.1	mg/L	1.0	08/23/23 22:57	
EPA 6010D	Magnesium	15.6	mg/L	0.050	08/23/23 22:57	
EPA 6020B	Barium	0.099	mg/L	0.0050	08/24/23 16:16	
EPA 6020B	Boron	2.2	mg/L	0.040	08/24/23 16:16	
EPA 6020B	Lithium	0.0030J	mg/L	0.030	08/24/23 16:16	
SM 2540C-2015	Total Dissolved Solids	861	mg/L	25.0	08/18/23 17:07	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	210	mg/L	5.0	08/17/23 23:50	
SM 2320B-2011	Alkalinity, Total as CaCO3	210	mg/L	5.0	08/17/23 23:50	M1
EPA 300.0 Rev 2.1 1993	Chloride	89.1	mg/L	1.0	08/16/23 18:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.053J	mg/L	0.10	08/16/23 18:32	
EPA 300.0 Rev 2.1 1993	Sulfate	214	mg/L	5.0	08/17/23 07:45	
<b>92681886008</b>	<b>HAM-HGWC-17</b>					
EPA 6010D	Iron	2.2	mg/L	0.040	08/23/23 23:02	
EPA 6010D	Manganese	2.3	mg/L	0.040	08/23/23 23:02	
EPA 6010D	Potassium	2.9	mg/L	0.50	08/23/23 23:02	
EPA 6010D	Sodium	13.5	mg/L	1.0	08/23/23 23:02	
EPA 6010D	Magnesium	30.0	mg/L	0.050	08/23/23 23:02	
EPA 6010D	Calcium	261	mg/L	5.0	08/24/23 16:20	
EPA 6020B	Barium	0.025	mg/L	0.0050	08/24/23 16:22	
EPA 6020B	Beryllium	0.00010J	mg/L	0.00050	08/24/23 16:22	
EPA 6020B	Boron	6.2	mg/L	0.040	08/24/23 16:22	
EPA 6020B	Cobalt	0.0090	mg/L	0.0050	08/24/23 16:22	
EPA 6020B	Lead	0.00049J	mg/L	0.0010	08/24/23 16:22	
EPA 6020B	Lithium	0.0018J	mg/L	0.030	08/24/23 16:22	
SM 2540C-2015	Total Dissolved Solids	1180	mg/L	25.0	08/18/23 17:08	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	211	mg/L	5.0	08/22/23 19:59	
SM 2320B-2011	Alkalinity, Total as CaCO3	211	mg/L	5.0	08/22/23 19:59	
SM 4500-S2D-2011	Sulfide	0.032J	mg/L	0.10	08/18/23 04:44	
EPA 300.0 Rev 2.1 1993	Chloride	109	mg/L	7.0	08/17/23 07:59	
EPA 300.0 Rev 2.1 1993	Fluoride	0.081J	mg/L	0.10	08/16/23 18:46	

### REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92681886

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681886008</b>	<b>HAM-HGWC-17</b>					
EPA 300.0 Rev 2.1 1993	Sulfate	351	mg/L	7.0	08/17/23 07:59	
<b>92681886009</b>	<b>HAM-HGWC-18</b>					
EPA 6010D	Calcium	355	mg/L	5.0	08/24/23 16:25	
EPA 6010D	Iron	0.038J	mg/L	0.040	08/23/23 23:07	
EPA 6010D	Manganese	3.4	mg/L	0.040	08/23/23 23:07	
EPA 6010D	Potassium	10.0	mg/L	0.50	08/23/23 23:07	
EPA 6010D	Sodium	10.9	mg/L	1.0	08/23/23 23:07	
EPA 6010D	Magnesium	35.8	mg/L	0.050	08/23/23 23:07	
EPA 6020B	Arsenic	0.0059J	mg/L	0.010	08/24/23 18:07	
EPA 6020B	Barium	0.026	mg/L	0.0050	08/24/23 18:07	
EPA 6020B	Beryllium	0.0030	mg/L	0.00050	08/24/23 18:07	
EPA 6020B	Boron	7.7	mg/L	0.040	08/24/23 18:07	
EPA 6020B	Cadmium	0.0017	mg/L	0.00050	08/24/23 18:07	
EPA 6020B	Cobalt	0.14	mg/L	0.0050	08/24/23 18:07	
EPA 6020B	Lead	0.00075J	mg/L	0.0010	08/24/23 18:07	
EPA 6020B	Lithium	0.012J	mg/L	0.030	08/24/23 18:07	
EPA 6020B	Selenium	0.0085	mg/L	0.0050	08/24/23 18:07	
SM 2540C-2015	Total Dissolved Solids	1700	mg/L	25.0	08/18/23 17:08	
EPA 300.0 Rev 2.1 1993	Chloride	104	mg/L	18.0	08/17/23 08:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.25	mg/L	0.10	08/16/23 19:01	
EPA 300.0 Rev 2.1 1993	Sulfate	895	mg/L	18.0	08/17/23 08:42	
<b>92681886010</b>	<b>HAM-MW-22</b>					
EPA 6010D	Calcium	305	mg/L	5.0	08/24/23 16:41	
EPA 6010D	Iron	0.086	mg/L	0.040	08/23/23 23:13	
EPA 6010D	Manganese	5.7	mg/L	0.040	08/23/23 23:13	
EPA 6010D	Potassium	1.9	mg/L	0.50	08/23/23 23:13	
EPA 6010D	Sodium	12.9	mg/L	1.0	08/23/23 23:13	
EPA 6010D	Magnesium	28.8	mg/L	0.050	08/23/23 23:13	
EPA 6020B	Barium	0.013	mg/L	0.0050	08/24/23 18:13	
EPA 6020B	Boron	2.3	mg/L	0.040	08/24/23 18:13	
EPA 6020B	Cadmium	0.0020	mg/L	0.00050	08/24/23 18:13	
EPA 6020B	Cobalt	0.0089	mg/L	0.0050	08/24/23 18:13	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	08/24/23 18:13	
SM 2540C-2015	Total Dissolved Solids	1000	mg/L	25.0	08/18/23 17:08	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	39.9	mg/L	5.0	08/22/23 20:19	
SM 2320B-2011	Alkalinity, Total as CaCO3	39.9	mg/L	5.0	08/22/23 20:19	
EPA 300.0 Rev 2.1 1993	Chloride	101	mg/L	8.0	08/17/23 08:56	
EPA 300.0 Rev 2.1 1993	Fluoride	0.057J	mg/L	0.10	08/16/23 19:15	
EPA 300.0 Rev 2.1 1993	Sulfate	410	mg/L	8.0	08/17/23 08:56	
<b>92681886011</b>	<b>HAM-MW-23D</b>					
EPA 6010D	Iron	0.12	mg/L	0.040	08/23/23 23:18	
EPA 6010D	Manganese	4.4	mg/L	0.040	08/23/23 23:18	
EPA 6010D	Potassium	11.0	mg/L	0.50	08/23/23 23:18	
EPA 6010D	Sodium	10.0	mg/L	1.0	08/23/23 23:18	
EPA 6010D	Magnesium	38.5	mg/L	0.050	08/23/23 23:18	
EPA 6010D	Calcium	343	mg/L	5.0	08/24/23 16:46	

## REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92681886

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92681886011</b>	<b>HAM-MW-23D</b>					
EPA 6020B	Barium	0.041	mg/L	0.0050	08/24/23 18:19	
EPA 6020B	Boron	2.7	mg/L	0.040	08/24/23 18:19	
EPA 6020B	Cadmium	0.00015J	mg/L	0.00050	08/24/23 18:19	
EPA 6020B	Cobalt	0.00073J	mg/L	0.0050	08/24/23 18:19	
EPA 6020B	Lithium	0.0017J	mg/L	0.030	08/24/23 18:19	
EPA 6020B	Molybdenum	0.0041J	mg/L	0.010	08/24/23 18:19	
SM 2540C-2015	Total Dissolved Solids	1280	mg/L	25.0	08/18/23 17:08	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	249	mg/L	5.0	08/23/23 12:49	
SM 2320B-2011	Alkalinity, Total as CaCO3	249	mg/L	5.0	08/23/23 12:49	
EPA 300.0 Rev 2.1 1993	Chloride	119	mg/L	8.0	08/17/23 09:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.061J	mg/L	0.10	08/16/23 19:29	
EPA 300.0 Rev 2.1 1993	Sulfate	379	mg/L	8.0	08/17/23 09:10	
<b>92681886012</b>	<b>HAM-MW-33</b>					
EPA 6010D	Iron	0.13	mg/L	0.040	08/23/23 23:33	
EPA 6010D	Manganese	4.4	mg/L	0.040	08/23/23 23:33	
EPA 6010D	Potassium	11.0	mg/L	0.50	08/23/23 23:33	
EPA 6010D	Sodium	10.1	mg/L	1.0	08/23/23 23:33	
EPA 6010D	Magnesium	38.6	mg/L	0.050	08/23/23 23:33	
EPA 6010D	Calcium	418	mg/L	5.0	08/24/23 16:51	
EPA 6020B	Arsenic	0.0059J	mg/L	0.010	08/24/23 18:25	
EPA 6020B	Barium	0.023	mg/L	0.0050	08/24/23 18:25	
EPA 6020B	Beryllium	0.00099	mg/L	0.00050	08/24/23 18:25	
EPA 6020B	Boron	6.6	mg/L	0.040	08/24/23 18:25	
EPA 6020B	Cadmium	0.00020J	mg/L	0.00050	08/24/23 18:25	
EPA 6020B	Cobalt	0.061	mg/L	0.0050	08/24/23 18:25	
EPA 6020B	Lead	0.0011	mg/L	0.0010	08/24/23 18:25	
EPA 6020B	Lithium	0.00077J	mg/L	0.030	08/24/23 18:25	
EPA 6020B	Selenium	0.0065	mg/L	0.0050	08/24/23 18:25	
EPA 6020B	Thallium	0.00022J	mg/L	0.0010	08/24/23 18:25	
SM 2540C-2015	Total Dissolved Solids	1910	mg/L	25.0	08/18/23 18:29	
EPA 300.0 Rev 2.1 1993	Chloride	99.0	mg/L	20.0	08/17/23 09:25	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.22	mg/L	0.10	08/16/23 21:35	
EPA 300.0 Rev 2.1 1993	Sulfate	970	mg/L	20.0	08/17/23 09:25	M1
<b>92681886013</b>	<b>HAM-MW-37D</b>					
EPA 6010D	Iron	0.18	mg/L	0.040	08/23/23 23:39	
EPA 6010D	Manganese	0.029J	mg/L	0.040	08/23/23 23:39	
EPA 6010D	Potassium	0.71	mg/L	0.50	08/23/23 23:39	
EPA 6010D	Sodium	14.0	mg/L	1.0	08/23/23 23:39	
EPA 6010D	Magnesium	11.8	mg/L	0.050	08/23/23 23:39	
EPA 6010D	Calcium	57.0	mg/L	1.0	08/24/23 16:56	
EPA 6020B	Barium	0.15	mg/L	0.0050	08/24/23 18:31	
EPA 6020B	Boron	0.14	mg/L	0.040	08/24/23 18:31	
EPA 6020B	Lithium	0.020J	mg/L	0.030	08/24/23 18:31	
EPA 6020B	Molybdenum	0.0029J	mg/L	0.010	08/24/23 18:31	
SM 2540C-2015	Total Dissolved Solids	258	mg/L	25.0	08/18/23 18:30	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	162	mg/L	5.0	08/22/23 20:50	

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92681886

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681886013</b>	<b>HAM-MW-37D</b>					
SM 2320B-2011	Alkalinity, Total as CaCO <sub>3</sub>	162	mg/L	5.0	08/22/23 20:50	M1
SM 4500-S2D-2011	Sulfide	0.036J	mg/L	0.10	08/18/23 04:47	
EPA 300.0 Rev 2.1 1993	Chloride	16.5	mg/L	1.0	08/16/23 22:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	08/16/23 22:18	
EPA 300.0 Rev 2.1 1993	Sulfate	39.2	mg/L	1.0	08/16/23 22:18	
<b>92681886014</b>	<b>HAM-AP2-FB-02</b>					
EPA 6020B	Boron	0.031J	mg/L	0.040	08/24/23 18:37	
<b>92681886015</b>	<b>HAM-AP2-EB-02</b>					
EPA 6020B	Boron	0.017J	mg/L	0.040	08/24/23 18:43	
<b>92681886016</b>	<b>HAM-AP2-FD-02</b>					
EPA 6010D	Manganese	3.5	mg/L	0.040	08/23/23 23:54	
EPA 6010D	Potassium	0.85	mg/L	0.50	08/23/23 23:54	
EPA 6010D	Sodium	12.5	mg/L	1.0	08/23/23 23:54	
EPA 6010D	Magnesium	30.1	mg/L	0.050	08/23/23 23:54	
EPA 6010D	Calcium	179	mg/L	5.0	08/24/23 17:12	
EPA 6020B	Antimony	0.0015J	mg/L	0.0030	08/24/23 18:49	
EPA 6020B	Barium	0.011	mg/L	0.0050	08/24/23 18:49	
EPA 6020B	Boron	1.6	mg/L	0.040	08/24/23 18:49	
EPA 6020B	Cadmium	0.00038J	mg/L	0.00050	08/24/23 18:49	
EPA 6020B	Cobalt	0.0021J	mg/L	0.0050	08/24/23 18:49	
EPA 6020B	Lithium	0.0048J	mg/L	0.030	08/24/23 18:49	
SM 2540C-2015	Total Dissolved Solids	888	mg/L	25.0	08/18/23 18:33	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO <sub>3</sub> )	216	mg/L	5.0	08/23/23 18:05	
SM 2320B-2011	Alkalinity, Total as CaCO <sub>3</sub>	216	mg/L	5.0	08/23/23 18:05	
EPA 300.0 Rev 2.1 1993	Chloride	79.5	mg/L	1.0	08/16/23 23:01	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	08/16/23 23:01	
EPA 300.0 Rev 2.1 1993	Sulfate	292	mg/L	6.0	08/17/23 10:07	
<b>92682572001</b>	<b>HAM-MW-21D</b>					
EPA 6010D	Iron	6.8	mg/L	0.040	08/18/23 22:16	
EPA 6010D	Manganese	0.40	mg/L	0.040	08/18/23 22:16	
EPA 6010D	Potassium	0.80	mg/L	0.50	08/18/23 22:16	
EPA 6010D	Sodium	10.3	mg/L	1.0	08/18/23 22:16	
EPA 6010D	Calcium	167	mg/L	1.0	08/18/23 22:16	
EPA 6010D	Magnesium	27.6	mg/L	0.050	08/18/23 22:16	
EPA 6020B	Barium	0.033	mg/L	0.0050	08/22/23 21:11	
EPA 6020B	Boron	2.8	mg/L	0.040	08/22/23 21:11	
EPA 6020B	Lithium	0.015J	mg/L	0.030	08/22/23 21:11	
EPA 6020B	Molybdenum	0.021	mg/L	0.010	08/22/23 21:11	
SM 2540C-2015	Total Dissolved Solids	2200	mg/L	25.0	08/18/23 17:05	1g
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO <sub>3</sub> )	115	mg/L	5.0	08/17/23 17:32	
SM 2320B-2011	Alkalinity, Total as CaCO <sub>3</sub>	115	mg/L	5.0	08/17/23 17:32	
EPA 300.0 Rev 2.1 1993	Chloride	76.2	mg/L	1.0	08/16/23 05:00	
EPA 300.0 Rev 2.1 1993	Sulfate	276	mg/L	6.0	08/16/23 12:36	

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## SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92681886

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92682572002</b>	<b>HAM-MW-34D</b>					
EPA 6010D	Calcium	469	mg/L	5.0	08/23/23 04:52	
EPA 6010D	Iron	0.14	mg/L	0.040	08/18/23 22:21	
EPA 6010D	Manganese	4.2	mg/L	0.040	08/18/23 22:21	
EPA 6010D	Potassium	10.4	mg/L	0.50	08/18/23 22:21	
EPA 6010D	Sodium	11.8	mg/L	1.0	08/18/23 22:21	
EPA 6010D	Magnesium	44.3	mg/L	0.050	08/18/23 22:21	
EPA 6020B	Barium	0.033	mg/L	0.0050	08/22/23 21:17	
EPA 6020B	Boron	7.2	mg/L	0.040	08/22/23 21:17	
EPA 6020B	Cadmium	0.0029	mg/L	0.00050	08/22/23 21:17	
EPA 6020B	Cobalt	0.0058	mg/L	0.0050	08/23/23 17:46	
EPA 6020B	Lithium	0.0013J	mg/L	0.030	08/22/23 21:17	
SM 2540C-2015	Total Dissolved Solids	837	mg/L	25.0	08/18/23 17:05	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	108	mg/L	5.0	08/17/23 17:41	
SM 2320B-2011	Alkalinity, Total as CaCO3	108	mg/L	5.0	08/17/23 17:41	
EPA 300.0 Rev 2.1 1993	Chloride	157	mg/L	19.0	08/16/23 03:36	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.062J	mg/L	0.10	08/15/23 12:47	
EPA 300.0 Rev 2.1 1993	Sulfate	948	mg/L	19.0	08/16/23 03:36	M1
<b>92682572003</b>	<b>HAM-MW-35</b>					
EPA 6010D	Calcium	455	mg/L	5.0	08/23/23 04:57	
EPA 6010D	Iron	0.16	mg/L	0.040	08/18/23 22:26	
EPA 6010D	Manganese	8.1	mg/L	0.040	08/18/23 22:26	
EPA 6010D	Potassium	7.3	mg/L	0.50	08/18/23 22:26	
EPA 6010D	Sodium	12.1	mg/L	1.0	08/18/23 22:26	
EPA 6010D	Magnesium	68.9	mg/L	0.050	08/18/23 22:26	
EPA 6020B	Arsenic	0.0045J	mg/L	0.010	08/22/23 21:23	
EPA 6020B	Barium	0.021	mg/L	0.0050	08/22/23 21:23	
EPA 6020B	Beryllium	0.00041J	mg/L	0.00050	08/23/23 17:57	
EPA 6020B	Boron	8.4	mg/L	0.040	08/22/23 21:23	
EPA 6020B	Cadmium	0.0012	mg/L	0.00050	08/22/23 21:23	
EPA 6020B	Cobalt	0.082	mg/L	0.0050	08/23/23 17:57	
EPA 6020B	Lead	0.00035J	mg/L	0.0010	08/22/23 21:23	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	08/22/23 21:23	
EPA 6020B	Selenium	0.0058	mg/L	0.0050	08/22/23 21:23	
SM 2540C-2015	Total Dissolved Solids	2290	mg/L	50.0	08/18/23 17:05	
EPA 300.0 Rev 2.1 1993	Chloride	181	mg/L	21.0	08/16/23 04:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.077J	mg/L	0.10	08/15/23 13:32	
EPA 300.0 Rev 2.1 1993	Sulfate	1090	mg/L	21.0	08/16/23 04:20	
<b>92682572004</b>	<b>HAM-MW-51</b>					
EPA 6010D	Calcium	485	mg/L	5.0	08/23/23 05:02	
EPA 6010D	Iron	1.1	mg/L	0.040	08/18/23 22:31	
EPA 6010D	Manganese	8.4	mg/L	0.040	08/18/23 22:31	
EPA 6010D	Potassium	7.7	mg/L	0.50	08/18/23 22:31	
EPA 6010D	Sodium	19.1	mg/L	1.0	08/18/23 22:31	
EPA 6010D	Magnesium	50.4	mg/L	0.050	08/18/23 22:31	
EPA 6020B	Barium	0.026	mg/L	0.0050	08/22/23 21:29	
EPA 6020B	Beryllium	0.00012J	mg/L	0.00050	08/23/23 18:01	

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92681886

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92682572004</b>	<b>HAM-MW-51</b>					
EPA 6020B	Boron	7.4	mg/L	0.040	08/22/23 21:29	
EPA 6020B	Cadmium	0.00019J	mg/L	0.00050	08/22/23 21:29	
EPA 6020B	Cobalt	0.022	mg/L	0.0050	08/22/23 21:29	
EPA 6020B	Lithium	0.00098J	mg/L	0.030	08/22/23 21:29	
SM 2540C-2015	Total Dissolved Solids	2220	mg/L	25.0	08/18/23 17:05	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	135	mg/L	5.0	08/17/23 17:55	
SM 2320B-2011	Alkalinity, Total as CaCO3	135	mg/L	5.0	08/17/23 17:55	
EPA 300.0 Rev 2.1 1993	Chloride	139	mg/L	20.0	08/16/23 04:34	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	08/15/23 13:46	
EPA 300.0 Rev 2.1 1993	Sulfate	1040	mg/L	20.0	08/16/23 04:34	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-HGWA-4		Lab ID: 92681886001		Collected: 08/08/23 12:56		Received: 08/09/23 11:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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									
Iron	ND	mg/L	0.040	0.025	1	08/11/23 14:21	08/12/23 06:48	7439-89-6	
Manganese	<b>0.024J</b>	mg/L	0.040	0.011	1	08/11/23 14:21	08/12/23 06:48	7439-96-5	
Potassium	<b>1.2</b>	mg/L	0.50	0.15	1	08/11/23 14:21	08/12/23 06:48	7440-09-7	
Sodium	<b>8.0</b>	mg/L	1.0	0.58	1	08/11/23 14:21	08/12/23 06:48	7440-23-5	
Calcium	<b>35.7</b>	mg/L	1.0	0.12	1	08/11/23 14:21	08/12/23 06:48	7440-70-2	
Magnesium	<b>3.6</b>	mg/L	0.050	0.012	1	08/11/23 14:21	08/12/23 06:48	7439-95-4	
<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	0.0012	1	08/17/23 10:25	08/22/23 18:54	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 18:54	7440-38-2	
Barium	<b>0.039</b>	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 18:54	7440-39-3	
Beryllium	<b>0.000067J</b>	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 18:54	7440-41-7	
Boron	<b>0.029J</b>	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 18:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 18:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 16:36	7440-47-3	
Cobalt	<b>0.00041J</b>	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 18:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 18:54	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 18:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 18:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 18:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 18:54	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	08/17/23 13:00	08/17/23 17:11	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>141</b>	mg/L	25.0	25.0	1		08/14/23 13:17		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>87.7</b>	mg/L	5.0	5.0	1		08/15/23 11:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/15/23 11:50		
Alkalinity, Total as CaCO3	<b>87.7</b>	mg/L	5.0	5.0	1		08/15/23 11:50		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:18	18496-25-8	
<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		08/12/23 22:07	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-HGWA-4 Lab ID: 92681886001 Collected: 08/08/23 12:56 Received: 08/09/23 11:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**  
 Analytical Method: EPA 300.0 Rev 2.1 1993  
 Pace Analytical Services - Asheville

Fluoride	<b>0.11</b>	mg/L	0.10	0.050	1		08/12/23 22:07	16984-48-8	
Sulfate	<b>16.8</b>	mg/L	1.0	0.50	1		08/12/23 22:07	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-HGWA-5		Lab ID: 92681886002		Collected: 08/08/23 14:03		Received: 08/09/23 11:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	0.25	mg/L	0.040	0.025	1	08/11/23 14:21	08/12/23 06:53	7439-89-6	
Manganese	0.068	mg/L	0.040	0.011	1	08/11/23 14:21	08/12/23 06:53	7439-96-5	
Potassium	0.64	mg/L	0.50	0.15	1	08/11/23 14:21	08/12/23 06:53	7440-09-7	
Sodium	7.8	mg/L	1.0	0.58	1	08/11/23 14:21	08/12/23 06:53	7440-23-5	
Calcium	54.4	mg/L	1.0	0.12	1	08/11/23 14:21	08/12/23 06:53	7440-70-2	
Magnesium	10.1	mg/L	0.050	0.012	1	08/11/23 14:21	08/12/23 06:53	7439-95-4	
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	0.0030	mg/L	0.0030	0.0012	1	08/17/23 10:25	08/22/23 19:17	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 19:17	7440-38-2	
Barium	0.18	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 19:17	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 19:17	7440-41-7	
Boron	0.025J	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 19:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 19:17	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 16:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 19:17	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 19:17	7439-92-1	
Lithium	0.0095J	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 19:17	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 19:17	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 19:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 19:17	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	08/17/23 13:00	08/17/23 17:14	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	225	mg/L	25.0	25.0	1		08/14/23 13:17		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	168	mg/L	5.0	5.0	1		08/15/23 11:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/15/23 11:59		
Alkalinity, Total as CaCO3	168	mg/L	5.0	5.0	1		08/15/23 11:59		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:19	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	1.3	mg/L	1.0	0.60	1		08/12/23 22:22	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
 Pace Project No.: 92681886

Sample: HAM-HGWA-5      Lab ID: 92681886002      Collected: 08/08/23 14:03      Received: 08/09/23 11:40      Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	<b>0.059J</b>	mg/L	0.10	0.050	1		08/12/23 22:22	16984-48-8	
Sulfate	<b>32.7</b>	mg/L	1.0	0.50	1		08/12/23 22:22	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-HGWA-6**      **Lab ID: 92681886003**      Collected: 08/08/23 16:12      Received: 08/09/23 11:40      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									
Iron	1.9	mg/L	0.040	0.025	1	08/11/23 14:21	08/12/23 06:57	7439-89-6	
Manganese	0.064	mg/L	0.040	0.011	1	08/11/23 14:21	08/12/23 06:57	7439-96-5	
Potassium	0.76	mg/L	0.50	0.15	1	08/11/23 14:21	08/12/23 06:57	7440-09-7	
Sodium	6.3	mg/L	1.0	0.58	1	08/11/23 14:21	08/12/23 06:57	7440-23-5	
Calcium	27.9	mg/L	1.0	0.12	1	08/11/23 14:21	08/12/23 06:57	7440-70-2	
Magnesium	5.7	mg/L	0.050	0.012	1	08/11/23 14:21	08/12/23 06:57	7439-95-4	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.0013J	mg/L	0.0030	0.0012	1	08/17/23 10:25	08/22/23 19:23	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 19:23	7440-38-2	
Barium	0.048	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 19:23	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 19:23	7440-41-7	
Boron	0.017J	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 19:23	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 19:23	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 16:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 19:23	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 19:23	7439-92-1	
Lithium	0.0028J	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 19:23	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 19:23	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 19:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 19:23	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	0.00013	1	08/17/23 13:00	08/17/23 17:16	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	125	mg/L	25.0	25.0	1		08/14/23 13:17		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	88.3	mg/L	5.0	5.0	1		08/15/23 12:09		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/15/23 12:09		
Alkalinity, Total as CaCO3	88.3	mg/L	5.0	5.0	1		08/15/23 12:09		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:19	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	2.1	mg/L	1.0	0.60	1		08/12/23 22:37	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-HGWA-6 Lab ID: 92681886003 Collected: 08/08/23 16:12 Received: 08/09/23 11:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.072J</b>	mg/L	0.10	0.050	1		08/12/23 22:37	16984-48-8	
Sulfate	<b>18.8</b>	mg/L	1.0	0.50	1		08/12/23 22:37	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-HGWA-42D**      **Lab ID: 92681886004**      Collected: 08/08/23 12:51      Received: 08/09/23 11:40      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									
Iron	0.43	mg/L	0.040	0.025	1	08/11/23 14:21	08/12/23 07:02	7439-89-6	
Manganese	0.027J	mg/L	0.040	0.011	1	08/11/23 14:21	08/12/23 07:02	7439-96-5	
Potassium	0.40J	mg/L	0.50	0.15	1	08/11/23 14:21	08/12/23 07:02	7440-09-7	
Sodium	8.1	mg/L	1.0	0.58	1	08/11/23 14:21	08/12/23 07:02	7440-23-5	
Calcium	40.7	mg/L	1.0	0.12	1	08/11/23 14:21	08/12/23 07:02	7440-70-2	
Magnesium	6.8	mg/L	0.050	0.012	1	08/11/23 14:21	08/12/23 07:02	7439-95-4	
<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	0.0012	1	08/17/23 10:25	08/22/23 19:29	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 19:29	7440-38-2	
Barium	0.21	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 19:29	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/22/23 19:29	7440-41-7	
Boron	0.048	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 19:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 19:29	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 16:54	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 19:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 19:29	7439-92-1	
Lithium	0.010J	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 19:29	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 19:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 19:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 19:29	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	0.00013	1	08/17/23 13:00	08/17/23 17:19	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	175	mg/L	25.0	25.0	1		08/14/23 13:23		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	153	mg/L	5.0	5.0	1		08/15/23 12:18		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/15/23 12:18		
Alkalinity, Total as CaCO3	153	mg/L	5.0	5.0	1		08/15/23 12:18		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:21	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	3.2	mg/L	1.0	0.60	1		08/12/23 22:51	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-HGWA-42D**      **Lab ID: 92681886004**      Collected: 08/08/23 12:51      Received: 08/09/23 11:40      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.10</b>	mg/L	0.10	0.050	1		08/12/23 22:51	16984-48-8	
Sulfate	<b>10.5</b>	mg/L	1.0	0.50	1		08/12/23 22:51	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-HGWC-14**      **Lab ID: 92681886005**      Collected: 08/13/23 10:25      Received: 08/14/23 11:15      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>418</b>	mg/L	5.0	0.61	5	08/22/23 11:29	08/25/23 18:53	7440-70-2	M1
Iron	<b>1.0</b>	mg/L	0.040	0.025	1	08/22/23 11:29	08/23/23 22:30	7439-89-6	
Manganese	<b>3.4</b>	mg/L	0.040	0.011	1	08/22/23 11:29	08/23/23 22:30	7439-96-5	
Potassium	<b>10.8</b>	mg/L	0.50	0.15	1	08/22/23 11:29	08/23/23 22:30	7440-09-7	M1
Sodium	<b>9.3</b>	mg/L	1.0	0.58	1	08/22/23 11:29	08/23/23 22:30	7440-23-5	M1
Magnesium	<b>37.4</b>	mg/L	0.050	0.012	1	08/22/23 11:29	08/23/23 22:30	7439-95-4	M1
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	<b>0.0032</b>	mg/L	0.0030	0.0012	1	08/21/23 10:22	08/24/23 16:04	7440-36-0	BC
Arsenic	<b>0.0048J</b>	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 16:04	7440-38-2	
Barium	<b>0.016</b>	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 16:04	7440-39-3	
Beryllium	<b>0.00040J</b>	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 16:04	7440-41-7	
Boron	<b>6.9</b>	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 16:04	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 16:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 16:04	7440-47-3	
Cobalt	<b>0.036</b>	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 16:04	7440-48-4	
Lead	<b>0.00079J</b>	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 16:04	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 16:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 16:04	7439-98-7	
Selenium	<b>0.0038J</b>	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 16:04	7782-49-2	
Thallium	<b>0.00026J</b>	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 16:04	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	08/21/23 11:10	08/21/23 14:13	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1960</b>	mg/L	25.0	25.0	1		08/18/23 17:07		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 23:17		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 23:17		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/17/23 23:17		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:41	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>95.8</b>	mg/L	19.0	11.4	19		08/17/23 07:16	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-HGWC-14 Lab ID: 92681886005 Collected: 08/13/23 10:25 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.10</b>	mg/L	0.10	0.050	1		08/16/23 18:03	16984-48-8	
Sulfate	<b>935</b>	mg/L	19.0	9.5	19		08/17/23 07:16	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-HGWC-15		Lab ID: 92681886006		Collected: 08/13/23 12:45		Received: 08/14/23 11:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	182	mg/L	5.0	0.61	5	08/22/23 11:29	08/24/23 16:10	7440-70-2	
Iron	ND	mg/L	0.040	0.025	1	08/22/23 11:29	08/23/23 22:52	7439-89-6	
Manganese	3.2	mg/L	0.040	0.011	1	08/22/23 11:29	08/23/23 22:52	7439-96-5	
Potassium	0.91	mg/L	0.50	0.15	1	08/22/23 11:29	08/23/23 22:52	7440-09-7	
Sodium	12.7	mg/L	1.0	0.58	1	08/22/23 11:29	08/23/23 22:52	7440-23-5	
Magnesium	31.2	mg/L	0.050	0.012	1	08/22/23 11:29	08/23/23 22:52	7439-95-4	
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	0.0027J	mg/L	0.0030	0.0012	1	08/21/23 10:22	08/24/23 16:10	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 16:10	7440-38-2	
Barium	0.011	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 16:10	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 16:10	7440-41-7	
Boron	1.6	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 16:10	7440-42-8	
Cadmium	0.00033J	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 16:10	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 16:10	7440-47-3	
Cobalt	0.0016J	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 16:10	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 16:10	7439-92-1	
Lithium	0.0047J	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 16:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 16:10	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 16:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 16:10	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	08/21/23 11:10	08/21/23 14:16	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	881	mg/L	25.0	25.0	1		08/18/23 17:07		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	246	mg/L	5.0	5.0	1		08/18/23 09:25		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/18/23 09:25		
Alkalinity, Total as CaCO3	246	mg/L	5.0	5.0	1		08/18/23 09:25		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:41	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	78.2	mg/L	1.0	0.60	1		08/16/23 18:17	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
 Pace Project No.: 92681886

**Sample: HAM-HGWC-15**      **Lab ID: 92681886006**      Collected: 08/13/23 12:45      Received: 08/14/23 11:15      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.12</b>	mg/L	0.10	0.050	1		08/16/23 18:17	16984-48-8	
Sulfate	<b>281</b>	mg/L	6.0	3.0	6		08/17/23 07:31	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-HGWC-16		Lab ID: 92681886007		Collected: 08/13/23 11:17		Received: 08/14/23 11:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	187	mg/L	5.0	0.61	5	08/22/23 11:29	08/24/23 16:15	7440-70-2	
Iron	1.4	mg/L	0.040	0.025	1	08/22/23 11:29	08/23/23 22:57	7439-89-6	
Manganese	0.049	mg/L	0.040	0.011	1	08/22/23 11:29	08/23/23 22:57	7439-96-5	
Potassium	0.72	mg/L	0.50	0.15	1	08/22/23 11:29	08/23/23 22:57	7440-09-7	
Sodium	10.1	mg/L	1.0	0.58	1	08/22/23 11:29	08/23/23 22:57	7440-23-5	
Magnesium	15.6	mg/L	0.050	0.012	1	08/22/23 11:29	08/23/23 22:57	7439-95-4	
<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	0.0012	1	08/21/23 10:22	08/24/23 16:16	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 16:16	7440-38-2	
Barium	0.099	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 16:16	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 16:16	7440-41-7	
Boron	2.2	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 16:16	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 16:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 16:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 16:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 16:16	7439-92-1	
Lithium	0.0030J	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 16:16	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 16:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 16:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 16:16	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	0.00013	1	08/21/23 11:10	08/21/23 14:19	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	861	mg/L	25.0	25.0	1		08/18/23 17:07		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	210	mg/L	5.0	5.0	1		08/17/23 23:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 23:50		
Alkalinity, Total as CaCO3	210	mg/L	5.0	5.0	1		08/17/23 23:50		M1
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:42	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	89.1	mg/L	1.0	0.60	1		08/16/23 18:32	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-HGWC-16 Lab ID: 92681886007 Collected: 08/13/23 11:17 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.053J	mg/L	0.10	0.050	1		08/16/23 18:32	16984-48-8	
Sulfate	214	mg/L	5.0	2.5	5		08/17/23 07:45	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample:** HAM-HGWC-17      **Lab ID:** 92681886008      Collected: 08/13/23 14:16      Received: 08/14/23 11:15      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									
Iron	2.2	mg/L	0.040	0.025	1	08/22/23 11:29	08/23/23 23:02	7439-89-6	
Manganese	2.3	mg/L	0.040	0.011	1	08/22/23 11:29	08/23/23 23:02	7439-96-5	
Potassium	2.9	mg/L	0.50	0.15	1	08/22/23 11:29	08/23/23 23:02	7440-09-7	
Sodium	13.5	mg/L	1.0	0.58	1	08/22/23 11:29	08/23/23 23:02	7440-23-5	
Magnesium	30.0	mg/L	0.050	0.012	1	08/22/23 11:29	08/23/23 23:02	7439-95-4	
Calcium	261	mg/L	5.0	0.61	5	08/22/23 11:29	08/24/23 16:20	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	0.0012	1	08/21/23 10:22	08/24/23 16:22	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 16:22	7440-38-2	
Barium	0.025	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 16:22	7440-39-3	
Beryllium	0.00010J	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 16:22	7440-41-7	
Boron	6.2	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 16:22	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 16:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 16:22	7440-47-3	
Cobalt	0.0090	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 16:22	7440-48-4	
Lead	0.00049J	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 16:22	7439-92-1	
Lithium	0.0018J	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 16:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 16:22	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 16:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 16:22	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	08/21/23 11:10	08/21/23 14:21	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1180	mg/L	25.0	25.0	1		08/18/23 17:08		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	211	mg/L	5.0	5.0	1		08/22/23 19:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/22/23 19:59		
Alkalinity, Total as CaCO3	211	mg/L	5.0	5.0	1		08/22/23 19:59		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	0.032J	mg/L	0.10	0.022	1		08/18/23 04:44	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	109	mg/L	7.0	4.2	7		08/17/23 07:59	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-HGWC-17 Lab ID: 92681886008 Collected: 08/13/23 14:16 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.081J</b>	mg/L	0.10	0.050	1		08/16/23 18:46	16984-48-8	
Sulfate	<b>351</b>	mg/L	7.0	3.5	7		08/17/23 07:59	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-HGWC-18		Lab ID: 92681886009		Collected: 08/13/23 09:18		Received: 08/14/23 11:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	355	mg/L	5.0	0.61	5	08/22/23 11:29	08/24/23 16:25	7440-70-2	
Iron	0.038J	mg/L	0.040	0.025	1	08/22/23 11:29	08/23/23 23:07	7439-89-6	
Manganese	3.4	mg/L	0.040	0.011	1	08/22/23 11:29	08/23/23 23:07	7439-96-5	
Potassium	10.0	mg/L	0.50	0.15	1	08/22/23 11:29	08/23/23 23:07	7440-09-7	
Sodium	10.9	mg/L	1.0	0.58	1	08/22/23 11:29	08/23/23 23:07	7440-23-5	
Magnesium	35.8	mg/L	0.050	0.012	1	08/22/23 11:29	08/23/23 23:07	7439-95-4	
<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	0.0012	1	08/21/23 10:22	08/24/23 18:07	7440-36-0	
Arsenic	0.0059J	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 18:07	7440-38-2	
Barium	0.026	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 18:07	7440-39-3	
Beryllium	0.0030	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 18:07	7440-41-7	
Boron	7.7	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 18:07	7440-42-8	
Cadmium	0.0017	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 18:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 18:07	7440-47-3	
Cobalt	0.14	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 18:07	7440-48-4	
Lead	0.00075J	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 18:07	7439-92-1	
Lithium	0.012J	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 18:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 18:07	7439-98-7	
Selenium	0.0085	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 18:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 18:07	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	08/21/23 11:10	08/21/23 14:24	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1700	mg/L	25.0	25.0	1		08/18/23 17:08		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/22/23 20:14		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/22/23 20:14		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/22/23 20:14		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:44	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	104	mg/L	18.0	10.8	18		08/17/23 08:42	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-HGWC-18**      **Lab ID: 92681886009**      Collected: 08/13/23 09:18      Received: 08/14/23 11:15      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.25</b>	mg/L	0.10	0.050	1		08/16/23 19:01	16984-48-8	
Sulfate	<b>895</b>	mg/L	18.0	9.0	18		08/17/23 08:42	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-MW-22**      **Lab ID: 92681886010**      Collected: 08/13/23 16:03      Received: 08/14/23 11:15      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	305	mg/L	5.0	0.61	5	08/22/23 11:29	08/24/23 16:41	7440-70-2	
Iron	0.086	mg/L	0.040	0.025	1	08/22/23 11:29	08/23/23 23:13	7439-89-6	
Manganese	5.7	mg/L	0.040	0.011	1	08/22/23 11:29	08/23/23 23:13	7439-96-5	
Potassium	1.9	mg/L	0.50	0.15	1	08/22/23 11:29	08/23/23 23:13	7440-09-7	
Sodium	12.9	mg/L	1.0	0.58	1	08/22/23 11:29	08/23/23 23:13	7440-23-5	
Magnesium	28.8	mg/L	0.050	0.012	1	08/22/23 11:29	08/23/23 23:13	7439-95-4	
<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	0.0012	1	08/21/23 10:22	08/24/23 18:13	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 18:13	7440-38-2	
Barium	0.013	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 18:13	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 18:13	7440-41-7	
Boron	2.3	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 18:13	7440-42-8	
Cadmium	0.0020	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 18:13	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 18:13	7440-47-3	
Cobalt	0.0089	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 18:13	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 18:13	7439-92-1	
Lithium	0.0014J	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 18:13	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 18:13	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 18:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 18:13	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	08/21/23 11:10	08/21/23 14:27	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1000	mg/L	25.0	25.0	1		08/18/23 17:08		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	39.9	mg/L	5.0	5.0	1		08/22/23 20:19		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/22/23 20:19		
Alkalinity, Total as CaCO3	39.9	mg/L	5.0	5.0	1		08/22/23 20:19		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:45	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	101	mg/L	8.0	4.8	8		08/17/23 08:56	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-MW-22 Lab ID: 92681886010 Collected: 08/13/23 16:03 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.057J</b>	mg/L	0.10	0.050	1		08/16/23 19:15	16984-48-8	
Sulfate	<b>410</b>	mg/L	8.0	4.0	8		08/17/23 08:56	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-MW-23D		Lab ID: 92681886011		Collected: 08/13/23 14:41		Received: 08/14/23 11:15		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								
Iron	0.12	mg/L	0.040	0.025	1	08/22/23 11:29	08/23/23 23:18	7439-89-6		
Manganese	4.4	mg/L	0.040	0.011	1	08/22/23 11:29	08/23/23 23:18	7439-96-5		
Potassium	11.0	mg/L	0.50	0.15	1	08/22/23 11:29	08/23/23 23:18	7440-09-7		
Sodium	10.0	mg/L	1.0	0.58	1	08/22/23 11:29	08/23/23 23:18	7440-23-5		
Magnesium	38.5	mg/L	0.050	0.012	1	08/22/23 11:29	08/23/23 23:18	7439-95-4		
Calcium	343	mg/L	5.0	0.61	5	08/22/23 11:29	08/24/23 16:46	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	0.0012	1	08/21/23 10:22	08/24/23 18:19	7440-36-0		
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 18:19	7440-38-2		
Barium	0.041	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 18:19	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 18:19	7440-41-7		
Boron	2.7	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 18:19	7440-42-8		
Cadmium	0.00015J	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 18:19	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 18:19	7440-47-3		
Cobalt	0.00073J	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 18:19	7440-48-4		
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 18:19	7439-92-1		
Lithium	0.0017J	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 18:19	7439-93-2		
Molybdenum	0.0041J	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 18:19	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 18:19	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 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	08/21/23 11:10	08/21/23 14:29	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	1280	mg/L	25.0	25.0	1		08/18/23 17:08			
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	249	mg/L	5.0	5.0	1		08/23/23 12:49			
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/23/23 12:49			
Alkalinity, Total as CaCO3	249	mg/L	5.0	5.0	1		08/23/23 12:49			
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:45	18496-25-8		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	119	mg/L	8.0	4.8	8		08/17/23 09:10	16887-00-6		

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**ANALYTICAL RESULTS**

Project: Hammond AP-2  
 Pace Project No.: 92681886

**Sample: HAM-MW-23D**      **Lab ID: 92681886011**      Collected: 08/13/23 14:41      Received: 08/14/23 11:15      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.061J</b>	mg/L	0.10	0.050	1		08/16/23 19:29	16984-48-8	
Sulfate	<b>379</b>	mg/L	8.0	4.0	8		08/17/23 09:10	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-MW-33		Lab ID: 92681886012		Collected: 08/13/23 09:28		Received: 08/14/23 11:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	0.13	mg/L	0.040	0.025	1	08/22/23 11:29	08/23/23 23:33	7439-89-6	
Manganese	4.4	mg/L	0.040	0.011	1	08/22/23 11:29	08/23/23 23:33	7439-96-5	
Potassium	11.0	mg/L	0.50	0.15	1	08/22/23 11:29	08/23/23 23:33	7440-09-7	
Sodium	10.1	mg/L	1.0	0.58	1	08/22/23 11:29	08/23/23 23:33	7440-23-5	
Magnesium	38.6	mg/L	0.050	0.012	1	08/22/23 11:29	08/23/23 23:33	7439-95-4	
Calcium	418	mg/L	5.0	0.61	5	08/22/23 11:29	08/24/23 16:51	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	0.0012	1	08/21/23 10:22	08/24/23 18:25	7440-36-0	
Arsenic	0.0059J	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 18:25	7440-38-2	
Barium	0.023	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 18:25	7440-39-3	
Beryllium	0.00099	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 18:25	7440-41-7	
Boron	6.6	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 18:25	7440-42-8	
Cadmium	0.00020J	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 18:25	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 18:25	7440-47-3	
Cobalt	0.061	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 18:25	7440-48-4	
Lead	0.0011	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 18:25	7439-92-1	
Lithium	0.00077J	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 18:25	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 18:25	7439-98-7	
Selenium	0.0065	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 18:25	7782-49-2	
Thallium	0.00022J	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 18:25	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	08/21/23 11:10	08/21/23 14:32	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1910	mg/L	25.0	25.0	1		08/18/23 18:29		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/22/23 20:45		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/22/23 20:45		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/22/23 20:45		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:45	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	99.0	mg/L	20.0	12.0	20		08/17/23 09:25	16887-00-6	M1

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-MW-33 Lab ID: 92681886012 Collected: 08/13/23 09:28 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.22</b>	mg/L	0.10	0.050	1		08/16/23 21:35	16984-48-8	
Sulfate	<b>970</b>	mg/L	20.0	10.0	20		08/17/23 09:25	14808-79-8	M1

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-MW-37D**      **Lab ID: 92681886013**      Collected: 08/13/23 12:00      Received: 08/14/23 11:15      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									
Iron	0.18	mg/L	0.040	0.025	1	08/22/23 11:29	08/23/23 23:39	7439-89-6	
Manganese	0.029J	mg/L	0.040	0.011	1	08/22/23 11:29	08/23/23 23:39	7439-96-5	
Potassium	0.71	mg/L	0.50	0.15	1	08/22/23 11:29	08/23/23 23:39	7440-09-7	
Sodium	14.0	mg/L	1.0	0.58	1	08/22/23 11:29	08/23/23 23:39	7440-23-5	
Magnesium	11.8	mg/L	0.050	0.012	1	08/22/23 11:29	08/23/23 23:39	7439-95-4	
Calcium	57.0	mg/L	1.0	0.12	1	08/22/23 11:29	08/24/23 16:56	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	0.0012	1	08/21/23 10:22	08/24/23 18:31	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 18:31	7440-38-2	
Barium	0.15	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 18:31	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 18:31	7440-41-7	
Boron	0.14	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 18:31	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 18:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 18:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 18:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 18:31	7439-92-1	
Lithium	0.020J	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 18:31	7439-93-2	
Molybdenum	0.0029J	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 18:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 18:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 18:31	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	08/21/23 11:10	08/21/23 14:55	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	258	mg/L	25.0	25.0	1		08/18/23 18:30		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	162	mg/L	5.0	5.0	1		08/22/23 20:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/22/23 20:50		
Alkalinity, Total as CaCO3	162	mg/L	5.0	5.0	1		08/22/23 20:50		M1
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	0.036J	mg/L	0.10	0.022	1		08/18/23 04:47	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	16.5	mg/L	1.0	0.60	1		08/16/23 22:18	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-MW-37D**      **Lab ID: 92681886013**      Collected: 08/13/23 12:00      Received: 08/14/23 11:15      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.11</b>	mg/L	0.10	0.050	1		08/16/23 22:18	16984-48-8	
Sulfate	<b>39.2</b>	mg/L	1.0	0.50	1		08/16/23 22:18	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-AP2-FB-02**      **Lab ID: 92681886014**      Collected: 08/13/23 13:00      Received: 08/14/23 11:15      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	08/22/23 11:29	08/24/23 17:02	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	0.0012	1	08/21/23 10:22	08/24/23 18:37	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 18:37	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 18:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 18:37	7440-41-7	
Boron	<b>0.031J</b>	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 18:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 18:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 18:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 18:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 18:37	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 18:37	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 18:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 18:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 18:37	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	08/21/23 11:10	08/21/23 16:15	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	25.0	25.0	1		08/18/23 18:32		
<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		08/16/23 22:33	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/16/23 22:33	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/16/23 22:33	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-AP2-EB-02**      **Lab ID: 92681886015**      Collected: 08/13/23 13:10      Received: 08/14/23 11:15      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	08/22/23 11:29	08/24/23 17:07	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	0.0012	1	08/21/23 10:22	08/24/23 18:43	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 18:43	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 18:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 18:43	7440-41-7	
Boron	<b>0.017J</b>	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 18:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 18:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 18:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 18:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 18:43	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 18:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 18:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 18:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 18:43	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	08/21/23 11:10	08/21/23 16:17	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	25.0	25.0	1		08/18/23 18:32		
<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		08/16/23 22:47	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/16/23 22:47	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/16/23 22:47	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample:** HAM-AP2-FD-02      **Lab ID:** 92681886016      Collected: 08/13/23 00:00      Received: 08/14/23 11:15      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									
Iron	ND	mg/L	0.040	0.025	1	08/22/23 11:29	08/23/23 23:54	7439-89-6	
Manganese	3.5	mg/L	0.040	0.011	1	08/22/23 11:29	08/23/23 23:54	7439-96-5	
Potassium	0.85	mg/L	0.50	0.15	1	08/22/23 11:29	08/23/23 23:54	7440-09-7	
Sodium	12.5	mg/L	1.0	0.58	1	08/22/23 11:29	08/23/23 23:54	7440-23-5	
Magnesium	30.1	mg/L	0.050	0.012	1	08/22/23 11:29	08/23/23 23:54	7439-95-4	
Calcium	179	mg/L	5.0	0.61	5	08/22/23 11:29	08/24/23 17:12	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.0015J	mg/L	0.0030	0.0012	1	08/21/23 10:22	08/24/23 18:49	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/21/23 10:22	08/24/23 18:49	7440-38-2	
Barium	0.011	mg/L	0.0050	0.00067	1	08/21/23 10:22	08/24/23 18:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 10:22	08/24/23 18:49	7440-41-7	
Boron	1.6	mg/L	0.040	0.0086	1	08/21/23 10:22	08/24/23 18:49	7440-42-8	
Cadmium	0.00038J	mg/L	0.00050	0.00011	1	08/21/23 10:22	08/24/23 18:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 10:22	08/24/23 18:49	7440-47-3	
Cobalt	0.0021J	mg/L	0.0050	0.00039	1	08/21/23 10:22	08/24/23 18:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 10:22	08/24/23 18:49	7439-92-1	
Lithium	0.0048J	mg/L	0.030	0.00073	1	08/21/23 10:22	08/24/23 18:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 10:22	08/24/23 18:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 10:22	08/24/23 18:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 10:22	08/24/23 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	08/21/23 11:10	08/21/23 16:20	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	888	mg/L	25.0	25.0	1		08/18/23 18:33		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	216	mg/L	5.0	5.0	1		08/23/23 18:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/23/23 18:05		
Alkalinity, Total as CaCO3	216	mg/L	5.0	5.0	1		08/23/23 18:05		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:48	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	79.5	mg/L	1.0	0.60	1		08/16/23 23:01	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-AP2-FD-02**      **Lab ID: 92681886016**      Collected: 08/13/23 00:00      Received: 08/14/23 11:15      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.11</b>	mg/L	0.10	0.050	1		08/16/23 23:01	16984-48-8	
Sulfate	<b>292</b>	mg/L	6.0	3.0	6		08/17/23 10:07	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-MW-21D		Lab ID: 92682572001		Collected: 08/12/23 16:07		Received: 08/14/23 11:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	6.8	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 22:16	7439-89-6	
Manganese	0.40	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 22:16	7439-96-5	
Potassium	0.80	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 22:16	7440-09-7	
Sodium	10.3	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 22:16	7440-23-5	
Calcium	167	mg/L	1.0	0.12	1	08/18/23 10:59	08/18/23 22:16	7440-70-2	
Magnesium	27.6	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 22:16	7439-95-4	
<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	0.0012	1	08/17/23 10:25	08/22/23 21:11	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 21:11	7440-38-2	
Barium	0.033	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 21:11	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/17/23 10:25	08/24/23 15:04	7440-41-7	D3
Boron	2.8	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 21:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 21:11	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/23/23 17:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 21:11	7439-92-1	
Lithium	0.015J	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 21:11	7439-93-2	
Molybdenum	0.021	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 21:11	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 21:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 21:11	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	08/21/23 11:10	08/21/23 15:51	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	2200	mg/L	25.0	25.0	1		08/18/23 17:05		1g
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	115	mg/L	5.0	5.0	1		08/17/23 17:32		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 17:32		
Alkalinity, Total as CaCO3	115	mg/L	5.0	5.0	1		08/17/23 17:32		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:32		18496-25-8
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	76.2	mg/L	1.0	0.60	1		08/16/23 05:00		16887-00-6

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-MW-21D Lab ID: 92682572001 Collected: 08/12/23 16:07 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		08/16/23 05:00	16984-48-8	
Sulfate	276	mg/L	6.0	3.0	6		08/16/23 12:36	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-MW-34D		Lab ID: 92682572002		Collected: 08/12/23 16:50		Received: 08/14/23 11:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	469	mg/L	5.0	0.61	5	08/18/23 10:59	08/23/23 04:52	7440-70-2	
Iron	0.14	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 22:21	7439-89-6	
Manganese	4.2	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 22:21	7439-96-5	
Potassium	10.4	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 22:21	7440-09-7	
Sodium	11.8	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 22:21	7440-23-5	
Magnesium	44.3	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 22:21	7439-95-4	
<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	0.0012	1	08/17/23 10:25	08/22/23 21:17	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 21:17	7440-38-2	
Barium	0.033	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 21:17	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/23/23 17:46	7440-41-7	
Boron	7.2	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 21:17	7440-42-8	
Cadmium	0.0029	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 21:17	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:46	7440-47-3	
Cobalt	0.0058	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/23/23 17:46	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 21:17	7439-92-1	
Lithium	0.0013J	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 21:17	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 21:17	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 21:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 21:17	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	08/21/23 11:10	08/21/23 15:54	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	837	mg/L	25.0	25.0	1		08/18/23 17:05		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	108	mg/L	5.0	5.0	1		08/17/23 17:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 17:41		
Alkalinity, Total as CaCO3	108	mg/L	5.0	5.0	1		08/17/23 17:41		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:33	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	157	mg/L	19.0	11.4	19		08/16/23 03:36	16887-00-6	M1

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-MW-34D Lab ID: 92682572002 Collected: 08/12/23 16:50 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.062J</b>	mg/L	0.10	0.050	1		08/15/23 12:47	16984-48-8	
Sulfate	<b>948</b>	mg/L	19.0	9.5	19		08/16/23 03:36	14808-79-8	M1

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-MW-35 Lab ID: 92682572003 Collected: 08/12/23 09:39 Received: 08/14/23 11:15 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	455	mg/L	5.0	0.61	5	08/18/23 10:59	08/23/23 04:57	7440-70-2	
Iron	0.16	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 22:26	7439-89-6	
Manganese	8.1	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 22:26	7439-96-5	
Potassium	7.3	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 22:26	7440-09-7	
Sodium	12.1	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 22:26	7440-23-5	
Magnesium	68.9	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 22:26	7439-95-4	
<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	0.0012	1	08/17/23 10:25	08/22/23 21:23	7440-36-0	
Arsenic	0.0045J	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 21:23	7440-38-2	
Barium	0.021	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 21:23	7440-39-3	
Beryllium	0.00041J	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/23/23 17:57	7440-41-7	
Boron	8.4	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 21:23	7440-42-8	
Cadmium	0.0012	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 21:23	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/23/23 17:57	7440-47-3	
Cobalt	0.082	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/23/23 17:57	7440-48-4	
Lead	0.00035J	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 21:23	7439-92-1	
Lithium	0.0031J	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 21:23	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 21:23	7439-98-7	
Selenium	0.0058	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 21:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 21:23	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	0.00013	1	08/21/23 11:10	08/21/23 15:56	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	2290	mg/L	50.0	50.0	1		08/18/23 17:05		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 17:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 17:50		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/17/23 17:50		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:34	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	181	mg/L	21.0	12.6	21		08/16/23 04:20	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2  
 Pace Project No.: 92681886

Sample: HAM-MW-35		Lab ID: 92682572003		Collected: 08/12/23 09:39		Received: 08/14/23 11:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	<b>0.077J</b>	mg/L	0.10	0.050	1		08/15/23 13:32	16984-48-8	
Sulfate	<b>1090</b>	mg/L	21.0	10.5	21		08/16/23 04:20	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

**Sample: HAM-MW-51**      **Lab ID: 92682572004**      Collected: 08/12/23 11:24      Received: 08/14/23 11:15      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>485</b>	mg/L	5.0	0.61	5	08/18/23 10:59	08/23/23 05:02	7440-70-2	
Iron	<b>1.1</b>	mg/L	0.040	0.025	1	08/18/23 10:59	08/18/23 22:31	7439-89-6	
Manganese	<b>8.4</b>	mg/L	0.040	0.011	1	08/18/23 10:59	08/18/23 22:31	7439-96-5	
Potassium	<b>7.7</b>	mg/L	0.50	0.15	1	08/18/23 10:59	08/18/23 22:31	7440-09-7	
Sodium	<b>19.1</b>	mg/L	1.0	0.58	1	08/18/23 10:59	08/18/23 22:31	7440-23-5	
Magnesium	<b>50.4</b>	mg/L	0.050	0.012	1	08/18/23 10:59	08/18/23 22:31	7439-95-4	
<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	0.0012	1	08/17/23 10:25	08/22/23 21:29	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/17/23 10:25	08/22/23 21:29	7440-38-2	
Barium	<b>0.026</b>	mg/L	0.0050	0.00067	1	08/17/23 10:25	08/22/23 21:29	7440-39-3	
Beryllium	<b>0.00012J</b>	mg/L	0.00050	0.000054	1	08/17/23 10:25	08/23/23 18:01	7440-41-7	
Boron	<b>7.4</b>	mg/L	0.040	0.0086	1	08/17/23 10:25	08/22/23 21:29	7440-42-8	
Cadmium	<b>0.00019J</b>	mg/L	0.00050	0.00011	1	08/17/23 10:25	08/22/23 21:29	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/17/23 10:25	08/22/23 21:29	7440-47-3	
Cobalt	<b>0.022</b>	mg/L	0.0050	0.00039	1	08/17/23 10:25	08/22/23 21:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/17/23 10:25	08/22/23 21:29	7439-92-1	
Lithium	<b>0.00098J</b>	mg/L	0.030	0.00073	1	08/17/23 10:25	08/22/23 21:29	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/17/23 10:25	08/22/23 21:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/17/23 10:25	08/22/23 21:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/17/23 10:25	08/22/23 21:29	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	0.00013	1	08/21/23 11:10	08/21/23 15:59	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>2220</b>	mg/L	25.0	25.0	1		08/18/23 17:05		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>135</b>	mg/L	5.0	5.0	1		08/17/23 17:55		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/17/23 17:55		
Alkalinity, Total as CaCO3	<b>135</b>	mg/L	5.0	5.0	1		08/17/23 17:55		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/18/23 04:35	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>139</b>	mg/L	20.0	12.0	20		08/16/23 04:34	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92681886

Sample: HAM-MW-51 Lab ID: 92682572004 Collected: 08/12/23 11:24 Received: 08/14/23 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.10	mg/L	0.10	0.050	1		08/15/23 13:46	16984-48-8	
Sulfate	1040	mg/L	20.0	10.0	20		08/16/23 04:34	14808-79-8	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch:	792418	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92681886001, 92681886002, 92681886003, 92681886004

METHOD BLANK: 4106293 Matrix: Water

Associated Lab Samples: 92681886001, 92681886002, 92681886003, 92681886004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/12/23 04:46	
Iron	mg/L	ND	0.040	0.025	08/12/23 04:46	
Magnesium	mg/L	ND	0.050	0.012	08/12/23 04:46	
Manganese	mg/L	ND	0.040	0.011	08/12/23 04:46	
Potassium	mg/L	ND	0.50	0.15	08/12/23 04:46	
Sodium	mg/L	ND	1.0	0.58	08/12/23 04:46	

LABORATORY CONTROL SAMPLE: 4106294

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.98J	98	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.0	105	80-120	
Manganese	mg/L	1	1.0	105	80-120	
Potassium	mg/L	1	1.1	111	80-120	
Sodium	mg/L	1	1.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4106295 4106296

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Spike Conc.	Result	Spike Conc.	Result						
Calcium	mg/L	40.7	1	1	41.4	41.0	71	33	75-125	1	20 M1
Iron	mg/L	0.13	1	1	1.2	1.1	111	102	75-125	8	20
Magnesium	mg/L	22.1	1	1	22.9	22.8	81	67	75-125	1	20 M1
Manganese	mg/L	0.020J	1	1	1.1	1.1	106	105	75-125	1	20
Potassium	mg/L	1.3	1	1	2.3	2.3	108	102	75-125	3	20
Sodium	mg/L	1.8	1	1	2.8	2.8	100	97	75-125	1	20

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch:	794188	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92682572001, 92682572002, 92682572003, 92682572004

METHOD BLANK: 4115153 Matrix: Water

Associated Lab Samples: 92682572001, 92682572002, 92682572003, 92682572004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/18/23 21:28	
Iron	mg/L	ND	0.040	0.025	08/18/23 21:28	
Magnesium	mg/L	ND	0.050	0.012	08/18/23 21:28	
Manganese	mg/L	ND	0.040	0.011	08/18/23 21:28	
Potassium	mg/L	ND	0.50	0.15	08/18/23 21:28	
Sodium	mg/L	ND	1.0	0.58	08/18/23 21:28	

LABORATORY CONTROL SAMPLE: 4115154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	101	80-120	
Iron	mg/L	1	0.98	98	80-120	
Magnesium	mg/L	1	0.98	98	80-120	
Manganese	mg/L	1	0.97	97	80-120	
Potassium	mg/L	1	1.1	113	80-120	
Sodium	mg/L	1	1.1	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115155 4115156

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Spike Conc.	Result	Spike Conc.	Result						
Calcium	mg/L	97.8	1	1	96.7	95.3	-103	-245	75-125	1	20 M1
Iron	mg/L	0.13	1	1	1.2	1.1	102	98	75-125	4	20
Magnesium	mg/L	9.4	1	1	10.2	10.1	81	69	75-125	1	20 M1
Manganese	mg/L	0.19	1	1	1.2	1.1	100	95	75-125	4	20
Potassium	mg/L	0.85	1	1	2.0	1.9	115	104	75-125	6	20
Sodium	mg/L	5.7	1	1	6.5	6.4	79	67	75-125	2	20 M1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 795114 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011, 92681886012, 92681886013, 92681886014, 92681886015, 92681886016

METHOD BLANK: 4119869 Matrix: Water  
 Associated Lab Samples: 92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011, 92681886012, 92681886013, 92681886014, 92681886015, 92681886016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/23/23 22:09	
Iron	mg/L	ND	0.040	0.025	08/23/23 22:09	
Magnesium	mg/L	ND	0.050	0.012	08/23/23 22:09	
Manganese	mg/L	ND	0.040	0.011	08/23/23 22:09	
Potassium	mg/L	ND	0.50	0.15	08/23/23 22:09	
Sodium	mg/L	ND	1.0	0.58	08/23/23 22:09	

LABORATORY CONTROL SAMPLE: 4119870

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.94J	94	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.1	109	80-120	
Manganese	mg/L	1	1.0	104	80-120	
Potassium	mg/L	1	1.1	110	80-120	
Sodium	mg/L	1	1.1	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119871 4119872

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92681886005 Result	Spike Conc.	Spike Conc.	Result						
Calcium	mg/L	418	1	1	418	405	17	-1290	75-125	3	20 M1
Iron	mg/L	1.0	1	1	2.1	1.9	107	93	75-125	7	20
Magnesium	mg/L	37.4	1	1	39.1	35.5	173	-190	75-125	10	20 M1
Manganese	mg/L	3.4	1	1	4.5	4.2	113	78	75-125	8	20
Potassium	mg/L	10.8	1	1	12.5	11.2	174	45	75-125	11	20 M1
Sodium	mg/L	9.3	1	1	10.6	9.8	127	46	75-125	8	20 M1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch:	794177	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92681886001, 92681886002, 92681886003, 92681886004, 92682572001, 92682572002, 92682572003, 92682572004		

METHOD BLANK:	4115107	Matrix:	Water
Associated Lab Samples:	92681886001, 92681886002, 92681886003, 92681886004, 92682572001, 92682572002, 92682572003, 92682572004		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/22/23 18:42	
Arsenic	mg/L	ND	0.010	0.0037	08/22/23 18:42	
Barium	mg/L	ND	0.0050	0.00067	08/22/23 18:42	
Beryllium	mg/L	ND	0.00050	0.000054	08/22/23 18:42	
Boron	mg/L	ND	0.040	0.0086	08/22/23 18:42	
Cadmium	mg/L	ND	0.00050	0.00011	08/22/23 18:42	
Chromium	mg/L	ND	0.0050	0.0011	08/23/23 16:28	
Cobalt	mg/L	ND	0.0050	0.00039	08/22/23 18:42	
Lead	mg/L	ND	0.0010	0.00012	08/22/23 18:42	
Lithium	mg/L	ND	0.030	0.00073	08/22/23 18:42	
Molybdenum	mg/L	ND	0.010	0.00074	08/22/23 18:42	
Selenium	mg/L	ND	0.0050	0.0014	08/22/23 18:42	
Thallium	mg/L	ND	0.0010	0.00018	08/22/23 18:42	

LABORATORY CONTROL SAMPLE: 4115108						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.094	94	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.093	93	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.090	90	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.095	95	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.093	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115109 4115110												
Parameter	Units	92681886001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115109 4115110												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92681886001 Result	Spike Conc.	Spike Conc.	MS Result							
Arsenic	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Barium	mg/L	0.039	0.1	0.1	0.14	0.14	103	103	75-125	1	20	
Beryllium	mg/L	0.000067J	0.1	0.1	0.094	0.091	94	91	75-125	4	20	
Boron	mg/L	0.029J	1	1	0.97	0.94	94	91	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Cobalt	mg/L	0.00041J	0.1	0.1	0.092	0.091	91	91	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.093	0.092	93	92	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.095	0.094	95	93	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.096	0.096	96	95	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.092	92	92	75-125	0	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 794885 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011, 92681886012, 92681886013, 92681886014, 92681886015, 92681886016

METHOD BLANK: 4118630 Matrix: Water  
 Associated Lab Samples: 92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011, 92681886012, 92681886013, 92681886014, 92681886015, 92681886016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/24/23 15:28	
Arsenic	mg/L	ND	0.010	0.0037	08/24/23 15:28	
Barium	mg/L	ND	0.0050	0.00067	08/24/23 15:28	
Beryllium	mg/L	ND	0.00050	0.000054	08/24/23 15:28	
Boron	mg/L	ND	0.040	0.0086	08/24/23 15:28	
Cadmium	mg/L	ND	0.00050	0.00011	08/24/23 15:28	
Chromium	mg/L	ND	0.0050	0.0011	08/24/23 15:28	
Cobalt	mg/L	ND	0.0050	0.00039	08/24/23 15:28	
Lead	mg/L	ND	0.0010	0.00012	08/24/23 15:28	
Lithium	mg/L	ND	0.030	0.00073	08/24/23 15:28	
Molybdenum	mg/L	ND	0.010	0.00074	08/24/23 15:28	
Selenium	mg/L	ND	0.0050	0.0014	08/24/23 15:28	
Thallium	mg/L	ND	0.0010	0.00018	08/24/23 15:28	

LABORATORY CONTROL SAMPLE: 4118631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	105	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.096	96	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.096	96	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118632 4118633

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Spike Conc.	Result	Spike Conc.	Result								
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	1	20		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118632 4118633												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92682397018 Result	Spike Conc.	Spike Conc.	MS Result							
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Barium	mg/L	2.2	0.1	0.1	2.4	2.3	206	105	75-125	4	20	M1
Beryllium	mg/L	ND	0.1	0.1	0.097	0.096	97	96	75-125	1	20	
Boron	mg/L	0.12	1	1	1.1	1.1	99	97	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.094	95	94	75-125	0	20	
Lithium	mg/L	0.016J	0.1	0.1	0.11	0.11	99	96	75-125	3	20	
Molybdenum	mg/L	0.0011J	0.1	0.1	0.099	0.10	98	99	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.088	0.087	87	87	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.096	95	95	75-125	0	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch:	794228	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92681886001, 92681886002, 92681886003, 92681886004

METHOD BLANK: 4115390 Matrix: Water  
 Associated Lab Samples: 92681886001, 92681886002, 92681886003, 92681886004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/17/23 17:06	

LABORATORY CONTROL SAMPLE: 4115391

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L		0.0024			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115392 4115393

Parameter	Units	4115392		4115393		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Mercury	mg/L	92682396014 ND		0.0026	0.0024				4	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 794866 Analysis Method: EPA 7470A  
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011, 92681886012, 92681886013

METHOD BLANK: 4118571 Matrix: Water  
 Associated Lab Samples: 92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011, 92681886012, 92681886013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/21/23 13:40	

LABORATORY CONTROL SAMPLE: 4118572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L		0.0024			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118573 4118574

Parameter	Units	92683125002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.35 ug/L			0.0028	0.0026				8	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch:	794869	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92681886014, 92681886015, 92681886016, 92682572001, 92682572002, 92682572003, 92682572004		

METHOD BLANK:	4118579	Matrix:	Water
Associated Lab Samples:	92681886014, 92681886015, 92681886016, 92682572001, 92682572002, 92682572003, 92682572004		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/21/23 15:01	

LABORATORY CONTROL SAMPLE: 4118580						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L		0.0025			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118581												4118582	
Parameter	Units	92682122016 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				1	20		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

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QC Batch:	793414	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: 92681886001, 92681886002, 92681886003, 92681886004

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METHOD BLANK: 4111318 Matrix: Water  
 Associated Lab Samples: 92681886001, 92681886002, 92681886003, 92681886004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/14/23 13:14	

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LABORATORY CONTROL SAMPLE: 4111319

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	436	109	80-120	

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SAMPLE DUPLICATE: 4111320

Parameter	Units	92681885002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	189	193	2	10	

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SAMPLE DUPLICATE: 4111321

Parameter	Units	92682120003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	61.0	62.0	2	10	

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 794562 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: 92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011, 92682572001, 92682572002, 92682572003, 92682572004

METHOD BLANK: 4117070 Matrix: Water  
 Associated Lab Samples: 92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011, 92682572001, 92682572002, 92682572003, 92682572004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/18/23 17:04	

LABORATORY CONTROL SAMPLE: 4117071

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	384	96	80-120	

SAMPLE DUPLICATE: 4117072

Parameter	Units	92682462004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	32400	9700	108	10 D6	

SAMPLE DUPLICATE: 4117073

Parameter	Units	92682397014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 794564

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: 92681886012, 92681886013, 92681886014, 92681886015, 92681886016

METHOD BLANK: 4117094

Matrix: Water

Associated Lab Samples: 92681886012, 92681886013, 92681886014, 92681886015, 92681886016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/18/23 18:28	

LABORATORY CONTROL SAMPLE: 4117095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	434	108	80-120	

SAMPLE DUPLICATE: 4117096

Parameter	Units	92681886012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1910	1890	1	10	

SAMPLE DUPLICATE: 4117097

Parameter	Units	92683141005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	107	97.0	10	10	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 793596 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92681886001, 92681886002, 92681886003, 92681886004

METHOD BLANK: 4112305 Matrix: Water  
 Associated Lab Samples: 92681886001, 92681886002, 92681886003, 92681886004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/15/23 11:24	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/15/23 11:24	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/15/23 11:24	

LABORATORY CONTROL SAMPLE: 4112306

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	53.7	107	80-120	

LABORATORY CONTROL SAMPLE: 4112307

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.7	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112308 4112309

Parameter	Units	4112308		4112309		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92681908004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO3	mg/L	99.9	50	50	159	163	118	126	80-120	2	25 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112310 4112311

Parameter	Units	4112310		4112311		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92681908005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO3	mg/L	5.3	50	50	58.0	58.8	105	107	80-120	1	25

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 794234 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92682572001, 92682572002, 92682572003, 92682572004

METHOD BLANK: 4115455 Matrix: Water  
 Associated Lab Samples: 92682572001, 92682572002, 92682572003, 92682572004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/17/23 15:14	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/17/23 15:14	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/17/23 15:14	

LABORATORY CONTROL SAMPLE: 4115456

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.9	106	80-120	

LABORATORY CONTROL SAMPLE: 4115457

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115458 4115459

Parameter	Units	4115458		4115459		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	92682576004	50	50	221	225	117	125	80-120	2	25 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115460 4115461

Parameter	Units	4115460		4115461		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	92682576005	50	50	135	134	110	108	80-120	1	25

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 794235 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92681886005, 92681886006, 92681886007

METHOD BLANK: 4115463 Matrix: Water  
 Associated Lab Samples: 92681886005, 92681886006, 92681886007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/17/23 20:06	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/17/23 20:06	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/17/23 20:06	

LABORATORY CONTROL SAMPLE: 4115464

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

LABORATORY CONTROL SAMPLE: 4115465

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115466 4115467

Parameter	Units	4115466		4115467		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92681886006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO3	mg/L	246	50	50	291	299	90	106	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115468 4115469

Parameter	Units	4115468		4115469		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92681886007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO3	mg/L	210	50	50	271	274	122	128	1	25 M1	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 794643 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92681886008, 92681886009, 92681886010, 92681886011, 92681886012, 92681886013

METHOD BLANK: 4117709 Matrix: Water  
 Associated Lab Samples: 92681886008, 92681886009, 92681886010, 92681886011, 92681886012, 92681886013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/22/23 17:53	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/22/23 17:53	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/22/23 17:53	

LABORATORY CONTROL SAMPLE: 4117710

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.4	105	80-120	

LABORATORY CONTROL SAMPLE: 4117711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.7	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4117712 4117713

Parameter	Units	92681886013		4117712		4117713		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					MS % Rec
Alkalinity, Total as CaCO3	mg/L	162	162	50	50	225	221	126	118	80-120	2	25 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4117714 4117715

Parameter	Units	92681886014		4117714		4117715		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					MS % Rec
Alkalinity, Total as CaCO3	mg/L					51.9	52.0				0	25

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 794644

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92681886016

METHOD BLANK: 4117720

Matrix: Water

Associated Lab Samples: 92681886016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/23/23 17:43	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/23/23 17:43	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/23/23 17:43	

LABORATORY CONTROL SAMPLE: 4117721

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.8	106	80-120	

LABORATORY CONTROL SAMPLE: 4117722

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.6	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4117723 4117724

Parameter	Units	92682650011		4117723		4117724		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.7	52.4	103	104	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4117725 4117726

Parameter	Units	92682671001		4117725		4117726		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					
Alkalinity, Total as CaCO3	mg/L	14.6	50	50	68.5	66.9	108	105	80-120	2	25	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 793499 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92681886001, 92681886002, 92681886003, 92681886004

METHOD BLANK: 4111952 Matrix: Water  
 Associated Lab Samples: 92681886001, 92681886002, 92681886003, 92681886004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	08/15/23 06:10	

LABORATORY CONTROL SAMPLE: 4111953

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.50	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111954 4111955

Parameter	Units	92681883001		4111954		4111955		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	0.16	0.5	0.5	0.5	0.68	0.59	102	84	80-120	14	10	R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111956 4111957

Parameter	Units	92681885005		4111956		4111957		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	0.14	0.5	0.5	0.5	0.53	0.60	79	93	80-120	12	10	M1,R1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 794102 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92682572001, 92682572002, 92682572003, 92682572004

METHOD BLANK: 4114896 Matrix: Water  
 Associated Lab Samples: 92682572001, 92682572002, 92682572003, 92682572004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	08/18/23 04:23	

LABORATORY CONTROL SAMPLE: 4114897

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.48	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114898 4114899

Parameter	Units	92682834002		4114898		4114899		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.				
Sulfide	mg/L	ND	0.5	0.5	0.47	0.44	93	87	80-120	6	10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114900 4114901

Parameter	Units	92682576011		4114900		4114901		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.				
Sulfide	mg/L	ND	0.5	0.5	0.50	0.50	98	98	80-120	1	10

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch:	794103	Analysis Method:	SM 4500-S2D-2011
QC Batch Method:	SM 4500-S2D-2011	Analysis Description:	4500S2D Sulfide Water
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011, 92681886012, 92681886013, 92681886016		

METHOD BLANK:	4114902	Matrix:	Water
Associated Lab Samples:	92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011, 92681886012, 92681886013, 92681886016		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	08/18/23 04:37	

LABORATORY CONTROL SAMPLE: 4114903						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.48	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114904												4114905	
Parameter	Units	92682397012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Sulfide	mg/L	ND	0.5	0.5	0.49	0.51	96	99	80-120	3	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114906												4114907	
Parameter	Units	92681886012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Sulfide	mg/L	ND	0.5	0.5	0.45	0.45	89	89	80-120	0	10		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 793207 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: 92681886001, 92681886002, 92681886003, 92681886004

METHOD BLANK: 4110503 Matrix: Water  
 Associated Lab Samples: 92681886001, 92681886002, 92681886003, 92681886004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/12/23 16:56	
Fluoride	mg/L	ND	0.10	0.050	08/12/23 16:56	
Sulfate	mg/L	ND	1.0	0.50	08/12/23 16:56	

LABORATORY CONTROL SAMPLE: 4110504

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	49.9	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4110505 4110506

Parameter	Units	92681883001		4110505		4110506		% 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	3.6	50	50	51.2	52.5	95	98	90-110	3	10		
Fluoride	mg/L	0.19	2.5	2.5	2.4	2.5	90	92	90-110	2	10		
Sulfate	mg/L	2.2	50	50	49.7	51.1	95	98	90-110	3	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4110507 4110508

Parameter	Units	92681885005		4110507		4110508		% 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	27.0	50	50	71.4	72.9	89	92	90-110	2	10	M1	
Fluoride	mg/L	1.3	2.5	2.5	3.3	3.4	83	86	90-110	2	10	M1	
Sulfate	mg/L	1.3	50	50	47.3	48.3	92	94	90-110	2	10		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 793553	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: 92682572001

METHOD BLANK: 4112135 Matrix: Water

Associated Lab Samples: 92682572001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/15/23 22:01	
Fluoride	mg/L	ND	0.10	0.050	08/15/23 22:01	
Sulfate	mg/L	ND	1.0	0.50	08/15/23 22:01	

LABORATORY CONTROL SAMPLE: 4112136

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.5	99	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	48.3	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112137 4112138

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92682397002	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	14.5	50	50	62.4	63.0	96	97	90-110	1	10		
Fluoride	mg/L	0.27	2.5	2.5	2.6	2.6	92	93	90-110	2	10		
Sulfate	mg/L	290	50	50	327	328	73	75	90-110	0	10 M1		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112139 4112140

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92682398009	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	13.6	50	50	61.8	62.0	96	97	90-110	0	10		
Fluoride	mg/L	1.5	2.5	2.5	3.8	3.9	95	96	90-110	1	10		
Sulfate	mg/L	0.62J	50	50	47.3	47.5	93	94	90-110	1	10		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 793554 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: 92682572002, 92682572003, 92682572004

METHOD BLANK: 4112141 Matrix: Water  
 Associated Lab Samples: 92682572002, 92682572003, 92682572004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/15/23 12:18	
Fluoride	mg/L	ND	0.10	0.050	08/15/23 12:18	
Sulfate	mg/L	ND	1.0	0.50	08/15/23 12:18	

LABORATORY CONTROL SAMPLE: 4112142

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.6	97	90-110	
Fluoride	mg/L	2.5	2.7	109	90-110	
Sulfate	mg/L	50	48.6	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112143 4112144

Parameter	Units	92682572002		4112143		4112144		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	157	157	50	50	193	200	71	86	90-110	4	10	M1
Fluoride	mg/L	0.062J	0.062J	2.5	2.5	2.3	2.3	90	90	90-110	0	10	
Sulfate	mg/L	948	948	50	50	947	983	-1	70	90-110	4	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112145 4112146

Parameter	Units	92682576008		4112145		4112146		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	3.8	3.8	50	50	53.6	51.7	100	96	90-110	4	10	
Fluoride	mg/L	0.070J	0.070J	2.5	2.5	2.4	2.3	94	90	90-110	4	10	
Sulfate	mg/L	64.9	64.9	50	50	104	106	78	82	90-110	2	10	M1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch:	793837	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:	92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011		

METHOD BLANK:	4113450	Matrix:	Water
Associated Lab Samples:	92681886005, 92681886006, 92681886007, 92681886008, 92681886009, 92681886010, 92681886011		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/16/23 12:10	
Fluoride	mg/L	ND	0.10	0.050	08/16/23 12:10	
Sulfate	mg/L	ND	1.0	0.50	08/16/23 12:10	

LABORATORY CONTROL SAMPLE: 4113451						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.2	98	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	49.2	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113452												4113453	
Parameter	Units	92682815002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	93.9	50	50	130	131	73	74	90-110	1	10	M1	
Fluoride	mg/L	0.66	2.5	2.5	2.8	2.9	87	88	90-110	1	10	M1	
Sulfate	mg/L	57.0	50	50	95.9	96.8	78	79	90-110	1	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113454												4113455	
Parameter	Units	92682397016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	78.9	50	50	117	117	75	77	90-110	1	10	M1	
Fluoride	mg/L	0.12	2.5	2.5	2.3	2.3	87	89	90-110	2	10	M1	
Sulfate	mg/L	197	50	50	239	240	84	85	90-110	0	10	M1	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92681886

QC Batch: 793838 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: 92681886012, 92681886013, 92681886014, 92681886015, 92681886016

METHOD BLANK: 4113456 Matrix: Water  
 Associated Lab Samples: 92681886012, 92681886013, 92681886014, 92681886015, 92681886016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/16/23 21:20	
Fluoride	mg/L	ND	0.10	0.050	08/16/23 21:20	
Sulfate	mg/L	ND	1.0	0.50	08/16/23 21:20	

LABORATORY CONTROL SAMPLE: 4113457

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.7	99	90-110	
Fluoride	mg/L	2.5	2.4	97	90-110	
Sulfate	mg/L	50	49.9	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113458 4113459

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92681886012	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	99.0	99.0	50	50	140	141	83	83	90-110	0	10	M1
Fluoride	mg/L	0.22	0.22	2.5	2.5	2.8	2.9	104	107	90-110	3	10	
Sulfate	mg/L	970	970	50	50	1000	1000	62	64	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113460 4113461

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92682650006	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	47.6	47.6	50	50	94.1	94.0	93	93	90-110	0	10	
Fluoride	mg/L	0.12	0.12	2.5	2.5	2.4	2.4	90	90	90-110	0	10	
Sulfate	mg/L	104	104	50	50	145	145	82	83	90-110	0	10	M1

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## QUALIFIERS

Project: Hammond AP-2

Pace Project No.: 92681886

### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92681886

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92681886001	HAM-HGWA-4	EPA 3010A	792418	EPA 6010D	793158
92681886002	HAM-HGWA-5	EPA 3010A	792418	EPA 6010D	793158
92681886003	HAM-HGWA-6	EPA 3010A	792418	EPA 6010D	793158
92681886004	HAM-HGWA-42D	EPA 3010A	792418	EPA 6010D	793158
92682572001	HAM-MW-21D	EPA 3010A	794188	EPA 6010D	794575
92682572002	HAM-MW-34D	EPA 3010A	794188	EPA 6010D	794575
92682572003	HAM-MW-35	EPA 3010A	794188	EPA 6010D	794575
92682572004	HAM-MW-51	EPA 3010A	794188	EPA 6010D	794575
92681886005	HAM-HGWC-14	EPA 3010A	795114	EPA 6010D	795227
92681886006	HAM-HGWC-15	EPA 3010A	795114	EPA 6010D	795227
92681886007	HAM-HGWC-16	EPA 3010A	795114	EPA 6010D	795227
92681886008	HAM-HGWC-17	EPA 3010A	795114	EPA 6010D	795227
92681886009	HAM-HGWC-18	EPA 3010A	795114	EPA 6010D	795227
92681886010	HAM-MW-22	EPA 3010A	795114	EPA 6010D	795227
92681886011	HAM-MW-23D	EPA 3010A	795114	EPA 6010D	795227
92681886012	HAM-MW-33	EPA 3010A	795114	EPA 6010D	795227
92681886013	HAM-MW-37D	EPA 3010A	795114	EPA 6010D	795227
92681886014	HAM-AP2-FB-02	EPA 3010A	795114	EPA 6010D	795227
92681886015	HAM-AP2-EB-02	EPA 3010A	795114	EPA 6010D	795227
92681886016	HAM-AP2-FD-02	EPA 3010A	795114	EPA 6010D	795227
92681886001	HAM-HGWA-4	EPA 3005A	794177	EPA 6020B	794304
92681886002	HAM-HGWA-5	EPA 3005A	794177	EPA 6020B	794304
92681886003	HAM-HGWA-6	EPA 3005A	794177	EPA 6020B	794304
92681886004	HAM-HGWA-42D	EPA 3005A	794177	EPA 6020B	794304
92682572001	HAM-MW-21D	EPA 3005A	794177	EPA 6020B	794304
92682572002	HAM-MW-34D	EPA 3005A	794177	EPA 6020B	794304
92682572003	HAM-MW-35	EPA 3005A	794177	EPA 6020B	794304
92682572004	HAM-MW-51	EPA 3005A	794177	EPA 6020B	794304
92681886005	HAM-HGWC-14	EPA 3005A	794885	EPA 6020B	794961
92681886006	HAM-HGWC-15	EPA 3005A	794885	EPA 6020B	794961
92681886007	HAM-HGWC-16	EPA 3005A	794885	EPA 6020B	794961
92681886008	HAM-HGWC-17	EPA 3005A	794885	EPA 6020B	794961
92681886009	HAM-HGWC-18	EPA 3005A	794885	EPA 6020B	794961
92681886010	HAM-MW-22	EPA 3005A	794885	EPA 6020B	794961
92681886011	HAM-MW-23D	EPA 3005A	794885	EPA 6020B	794961
92681886012	HAM-MW-33	EPA 3005A	794885	EPA 6020B	794961
92681886013	HAM-MW-37D	EPA 3005A	794885	EPA 6020B	794961
92681886014	HAM-AP2-FB-02	EPA 3005A	794885	EPA 6020B	794961
92681886015	HAM-AP2-EB-02	EPA 3005A	794885	EPA 6020B	794961
92681886016	HAM-AP2-FD-02	EPA 3005A	794885	EPA 6020B	794961
92681886001	HAM-HGWA-4	EPA 7470A	794228	EPA 7470A	794260
92681886002	HAM-HGWA-5	EPA 7470A	794228	EPA 7470A	794260
92681886003	HAM-HGWA-6	EPA 7470A	794228	EPA 7470A	794260
92681886004	HAM-HGWA-42D	EPA 7470A	794228	EPA 7470A	794260
92682572001	HAM-MW-21D	EPA 7470A	794869	EPA 7470A	794934
92682572002	HAM-MW-34D	EPA 7470A	794869	EPA 7470A	794934

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92681886

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682572003	HAM-MW-35	EPA 7470A	794869	EPA 7470A	794934
92682572004	HAM-MW-51	EPA 7470A	794869	EPA 7470A	794934
92681886005	HAM-HGWC-14	EPA 7470A	794866	EPA 7470A	794932
92681886006	HAM-HGWC-15	EPA 7470A	794866	EPA 7470A	794932
92681886007	HAM-HGWC-16	EPA 7470A	794866	EPA 7470A	794932
92681886008	HAM-HGWC-17	EPA 7470A	794866	EPA 7470A	794932
92681886009	HAM-HGWC-18	EPA 7470A	794866	EPA 7470A	794932
92681886010	HAM-MW-22	EPA 7470A	794866	EPA 7470A	794932
92681886011	HAM-MW-23D	EPA 7470A	794866	EPA 7470A	794932
92681886012	HAM-MW-33	EPA 7470A	794866	EPA 7470A	794932
92681886013	HAM-MW-37D	EPA 7470A	794866	EPA 7470A	794932
92681886014	HAM-AP2-FB-02	EPA 7470A	794869	EPA 7470A	794934
92681886015	HAM-AP2-EB-02	EPA 7470A	794869	EPA 7470A	794934
92681886016	HAM-AP2-FD-02	EPA 7470A	794869	EPA 7470A	794934
92681886001	HAM-HGWA-4	SM 2540C-2015	793414		
92681886002	HAM-HGWA-5	SM 2540C-2015	793414		
92681886003	HAM-HGWA-6	SM 2540C-2015	793414		
92681886004	HAM-HGWA-42D	SM 2540C-2015	793414		
92682572001	HAM-MW-21D	SM 2540C-2015	794562		
92682572002	HAM-MW-34D	SM 2540C-2015	794562		
92682572003	HAM-MW-35	SM 2540C-2015	794562		
92682572004	HAM-MW-51	SM 2540C-2015	794562		
92681886005	HAM-HGWC-14	SM 2540C-2015	794562		
92681886006	HAM-HGWC-15	SM 2540C-2015	794562		
92681886007	HAM-HGWC-16	SM 2540C-2015	794562		
92681886008	HAM-HGWC-17	SM 2540C-2015	794562		
92681886009	HAM-HGWC-18	SM 2540C-2015	794562		
92681886010	HAM-MW-22	SM 2540C-2015	794562		
92681886011	HAM-MW-23D	SM 2540C-2015	794562		
92681886012	HAM-MW-33	SM 2540C-2015	794564		
92681886013	HAM-MW-37D	SM 2540C-2015	794564		
92681886014	HAM-AP2-FB-02	SM 2540C-2015	794564		
92681886015	HAM-AP2-EB-02	SM 2540C-2015	794564		
92681886016	HAM-AP2-FD-02	SM 2540C-2015	794564		
92681886001	HAM-HGWA-4	SM 2320B-2011	793596		
92681886002	HAM-HGWA-5	SM 2320B-2011	793596		
92681886003	HAM-HGWA-6	SM 2320B-2011	793596		
92681886004	HAM-HGWA-42D	SM 2320B-2011	793596		
92682572001	HAM-MW-21D	SM 2320B-2011	794234		
92682572002	HAM-MW-34D	SM 2320B-2011	794234		
92682572003	HAM-MW-35	SM 2320B-2011	794234		
92682572004	HAM-MW-51	SM 2320B-2011	794234		
92681886005	HAM-HGWC-14	SM 2320B-2011	794235		
92681886006	HAM-HGWC-15	SM 2320B-2011	794235		
92681886007	HAM-HGWC-16	SM 2320B-2011	794235		

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Hammond AP-2  
 Pace Project No.: 92681886

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92681886008	HAM-HGWC-17	SM 2320B-2011	794643		
92681886009	HAM-HGWC-18	SM 2320B-2011	794643		
92681886010	HAM-MW-22	SM 2320B-2011	794643		
92681886011	HAM-MW-23D	SM 2320B-2011	794643		
92681886012	HAM-MW-33	SM 2320B-2011	794643		
92681886013	HAM-MW-37D	SM 2320B-2011	794643		
92681886016	HAM-AP2-FD-02	SM 2320B-2011	794644		
92681886001	HAM-HGWA-4	SM 4500-S2D-2011	793499		
92681886002	HAM-HGWA-5	SM 4500-S2D-2011	793499		
92681886003	HAM-HGWA-6	SM 4500-S2D-2011	793499		
92681886004	HAM-HGWA-42D	SM 4500-S2D-2011	793499		
92682572001	HAM-MW-21D	SM 4500-S2D-2011	794102		
92682572002	HAM-MW-34D	SM 4500-S2D-2011	794102		
92682572003	HAM-MW-35	SM 4500-S2D-2011	794102		
92682572004	HAM-MW-51	SM 4500-S2D-2011	794102		
92681886005	HAM-HGWC-14	SM 4500-S2D-2011	794103		
92681886006	HAM-HGWC-15	SM 4500-S2D-2011	794103		
92681886007	HAM-HGWC-16	SM 4500-S2D-2011	794103		
92681886008	HAM-HGWC-17	SM 4500-S2D-2011	794103		
92681886009	HAM-HGWC-18	SM 4500-S2D-2011	794103		
92681886010	HAM-MW-22	SM 4500-S2D-2011	794103		
92681886011	HAM-MW-23D	SM 4500-S2D-2011	794103		
92681886012	HAM-MW-33	SM 4500-S2D-2011	794103		
92681886013	HAM-MW-37D	SM 4500-S2D-2011	794103		
92681886016	HAM-AP2-FD-02	SM 4500-S2D-2011	794103		
92681886001	HAM-HGWA-4	EPA 300.0 Rev 2.1 1993	793207		
92681886002	HAM-HGWA-5	EPA 300.0 Rev 2.1 1993	793207		
92681886003	HAM-HGWA-6	EPA 300.0 Rev 2.1 1993	793207		
92681886004	HAM-HGWA-42D	EPA 300.0 Rev 2.1 1993	793207		
92682572001	HAM-MW-21D	EPA 300.0 Rev 2.1 1993	793553		
92682572002	HAM-MW-34D	EPA 300.0 Rev 2.1 1993	793554		
92682572003	HAM-MW-35	EPA 300.0 Rev 2.1 1993	793554		
92682572004	HAM-MW-51	EPA 300.0 Rev 2.1 1993	793554		
92681886005	HAM-HGWC-14	EPA 300.0 Rev 2.1 1993	793837		
92681886006	HAM-HGWC-15	EPA 300.0 Rev 2.1 1993	793837		
92681886007	HAM-HGWC-16	EPA 300.0 Rev 2.1 1993	793837		
92681886008	HAM-HGWC-17	EPA 300.0 Rev 2.1 1993	793837		
92681886009	HAM-HGWC-18	EPA 300.0 Rev 2.1 1993	793837		
92681886010	HAM-MW-22	EPA 300.0 Rev 2.1 1993	793837		
92681886011	HAM-MW-23D	EPA 300.0 Rev 2.1 1993	793837		
92681886012	HAM-MW-33	EPA 300.0 Rev 2.1 1993	793838		
92681886013	HAM-MW-37D	EPA 300.0 Rev 2.1 1993	793838		
92681886014	HAM-AP2-FB-02	EPA 300.0 Rev 2.1 1993	793838		
92681886015	HAM-AP2-EB-02	EPA 300.0 Rev 2.1 1993	793838		

**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2  
Pace Project No.: 92681886

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Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92681886016	HAM-AP2-FD-02	EPA 300.0 Rev 2.1 1993	793838		

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### REPORT OF LABORATORY ANALYSIS

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DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: G A Power

Project #:

WO# 92681886  
Barcode  
92681886

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/9/23  
COB

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID:

214

Type of Ice:

Wet  Blue  None

Cooler Temp:

2.1

Correction Factor: Add/Subtract (°C)

0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C):

2.1

USDA Regulated Soil (  N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



Effective Date: 11/14/2022

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

Project #

NO#: 92681886

PM: BV Due Date: 03/23/23  
CLIENT: 92 - GP-HAM

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFW-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber MH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1	2	1																											
2	2	1																											
3	2	1																											
4	2	1																											
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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



CHAIN-OF-CUSTODY / Analytical Request Document

Section A Required Client Information: Section B Required Project Information: Section C Invoice Information:

Company: GA Power Report To: SCS Contacts Copy To: Geosyntec Contacts

Address: Atlanta, GA Purchase Order No.: Project Name: Hammond AP-2

Requested Date Shift/FAT: 10 Day Project Number: Reference: Bonnie Vang

Requested Analysis Filtered (Y/N): Preservatives: H2SO4, HNO3, HCl, NaOH, Na2S2O3, Methanol, Other

Analysis Test: Chloride, Fluoride, Sulfate; Full App. III and IV metals; RAD 228/228; TDS; Major Ions (Profile 10839-2)

Regulatory Agency: NPDES, UST, RCRA, GROUND WATER, DRINKING WATER, OTHER

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

Main data table with columns: ITEM #, Section D Required Client Information, Valid Matrix Codes, MATRIX CODE, SAMPLE TYPE, DATE, TIME, SAMPLE TEMP AT COLLECTION, # OF CONTAINERS, Preservatives, Analysis Test, Residual Chlorine (Y/N), and SAMPLE CONDITIONS.

Chain-of-Custody - For additional information, please refer to the Chain-of-Custody Manual, 1st Edition, 1997, published by the Environmental Protection Agency, EPA-823-R-97-001.





DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
Upon Receipt

Client Name:

*GA Power*

Project #:

WO#: 92681886

PM: BV

Due Date: 08/23/23

CLIENT: 92- GP-HAM

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *8/14/23*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: *214* Type of Ice:  Wet  Blue  None

Cooler Temp: *4.5* 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): *4.5*

USDA Regulated Soil (  N/A, water sample)

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

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

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

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92681886

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

Project #

PM: BV

Due Date: 08/23/23

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

CLIENT: 92- GP-HAM

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA N62SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (S:3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	2	1																										
2	2	1																										
3	2	1																										
4	2	1																										
5	2	1																										
6	2	1																										
7	2	1																										
8	2	1																										
9	2	1																										
10	2	1																										
11	2	1																										
12	2	1																										

pH Adjustment Log for Preserved Samples

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

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



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

<b>Section A</b> Required Client Information: Company: GA Power Address: Atlanta, GA Email To: SCS Contacts Phone: Fax Requested Date Data/TAT: 30 Day		<b>Section B</b> Required Project Information: Report To: SCS Contacts Copy To: Geosyntec Contacts Purchase Order No.: Project Name: Hammond AP-2 Project Number:		<b>Section C</b> Media Information: Attention: Southern Co. Company Name: Address: State: Project Manager: Phone/Fax #: 19839	
Regulatory Agency: <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER		Site Location: STATE: GA		Requested Analysis Filtered (Y/N):	

ITEM #	Valid Matrix Codes MATRIX CODE (see valid codes to left) SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test	Y/N	Residual Chlorine (Y/N)	Para Project No./ Lab ID.
		DATE	TIME					Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol				
1	HGWC-14	WG G	01/30/2023	1025	23	7	3	3	1	1	1	1	1	1	1	1	005	
2	HGWC-15	WG G	01/30/2023	1245	21	7	3	3	1	1	1	1	1	1	1	1	006	
3	HGWC-16	WG G	01/30/2023	1117	23	7	3	3	1	1	1	1	1	1	1	1	007	
4	HGWC-17	WG G	01/30/2023	1416	22	7	3	3	1	1	1	1	1	1	1	1	008	
5	HGWC-18	WG G	01/30/2023	0818	21	7	3	3	1	1	1	1	1	1	1	1	009	
6	MW-22	WG G	01/30/2023	1803	22	7	3	3	1	1	1	1	1	1	1	1	010	
7	MW-23D	WG G	01/30/2023	1441	22	7	3	3	1	1	1	1	1	1	1	1	011	
8	MM-33	WG G	01/30/2023	0928	18	7	3	3	1	1	1	1	1	1	1	1	012	
9	MW-37D	WG G	01/30/2023	1200	22	7	3	3	1	1	1	1	1	1	1	1	013	
10	HAM-AP2-FB-02	WG G	01/30/2023	1300	22	7	3	3	1	1	1	1	1	1	1	1	014	
11	HAM-AP2-EB-02	WG G	01/30/2023	1310	22	7	3	3	1	1	1	1	1	1	1	1	015	
12	HAM-AP2-FD-02	WG G	01/30/2023	0000	22	7	3	3	1	1	1	1	1	1	1	1	016	

Important Notice: By signing this form, you are accepting Frazer NET 30 day payment terms and agreeing to rate changes of 1.5% per month. Frazer reserves the right to change rates and terms without notice.

REQUIREMENTS BY AFFILIATION

ACCEPTED BY AFFILIATION

SAMPLE CONDITIONS

FRONT NAME OF SAMPLER: Thomas W. Williams / Geosyntec	DATE SIGNED: 01/30/23	TEMP IN °C:	RECEIVED ON ICE (Y/N):	CUSTODY SEALED COOLER (Y/N):	SAMPLES INTACT (Y/N):
SIGNATURE OF SAMPLER: [Signature]	DATE SIGNED: 01/30/23				

FRONT NAME OF SAMPLER: Thomas W. Williams / Geosyntec	DATE SIGNED: 01/30/23	TEMP IN °C:	RECEIVED ON ICE (Y/N):	CUSTODY SEALED COOLER (Y/N):	SAMPLES INTACT (Y/N):
SIGNATURE OF SAMPLER: [Signature]	DATE SIGNED: 01/30/23				

FRONT NAME OF SAMPLER: Thomas W. Williams / Geosyntec	DATE SIGNED: 01/30/23	TEMP IN °C:	RECEIVED ON ICE (Y/N):	CUSTODY SEALED COOLER (Y/N):	SAMPLES INTACT (Y/N):
SIGNATURE OF SAMPLER: [Signature]	DATE SIGNED: 01/30/23				

FRONT NAME OF SAMPLER: Thomas W. Williams / Geosyntec	DATE SIGNED: 01/30/23	TEMP IN °C:	RECEIVED ON ICE (Y/N):	CUSTODY SEALED COOLER (Y/N):	SAMPLES INTACT (Y/N):
SIGNATURE OF SAMPLER: [Signature]	DATE SIGNED: 01/30/23				

FRONT NAME OF SAMPLER: Thomas W. Williams / Geosyntec	DATE SIGNED: 01/30/23	TEMP IN °C:	RECEIVED ON ICE (Y/N):	CUSTODY SEALED COOLER (Y/N):	SAMPLES INTACT (Y/N):
SIGNATURE OF SAMPLER: [Signature]	DATE SIGNED: 01/30/23				

FRONT NAME OF SAMPLER: Thomas W. Williams / Geosyntec	DATE SIGNED: 01/30/23	TEMP IN °C:	RECEIVED ON ICE (Y/N):	CUSTODY SEALED COOLER (Y/N):	SAMPLES INTACT (Y/N):
SIGNATURE OF SAMPLER: [Signature]	DATE SIGNED: 01/30/23				

FRONT NAME OF SAMPLER: Thomas W. Williams / Geosyntec	DATE SIGNED: 01/30/23	TEMP IN °C:	RECEIVED ON ICE (Y/N):	CUSTODY SEALED COOLER (Y/N):	SAMPLES INTACT (Y/N):
SIGNATURE OF SAMPLER: [Signature]	DATE SIGNED: 01/30/23				

FRONT NAME OF SAMPLER: Thomas W. Williams / Geosyntec	DATE SIGNED: 01/30/23	TEMP IN °C:	RECEIVED ON ICE (Y/N):	CUSTODY SEALED COOLER (Y/N):	SAMPLES INTACT (Y/N):
SIGNATURE OF SAMPLER: [Signature]	DATE SIGNED: 01/30/23				



DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: G A Power

Project #: **WO# : 92681886**

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

PM: BV Due Date: 08/23/23  
CLIENT: 92- GP-HAM

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 9-14-23 A

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

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

Yes  No  N/A

Cooler Temp: 4.5 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): 4.5

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 type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W G</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92681886

PM: BV

Due Date: 08/23/23

CLIENT: 92- GP-HAM

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

Project #

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WG7U-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP9R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1		2	1	2																									
2		2	1	2																									
3		2	1	2																									
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

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

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



# CHAIN-OF-CUSTODY / Analytical Request Document

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

**Section A** Required Client Information:  
 Company: GA Power  
 Address: Atlanta, GA  
 Requested Date: 18 Day

**Section B** Required Project Information:  
 Report To: SCS Contracts  
 Copy To: Geosyntec Contracts  
 Project Name: Hammond AP-2  
 Project Number:

**Section C** Invoice Information:  
 Attention: Southern Co.  
 Company Name:  
 Address:  
 City: Baltimore Vtng  
 Zip Code: 10839

**REGULATORY AGENCY**  
 NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER

Site Location: GA

ITEM #	Section D Required Client Information	Vial Matrix Codes NOTED RESIDUAL CHLORINE WATER WASTE WATER RESIDUAL CHLORINE SLURRY AIR OTHER TISSE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test					Residual Chlorine (Y/N)		
											Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Chloride, Fluoride, Sulfate	Full App. III and IV metals	BAR 226/228	TOC		Major Ions (Profile 10638-2)	
1	HAM-AMV-21D				8/12/2023	1607				3								X	X	X	X				
2	HAM-AMV-34D				8/12/2023	1650				3								X	X	X	X				
3	HAM-AMV-35				8/12/2023	0839				3								X	X	X	X				
4	HAM-AMV-51				8/12/2023	1124				3								X	X	X	X				

**ADDITIONAL COMMENTS**  
 HAM-AMV-21D, HAM-AMV-34D, HAM-AMV-35, HAM-AMV-51

**RELINQUISHED BY / AFFILIATION**  
 Date: 8/12/2023

**ACCEPTED BY / AFFILIATION**  
 Date: 8/14/2023

**SAMPLER NAME AND SIGNATURE**  
 Signature: [Handwritten]

**FRONT NAME OF SAMPLER**  
 Signature: [Handwritten]

**SIGNATURE OF SAMPLER**  
 Signature: [Handwritten]

Temp in °C

Received on ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)

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

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



September 14, 2023

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

RE: Project: Hammond AP-2- RADs  
Pace Project No.: 92681879

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between August 09, 2023 and August 14, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

#### Pace Analytical Services Pennsylvania

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

ANAB DOD-ELAP Rad Accreditation #: L2417

ANABISO/IEC 17025:2017 Rad Cert#: L24170

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 2950

Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA010

Louisiana DEQ/TNI Certification #: 04086

Maine Certification #: 2023021

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification #: 9991

Missouri Certification #: 235

Montana Certification #: Cert0082

Nebraska Certification #: NE-OS-29-14

Nevada Certification #: PA014572023-03

New Hampshire/TNI Certification #: 297622

New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-015

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN02867

Texas/TNI Certification #: T104704188-22-18

Utah/TNI Certification #: PA014572223-14

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

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92681879001	HAM-HGWA-4	Water	08/08/23 12:56	08/09/23 11:40
92681879002	HAM-HGWA-5	Water	08/08/23 14:03	08/09/23 11:40
92681879003	HAM-HGWA-6	Water	08/08/23 16:12	08/09/23 11:40
92681879004	HAM-HGWA-42D	Water	08/08/23 12:51	08/09/23 11:40
92681879006	HAM-HGWC-14	Water	08/13/23 10:25	08/14/23 11:15
92681879007	HAM-HGWC-15	Water	08/13/23 12:45	08/14/23 11:15
92681879008	HAM-HGWC-16	Water	08/13/23 11:17	08/14/23 11:15
92681879009	HAM-HGWC-17	Water	08/13/23 14:16	08/14/23 11:15
92681879010	HAM-HGWC-18	Water	08/13/23 09:16	08/14/23 11:15
92681879011	HAM-MW-22	Water	08/13/23 16:03	08/14/23 11:15
92681879012	HAM-MW-23D	Water	08/13/23 14:41	08/14/23 11:15
92681879013	HAM-MW-33	Water	08/13/23 09:28	08/14/23 11:15
92681879014	HAM-MW-37D	Water	08/13/23 12:00	08/14/23 11:15
92681879015	HAM-AP2-FB-02	Water	08/13/23 13:00	08/14/23 11:15
92681879016	HAM-AP2-EB-02	Water	08/13/23 13:10	08/14/23 11:15
92681879017	HAM-AP2-FD-02	Water	08/13/23 00:00	08/14/23 11:15
92681879018	HAM-MW-21D	Water	08/12/23 16:07	08/14/23 11:15
92681879019	HAM-MW-34D	Water	08/12/23 16:50	08/14/23 11:15
92681879020	HAM-MW-35	Water	08/12/23 09:39	08/14/23 11:15
92681879021	HAM-MW-51	Water	08/12/23 11:24	08/14/23 11:15

### REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92681879001	HAM-HGWA-4	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879002	HAM-HGWA-5	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879003	HAM-HGWA-6	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879004	HAM-HGWA-42D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879006	HAM-HGWC-14	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879007	HAM-HGWC-15	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879008	HAM-HGWC-16	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879009	HAM-HGWC-17	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879010	HAM-HGWC-18	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879011	HAM-MW-22	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879012	HAM-MW-23D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879013	HAM-MW-33	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879014	HAM-MW-37D	EPA 9315	SLC	1	PASI-PA

**REPORT OF LABORATORY ANALYSIS**

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**SAMPLE ANALYTE COUNT**

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92681879015	HAM-AP2-FB-02	EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
92681879016	HAM-AP2-EB-02	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879017	HAM-AP2-FD-02	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
92681879018	HAM-MW-21D	EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
92681879019	HAM-MW-34D	Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92681879020	HAM-MW-35	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
92681879021	HAM-MW-51	EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

**REPORT OF LABORATORY ANALYSIS**

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### SUMMARY OF DETECTION

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681879001</b>	<b>HAM-HGWA-4</b>					
EPA 9315	Radium-226	0.146U ± 0.133 (0.250) C:95% T:NA	pCi/L		09/07/23 14:59	
EPA 9320	Radium-228	0.317U ± 0.296 (0.592) C:77% T:83%	pCi/L		08/31/23 15:30	
Total Radium Calculation	Total Radium	0.463U ± 0.429 (0.842)	pCi/L		09/08/23 17:15	
<b>92681879002</b>	<b>HAM-HGWA-5</b>					
EPA 9315	Radium-226	0.166U ± 0.151 (0.288) C:88% T:NA	pCi/L		09/07/23 14:59	
EPA 9320	Radium-228	0.0563U ± 0.271 (0.623) C:84% T:81%	pCi/L		08/31/23 15:30	
Total Radium Calculation	Total Radium	0.222U ± 0.422 (0.911)	pCi/L		09/08/23 17:15	
<b>92681879003</b>	<b>HAM-HGWA-6</b>					
EPA 9315	Radium-226	0.0949U ± 0.134 (0.291) C:87% T:NA	pCi/L		09/07/23 15:00	
EPA 9320	Radium-228	0.0731U ± 0.282 (0.642) C:84% T:84%	pCi/L		08/31/23 15:30	
Total Radium Calculation	Total Radium	0.168U ± 0.416 (0.933)	pCi/L		09/08/23 17:15	
<b>92681879004</b>	<b>HAM-HGWA-42D</b>					
EPA 9315	Radium-226	0.264 ± 0.165 (0.249) C:86% T:NA	pCi/L		09/07/23 15:00	
EPA 9320	Radium-228	0.199U ± 0.395 (0.869) C:83% T:85%	pCi/L		08/31/23 15:31	
Total Radium Calculation	Total Radium	0.463U ± 0.560 (1.12)	pCi/L		09/08/23 17:15	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681879006</b>						
EPA 9315	Radium-226	0.129U ± 0.126 (0.245)	pCi/L		09/08/23 10:01	
EPA 9320	Radium-228	C:98% T:NA 0.672U ± 0.430 (0.816)	pCi/L		08/31/23 15:30	
Total Radium Calculation	Total Radium	C:82% T:83% 0.801U ± 0.556 (1.06)	pCi/L		09/08/23 17:23	
<b>92681879007</b>						
EPA 9315	Radium-226	0.0606U ± 0.0975 (0.216)	pCi/L		09/08/23 13:27	
EPA 9320	Radium-228	C:95% T:NA 0.724U ± 0.441 (0.830)	pCi/L		08/31/23 15:30	
Total Radium Calculation	Total Radium	C:83% T:82% 0.785U ± 0.539 (1.05)	pCi/L		09/08/23 17:23	
<b>92681879008</b>						
EPA 9315	Radium-226	0.264 ± 0.157 (0.241)	pCi/L		09/08/23 10:01	
EPA 9320	Radium-228	C:93% T:NA 0.0167U ± 0.391 (0.897)	pCi/L		08/31/23 15:30	
Total Radium Calculation	Total Radium	C:78% T:90% 0.281U ± 0.548 (1.14)	pCi/L		09/08/23 17:23	
<b>92681879009</b>						
EPA 9315	Radium-226	0.170U ± 0.205 (0.426)	pCi/L		09/08/23 10:01	
EPA 9320	Radium-228	C:52% T:NA 0.508U ± 0.393 (0.778)	pCi/L		08/31/23 15:30	
Total Radium Calculation	Total Radium	C:85% T:79% 0.678U ± 0.598 (1.20)	pCi/L		09/08/23 17:23	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681879010</b>	<b>HAM-HGWC-18</b>					
EPA 9315	Radium-226	0.439 ± 0.201 (0.253) C:86% T:NA	pCi/L		09/08/23 11:39	
EPA 9320	Radium-228	0.589U ± 0.343 (0.609) C:86% T:79%	pCi/L		08/31/23 15:31	
Total Radium Calculation	Total Radium	1.03 ± 0.544 (0.862)	pCi/L		09/08/23 17:23	
<b>92681879011</b>	<b>HAM-MW-22</b>					
EPA 9315	Radium-226	0.0993U ± 0.132 (0.282) C:93% T:NA	pCi/L		09/08/23 11:39	
EPA 9320	Radium-228	0.262U ± 0.332 (0.701) C:86% T:66%	pCi/L		08/31/23 15:31	
Total Radium Calculation	Total Radium	0.361U ± 0.464 (0.983)	pCi/L		09/08/23 17:23	
<b>92681879012</b>	<b>HAM-MW-23D</b>					
EPA 9315	Radium-226	0.0608U ± 0.127 (0.297) C:90% T:NA	pCi/L		09/08/23 11:39	
EPA 9320	Radium-228	-0.159U ± 0.299 (0.740) C:82% T:81%	pCi/L		08/31/23 15:31	
Total Radium Calculation	Total Radium	0.0608U ± 0.426 (1.04)	pCi/L		09/08/23 17:23	
<b>92681879013</b>	<b>HAM-MW-33</b>					
EPA 9315	Radium-226	0.333 ± 0.161 (0.215) C:101% T:NA	pCi/L		09/08/23 11:39	
EPA 9320	Radium-228	0.440U ± 0.392 (0.794) C:86% T:73%	pCi/L		08/31/23 15:31	
Total Radium Calculation	Total Radium	0.773U ± 0.553 (1.01)	pCi/L		09/08/23 17:23	

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### SUMMARY OF DETECTION

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681879014</b>	<b>HAM-MW-37D</b>					
EPA 9315	Radium-226	0.118U ± 0.118 (0.230)	pCi/L		09/08/23 11:40	
EPA 9320	Radium-228	C:92% T:NA 0.190U ± 0.290 (0.627)	pCi/L		08/31/23 15:31	
Total Radium Calculation	Total Radium	C:85% T:81% 0.308U ± 0.408 (0.857)	pCi/L		09/08/23 17:23	
<b>92681879015</b>	<b>HAM-AP2-FB-02</b>					
EPA 9315	Radium-226	0.0896U ± 0.133 (0.292)	pCi/L		09/08/23 11:40	
EPA 9320	Radium-228	C:78% T:NA 0.158U ± 0.284 (0.621)	pCi/L		08/31/23 15:31	
Total Radium Calculation	Total Radium	C:86% T:85% 0.248U ± 0.417 (0.913)	pCi/L		09/08/23 17:23	
<b>92681879016</b>	<b>HAM-AP2-EB-02</b>					
EPA 9315	Radium-226	-0.0328U ± 0.0924 (0.276)	pCi/L		09/08/23 11:40	
EPA 9320	Radium-228	C:83% T:NA 0.126U ± 0.272 (0.603)	pCi/L		08/31/23 15:31	
Total Radium Calculation	Total Radium	C:86% T:93% 0.126U ± 0.364 (0.879)	pCi/L		09/08/23 17:23	
<b>92681879017</b>	<b>HAM-AP2-FD-02</b>					
EPA 9315	Radium-226	0.103U ± 0.145 (0.318)	pCi/L		09/08/23 11:40	
EPA 9320	Radium-228	C:85% T:NA 0.265U ± 0.440 (0.957)	pCi/L		08/31/23 15:32	
Total Radium Calculation	Total Radium	C:84% T:78% 0.368U ± 0.585 (1.28)	pCi/L		09/08/23 17:23	

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### SUMMARY OF DETECTION

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681879018</b>	<b>HAM-MW-21D</b>					
EPA 9315	Radium-226	0.295 ± 0.161 (0.239)	pCi/L		09/08/23 11:40	
EPA 9320	Radium-228	C:94% T:NA 0.00217U ± 0.405 (0.932)	pCi/L		08/31/23 15:32	
Total Radium Calculation	Total Radium	C:83% T:78% 0.297U ± 0.566 (1.17)	pCi/L		09/08/23 17:23	
<b>92681879019</b>	<b>HAM-MW-34D</b>					
EPA 9315	Radium-226	0.218U ± 0.153 (0.257)	pCi/L		09/08/23 11:40	
EPA 9320	Radium-228	C:83% T:NA 0.458U ± 0.419 (0.857)	pCi/L		08/31/23 15:32	
Total Radium Calculation	Total Radium	C:80% T:82% 0.676U ± 0.572 (1.11)	pCi/L		09/08/23 17:23	
<b>92681879020</b>	<b>HAM-MW-35</b>					
EPA 9315	Radium-226	0.390 ± 0.197 (0.285)	pCi/L		09/08/23 11:32	
EPA 9320	Radium-228	C:86% T:NA 0.507U ± 0.437 (0.884)	pCi/L		08/31/23 15:32	
Total Radium Calculation	Total Radium	C:82% T:82% 0.897U ± 0.634 (1.17)	pCi/L		09/08/23 17:23	
<b>92681879021</b>	<b>HAM-MW-51</b>					
EPA 9315	Radium-226	0.298U ± 0.261 (0.490)	pCi/L		09/13/23 10:02	
EPA 9320	Radium-228	C:94% T:NA 0.186U ± 0.252 (0.537)	pCi/L		09/06/23 15:48	
Total Radium Calculation	Total Radium	C:87% T:96% 0.484U ± 0.513 (1.03)	pCi/L		09/13/23 14:27	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-4</b> <b>Lab ID: 92681879001</b> Collected: 08/08/23 12:56      Received: 08/09/23 11:40      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.146U ± 0.133 (0.250)</b> <b>C:95% T:NA</b>	pCi/L	09/07/23 14:59	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.317U ± 0.296 (0.592)</b> <b>C:77% T:83%</b>	pCi/L	08/31/23 15:30	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.463U ± 0.429 (0.842)</b>	pCi/L	09/08/23 17:15	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-5</b> <b>Lab ID: 92681879002</b> Collected: 08/08/23 14:03      Received: 08/09/23 11:40      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.166U ± 0.151 (0.288)</b> <b>C:88% T:NA</b>	pCi/L	09/07/23 14:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.0563U ± 0.271 (0.623)</b> <b>C:84% T:81%</b>	pCi/L	08/31/23 15:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.222U ± 0.422 (0.911)</b>	pCi/L	09/08/23 17:15	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-6</b> <b>Lab ID: 92681879003</b> Collected: 08/08/23 16:12      Received: 08/09/23 11:40      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0949U ± 0.134 (0.291)</b> <b>C:87% T:NA</b>	pCi/L	09/07/23 15:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.0731U ± 0.282 (0.642)</b> <b>C:84% T:84%</b>	pCi/L	08/31/23 15:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.168U ± 0.416 (0.933)</b>	pCi/L	09/08/23 17:15	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-42D</b> <b>Lab ID: 92681879004</b> Collected: 08/08/23 12:51      Received: 08/09/23 11:40      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.264 ± 0.165 (0.249)</b> <b>C:86% T:NA</b>	pCi/L	09/07/23 15:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.199U ± 0.395 (0.869)</b> <b>C:83% T:85%</b>	pCi/L	08/31/23 15:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.463U ± 0.560 (1.12)</b>	pCi/L	09/08/23 17:15	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWC-14</b> <b>Lab ID: 92681879006</b> Collected: 08/13/23 10:25      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.129U ± 0.126 (0.245)</b> <b>C:98% T:NA</b>	pCi/L	09/08/23 10:01	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.672U ± 0.430 (0.816)</b> <b>C:82% T:83%</b>	pCi/L	08/31/23 15:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.801U ± 0.556 (1.06)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWC-15</b> <b>Lab ID: 92681879007</b> Collected: 08/13/23 12:45      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0606U ± 0.0975 (0.216)</b> <b>C:95% T:NA</b>	pCi/L	09/08/23 13:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.724U ± 0.441 (0.830)</b> <b>C:83% T:82%</b>	pCi/L	08/31/23 15:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.785U ± 0.539 (1.05)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWC-16</b> <b>Lab ID: 92681879008</b> Collected: 08/13/23 11:17      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.264 ± 0.157 (0.241)</b> <b>C:93% T:NA</b>	pCi/L	09/08/23 10:01	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.0167U ± 0.391 (0.897)</b> <b>C:78% T:90%</b>	pCi/L	08/31/23 15:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.281U ± 0.548 (1.14)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

**Sample: HAM-HGWC-17**      **Lab ID: 92681879009**      Collected: 08/13/23 14:16      Received: 08/14/23 11:15      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>0.170U ± 0.205 (0.426)</b> <b>C:52% T:NA</b>	pCi/L	09/08/23 10:01	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.508U ± 0.393 (0.778)</b> <b>C:85% T:79%</b>	pCi/L	08/31/23 15:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.678U ± 0.598 (1.20)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWC-18</b> <b>Lab ID: 92681879010</b> Collected: 08/13/23 09:16      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.439 ± 0.201 (0.253)</b> <b>C:86% T:NA</b>	pCi/L	09/08/23 11:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.589U ± 0.343 (0.609)</b> <b>C:86% T:79%</b>	pCi/L	08/31/23 15:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.03 ± 0.544 (0.862)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

**Sample: HAM-MW-22**      **Lab ID: 92681879011**      Collected: 08/13/23 16:03      Received: 08/14/23 11:15      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>0.0993U ± 0.132 (0.282)</b> <b>C:93% T:NA</b>	pCi/L	09/08/23 11:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.262U ± 0.332 (0.701)</b> <b>C:86% T:66%</b>	pCi/L	08/31/23 15:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.361U ± 0.464 (0.983)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-23D</b> <b>Lab ID: 92681879012</b> Collected: 08/13/23 14:41      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0608U ± 0.127 (0.297)</b> <b>C:90% T:NA</b>	pCi/L	09/08/23 11:39	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>-0.159U ± 0.299 (0.740)</b> <b>C:82% T:81%</b>	pCi/L	08/31/23 15:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.0608U ± 0.426 (1.04)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-33</b> <b>Lab ID: 92681879013</b> Collected: 08/13/23 09:28      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.333 ± 0.161 (0.215)</b> <b>C:101% T:NA</b>	pCi/L	09/08/23 11:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.440U ± 0.392 (0.794)</b> <b>C:86% T:73%</b>	pCi/L	08/31/23 15:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.773U ± 0.553 (1.01)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-37D</b> <b>Lab ID: 92681879014</b> Collected: 08/13/23 12:00      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.118U ± 0.118 (0.230)</b> <b>C:92% T:NA</b>	pCi/L	09/08/23 11:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.190U ± 0.290 (0.627)</b> <b>C:85% T:81%</b>	pCi/L	08/31/23 15:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.308U ± 0.408 (0.857)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-AP2-FB-02</b> <b>Lab ID: 92681879015</b> Collected: 08/13/23 13:00      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0896U ± 0.133 (0.292)</b> <b>C:78% T:NA</b>	pCi/L	09/08/23 11:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.158U ± 0.284 (0.621)</b> <b>C:86% T:85%</b>	pCi/L	08/31/23 15:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.248U ± 0.417 (0.913)</b>	pCi/L	09/08/23 17:23	7440-14-4	

**REPORT OF LABORATORY ANALYSIS**

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

**Sample: HAM-AP2-EB-02**      **Lab ID: 92681879016**      Collected: 08/13/23 13:10      Received: 08/14/23 11:15      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>-0.0328U ± 0.0924 (0.276)</b> <b>C:83% T:NA</b>	pCi/L	09/08/23 11:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.126U ± 0.272 (0.603)</b> <b>C:86% T:93%</b>	pCi/L	08/31/23 15:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.126U ± 0.364 (0.879)</b>	pCi/L	09/08/23 17:23	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-AP2-FD-02</b> <b>Lab ID: 92681879017</b> Collected: 08/13/23 00:00      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.103U ± 0.145 (0.318)</b> <b>C:85% T:NA</b>	pCi/L	09/08/23 11:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.265U ± 0.440 (0.957)</b> <b>C:84% T:78%</b>	pCi/L	08/31/23 15:32	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.368U ± 0.585 (1.28)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-21D</b>						
<b>Lab ID: 92681879018</b>						
Collected: 08/12/23 16:07 Received: 08/14/23 11:15 Matrix: Water						
PWS: Site ID: Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.295 ± 0.161 (0.239)</b> <b>C:94% T:NA</b>	pCi/L	09/08/23 11:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.00217U ± 0.405 (0.932)</b> <b>C:83% T:78%</b>	pCi/L	08/31/23 15:32	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.297U ± 0.566 (1.17)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-34D</b> <b>Lab ID: 92681879019</b> Collected: 08/12/23 16:50      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.218U ± 0.153 (0.257)</b> <b>C:83% T:NA</b>	pCi/L	09/08/23 11:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.458U ± 0.419 (0.857)</b> <b>C:80% T:82%</b>	pCi/L	08/31/23 15:32	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.676U ± 0.572 (1.11)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-35</b> <b>Lab ID: 92681879020</b> Collected: 08/12/23 09:39      Received: 08/14/23 11:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.390 ± 0.197 (0.285)</b> <b>C:86% T:NA</b>	pCi/L	09/08/23 11:32	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.507U ± 0.437 (0.884)</b> <b>C:82% T:82%</b>	pCi/L	08/31/23 15:32	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.897U ± 0.634 (1.17)</b>	pCi/L	09/08/23 17:23	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

**Sample: HAM-MW-51**      **Lab ID: 92681879021**      Collected: 08/12/23 11:24      Received: 08/14/23 11:15      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>0.298U ± 0.261 (0.490)</b> <b>C:94% T:NA</b>	pCi/L	09/13/23 10:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.186U ± 0.252 (0.537)</b> <b>C:87% T:96%</b>	pCi/L	09/06/23 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.484U ± 0.513 (1.03)</b>	pCi/L	09/13/23 14:27	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

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QC Batch:	610551	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92681879001, 92681879002, 92681879003, 92681879004, 92681879006, 92681879007, 92681879008, 92681879009, 92681879010, 92681879011, 92681879012, 92681879013, 92681879014, 92681879015, 92681879016, 92681879017, 92681879018, 92681879019, 92681879020

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METHOD BLANK:	2971504	Matrix:	Water
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Associated Lab Samples: 92681879001, 92681879002, 92681879003, 92681879004, 92681879006, 92681879007, 92681879008, 92681879009, 92681879010, 92681879011, 92681879012, 92681879013, 92681879014, 92681879015, 92681879016, 92681879017, 92681879018, 92681879019, 92681879020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0282 ± 0.177 (0.418) C:85% T:91%	pCi/L	08/31/23 15:33	

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

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**QUALITY CONTROL - RADIOCHEMISTRY**

Project: Hammond AP-2- RADs  
 Pace Project No.: 92681879

QC Batch: 611586	Analysis Method: EPA 9320
QC Batch Method: EPA 9320	Analysis Description: 9320 Radium 228
	Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92681879021

METHOD BLANK: 2976847 Matrix: Water

Associated Lab Samples: 92681879021

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.830 ± 0.342 (0.491) C:81% T:89%	pCi/L	09/06/23 15:45	

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-2- RADs

Pace Project No.: 92681879

QC Batch:	611645	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92681879001, 92681879002, 92681879003, 92681879004

METHOD BLANK:	2977130	Matrix:	Water
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Associated Lab Samples: 92681879001, 92681879002, 92681879003, 92681879004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0856 ± 0.0973 (0.188) C:95% T:NA	pCi/L	09/07/23 15:00	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

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QC Batch:	611647	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92681879006, 92681879007, 92681879008, 92681879009, 92681879010, 92681879011, 92681879012, 92681879013, 92681879014, 92681879015, 92681879016, 92681879017, 92681879018, 92681879019, 92681879020

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METHOD BLANK:	2977138	Matrix:	Water
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Associated Lab Samples: 92681879006, 92681879007, 92681879008, 92681879009, 92681879010, 92681879011, 92681879012, 92681879013, 92681879014, 92681879015, 92681879016, 92681879017, 92681879018, 92681879019, 92681879020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0931 ± 0.137 (0.301) C:88% T:NA	pCi/L	09/08/23 10:01	

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

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**QUALITY CONTROL - RADIOCHEMISTRY**

Project: Hammond AP-2- RADs  
 Pace Project No.: 92681879

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QC Batch: 612651	Analysis Method: EPA 9315
QC Batch Method: EPA 9315	Analysis Description: 9315 Total Radium
	Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92681879021

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METHOD BLANK: 2982186 Matrix: Water

Associated Lab Samples: 92681879021

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.199 ± 0.286 (0.622) C:88% T:NA	pCi/L	09/12/23 18:19	

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

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## QUALIFIERS

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

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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 AP-2- RADs

Pace Project No.: 92681879

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92681879001	HAM-HGWA-4	EPA 9315	611645		
92681879002	HAM-HGWA-5	EPA 9315	611645		
92681879003	HAM-HGWA-6	EPA 9315	611645		
92681879004	HAM-HGWA-42D	EPA 9315	611645		
92681879006	HAM-HGWC-14	EPA 9315	611647		
92681879007	HAM-HGWC-15	EPA 9315	611647		
92681879008	HAM-HGWC-16	EPA 9315	611647		
92681879009	HAM-HGWC-17	EPA 9315	611647		
92681879010	HAM-HGWC-18	EPA 9315	611647		
92681879011	HAM-MW-22	EPA 9315	611647		
92681879012	HAM-MW-23D	EPA 9315	611647		
92681879013	HAM-MW-33	EPA 9315	611647		
92681879014	HAM-MW-37D	EPA 9315	611647		
92681879015	HAM-AP2-FB-02	EPA 9315	611647		
92681879016	HAM-AP2-EB-02	EPA 9315	611647		
92681879017	HAM-AP2-FD-02	EPA 9315	611647		
92681879018	HAM-MW-21D	EPA 9315	611647		
92681879019	HAM-MW-34D	EPA 9315	611647		
92681879020	HAM-MW-35	EPA 9315	611647		
92681879021	HAM-MW-51	EPA 9315	612651		
92681879001	HAM-HGWA-4	EPA 9320	610551		
92681879002	HAM-HGWA-5	EPA 9320	610551		
92681879003	HAM-HGWA-6	EPA 9320	610551		
92681879004	HAM-HGWA-42D	EPA 9320	610551		
92681879006	HAM-HGWC-14	EPA 9320	610551		
92681879007	HAM-HGWC-15	EPA 9320	610551		
92681879008	HAM-HGWC-16	EPA 9320	610551		
92681879009	HAM-HGWC-17	EPA 9320	610551		
92681879010	HAM-HGWC-18	EPA 9320	610551		
92681879011	HAM-MW-22	EPA 9320	610551		
92681879012	HAM-MW-23D	EPA 9320	610551		
92681879013	HAM-MW-33	EPA 9320	610551		
92681879014	HAM-MW-37D	EPA 9320	610551		
92681879015	HAM-AP2-FB-02	EPA 9320	610551		
92681879016	HAM-AP2-EB-02	EPA 9320	610551		
92681879017	HAM-AP2-FD-02	EPA 9320	610551		
92681879018	HAM-MW-21D	EPA 9320	610551		
92681879019	HAM-MW-34D	EPA 9320	610551		
92681879020	HAM-MW-35	EPA 9320	610551		
92681879021	HAM-MW-51	EPA 9320	611586		
92681879001	HAM-HGWA-4	Total Radium Calculation	614326		
92681879002	HAM-HGWA-5	Total Radium Calculation	614326		
92681879003	HAM-HGWA-6	Total Radium Calculation	614326		
92681879004	HAM-HGWA-42D	Total Radium Calculation	614326		
92681879006	HAM-HGWC-14	Total Radium Calculation	614331		
92681879007	HAM-HGWC-15	Total Radium Calculation	614331		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2- RADs

Pace Project No.: 92681879

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92681879008	HAM-HGWC-16	Total Radium Calculation	614331		
92681879009	HAM-HGWC-17	Total Radium Calculation	614331		
92681879010	HAM-HGWC-18	Total Radium Calculation	614331		
92681879011	HAM-MW-22	Total Radium Calculation	614331		
92681879012	HAM-MW-23D	Total Radium Calculation	614331		
92681879013	HAM-MW-33	Total Radium Calculation	614331		
92681879014	HAM-MW-37D	Total Radium Calculation	614331		
92681879015	HAM-AP2-FB-02	Total Radium Calculation	614331		
92681879016	HAM-AP2-EB-02	Total Radium Calculation	614331		
92681879017	HAM-AP2-FD-02	Total Radium Calculation	614331		
92681879018	HAM-MW-21D	Total Radium Calculation	614331		
92681879019	HAM-MW-34D	Total Radium Calculation	614331		
92681879020	HAM-MW-35	Total Radium Calculation	614331		
92681879021	HAM-MW-51	Total Radium Calculation	615223		

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DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# 92681879  
Barcode  
92681879

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/9/23  
COG

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Thermometer:

Yes  No  N/A

IR Gun ID:

214

Type of Ice:

Wet  Blue  None

Cooler Temp:

2.1

Correction Factor:  
Add/Subtract (°C)

0.0

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C):

2.1

USDA Regulated Soil (  N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



Effective Date: 11/14/2022

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

Project #

WO# 92681879

PM: BV Due Date: 08/30/23  
CLIENT: 92- GP-HAM

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFLU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1M-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP7T-250 mL Sterile Plastic (N/A - lab)	BP9R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	2	1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	

pH Adjustment Log for Preserved Samples

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

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



CHAIN-OF-CUSTODY / Analytical Request Document

Section A Required Client Information: Section B Required Project Information: Section C Invoice Information:

Company: GA Power, Address: Atlanta, GA, Report To: SCS Contacts, Copy To: Geosyntec Contacts, Purchase Order No., Project Name: Hammond AP-2, Invoice Information: Southern Co., Company Name: Southern Co., Address: , City: , State: GA, Regulatory Agency: NPDES, GROUND WATER, DRINKING WATER, UST, RCRA, OTHER, CCR, State: GA

Table with columns: ITEM #, Section D Required Client Information (Valid Matrix Codes, MATRIX CODE, SAMPLE TYPE), DATE, TIME, SAMPLE TEMP AT COLLECTION, # OF CONTAINERS (Unpreserved, H2SO4, HNO3, HCl, NaOH, Na2S2O3, Methanol, Other), Analysis Test (Chloride, Fluoride, Sulfate, Full App. III and IV metals, RAD 228/225, TDS, Major ions), Residual Chlorine (Y/N), and SAMPLE CONDITIONS (Received on ice, Custody Sealed Cooler, Samples Intact). Includes handwritten entries for samples 1-4 and 8-12.

Guarantee: Under the standard this form was not intended to be a contract. The chain-of-custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

*G A Powell*

Project #:

WO#: 92681879

By: BV

Due Date: 08/30/23

CLIENT: 92- GP-HAM

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *8/14/23*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID:

*214*

Type of Ice:

Wet  Blue  None

Cooler Temp:

*4.5*

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):

*4.5*

USDA Regulated Soil (  N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:





DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92681879

PM: BV

Due Date: 08/30/23

CLIENT: 92- GP-HAM

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

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

pH Adjustment Log for Preserved Samples

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

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



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

Section A  
 Required Client Information:  
 Company: **GA Power**  
 Address: **Atlanta, GA**

Section B  
 Required Project Information:  
 Report To: **SCS Contacts**  
 Copy To: **Geosyntec Contacts**

Section C  
 Vendor Information:  
 Address: **Atlanta, GA**  
 Company Name: **Geosyntec**

Request Information:  
 Project Name: **Hammond AP-2**

REGULATORY AGENCY  
 NPDES: \_\_\_\_\_ GROUND WATER: \_\_\_\_\_ DRINKING WATER: \_\_\_\_\_  
 UST: \_\_\_\_\_ RCRA: \_\_\_\_\_ OTHER: \_\_\_\_\_  
 State: \_\_\_\_\_

ITEM #	Section D Required Client Information Matrix Code Sample ID (4-2, 0.9 / ) Sample ID must be UNIQUE	Section A Required Client Information Matrix WATER WASTE WATER PRODUCT SOLID WIRE AN OTHER TIS	Section B Required Project Information Report To: SCS Contacts Copy To: Geosyntec Contacts	Section C Vendor Information Address: Atlanta, GA Company Name: Geosyntec	Request Information Project Name: Hammond AP-2	Requested Analysis Filtered (Y/N)	Request Information		Requested Analysis Filtered (Y/N)	RESIDUAL CHLORINE (Y/N)				
							NPDES	GROUND WATER			DRINKING WATER			
1	HGWC-14	W/G G	8/13/2023	1025	23	7	3	3	X	X	X	X		006
2	HGWC-15	W/G G	8/13/2023	1245	21	7	3	3	X	X	X	X		067
3	HGWC-16	W/G G	8/13/2023	1117	23	7	3	3	X	X	X	X		008
4	HGWC-17	W/G G	8/13/2023	1416	22	7	3	3	X	X	X	X		009
5	HGWC-18	W/G G	8/13/2023	0818	21	7	3	3	X	X	X	X		010
6	MW-22	W/G G	8/13/2023	1893	22	7	3	3	X	X	X	X		011
7	MW-23D	W/G G	8/13/2023	1441	22	7	3	3	X	X	X	X		013
8	MW-33	W/G G	8/13/2023	0828	19	7	3	3	X	X	X	X		014
9	MW-37D	W/G G	8/13/2023	1290	22	7	3	3	X	X	X	X		015
10	HAM-AP2-EB-02	W/Q G	8/13/2023	1390	22	7	3	3	X	X	X	X		016
11	HAM-AP2-EB-02	W/Q G	8/13/2023	1310	22	7	3	3	X	X	X	X		016
12	HAM-AP2-FD-02	W/G G	8/13/2023	0000	22	7	3	3	X	X	X	X		017

Matrix Code (see valid codes to left)

Sample Type (G-GRAB C-COMP)

DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test												
														Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAO 226/228	TDS	Major Ions (Profile 10839-2)							
8/13/2023	1025				23	7	3	3																		

Important Note: By signing this form you are accepting Paces' NET 30 day payment terms and agreeing to the charges of 1.5% per month late charges for delinquent payments.

TEMP IN °C	RECEIVED ON ICE (Y/N)	CUSTODY SEALED COOLER (Y/N)	SAMPLES INTACT (Y/N)

ADDITIONAL COMMENTS  
 HAM-COR-CASSIST-202352

RELINQUISHED BY / AFFILIATION  
 George Williams / Pace

DATE  
 8/13/23

TIME  
 1332

ACCEPTED BY / AFFILIATION  
 George Williams / Pace

DATE  
 8/13/23

TIME  
 1332

SAMPLER NAME AND SIGNATURE

PROJECT NAME OF SAMPLER: *Hammond AP-2*

SIGNATURE OF SAMPLER: *George Williams*

DATE SIGNED: *8/13/23*

TEMP IN °C

RECEIVED ON ICE (Y/N)

CUSTODY SEALED COOLER (Y/N)

SAMPLES INTACT (Y/N)



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition  
Upon Receipt

Client Name:

*GA Power*

Project #:

WO#: 92681879

Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other:

PM: BV Due Date: 08/30/23  
CLIENT: 92- GP-HAM

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *9-14-23 A*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID:

*083*

Type of Ice:  Wet  Blue  None

Cooler Temp:

*4.5*

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):

*4.5*

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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	<i>WG</i>	
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted:

Date/Time:

Project Manager SCURF Review:

Date:

Project Manager SRF Review:

Date:



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

Project #

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP9R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
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12																												

**pH Adjustment Log for Preserved Samples**

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

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



# CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Requested Client Information: Company: GA Power Address: Atlanta, GA

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

Section C Invoice Information: Attention: Southern Co. Company Name: Address: 10839

Page: 1 of 1

Section D Requested Client Information: Matrix Code: SAMPLE TYPE: DATE: TIME: DATE: TIME: SAMPLE TEMP AT COLLECTION: # OF CONTAINERS: Unpreserved: H<sub>2</sub>SO<sub>4</sub>: HNO<sub>3</sub>: HCl: NaOH: Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>: Methanol: Other: Analysis Test: Chloride, Fluoride, Sulfate: Full App. III and IV metals: RAD 226/228: TDS: Major Ions (Profile 10839-2): Residual Chlorine (Y/N):

REGULATORY AGENCY:  NPDES  GROUND WATER  DRINKING WATER  LUST  RCRA  OTHER

ITEM #	Section D Requested Client Information	Valid Matrix Codes MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE	TIME	DATE	TIME	RELEASHER BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
				COMPOSITE	COMPOSITE											
1	HAM-MW-210	WIG G	G	8/12/2023	1607	21	7	3	3	TK 8/12/2023	1115	1332	Wm. William / Pac	8/14/2023	1115	
2	HAM-MW-34D	WIG G	G	8/12/2023	1650	22	7	3	3							
3	HAM-MW-35	WIG G	G	8/12/2023	0939	21	7	3	3							
4	HAM-MW-51	WIG G	G	8/12/2023	1124	22	7	3	3							
5																
6																
7																
8																
9																
10																
11																
12																

ADDITIONAL COMMENTS: The water tested for heavy metals

RELEASHER BY / AFFILIATION: Wm. William / Pac

DATE: 8/14/2023

TIME: 1332

ACCEPTED BY / AFFILIATION: Wm. William / Pac

DATE: 8/14/2023

TIME: 1115

SAMPLER NAME AND SIGNATURE: [Signature]

PROJECT Name of SAMPLER: [Blank]

SIGNATURE of SAMPLER: [Signature]

DATE Signed: 08/12/2023

ANALYST: [Blank]

Temp in °C: [Blank]

Received on ice (Y/N): [Blank]

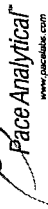
Custody Sealed Cooler (Y/N): [Blank]

Sample Intact (Y/N): [Blank]

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

F-ALL-Q-020REV. 07, 15-FEB-2007

# Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228  
Analyst: ZPC  
Date: 8/29/2023  
Worklist: 74946  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2971504
MB concentration:	0.028
M/B 2 Sigma CSU:	0.177
MB MDC:	0.418
MB Numerical Performance Indicator:	0.31
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS74946	Y
Count Date:	8/31/2023	LCS74946
Spike I.D.:	23-043	8/31/2023
Decay Corrected Spike Concentration (pCi/mL):	40.010	23-043
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.816	0.815
Target Conc. (pCi/L, g, F):	4.905	4.908
Uncertainty (Calculated):	0.240	0.240
Result (pCi/L, g, F):	4.584	4.915
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.002	1.070
Numerical Performance Indicator:	-0.59	0.01
Percent Recovery:	93.66%	100.15%
Status vs Numerical Indicator:	N/A	N/A
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

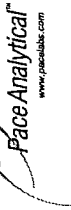
## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*Jasper*

VAM 9/15/23

# Quality Control Sample Performance Assessment



Analyst **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-228  
Analyst: ZPC  
Date: 8/31/2023  
Worklist: 75029  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2976847
MB concentration:	0.830
M/B 2 Sigma CSU:	0.342
MB MDC:	0.491
MB Numerical Performance Indicator:	4.76
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

*OK*

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS75029	LCS75029
Count Date:	9/6/2023	9/6/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.931	39.931
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.817
Target Conc. (pCi/L, g, F):	4.889	4.888
Uncertainty (Calculated):	0.240	0.240
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	3.930	3.696
Numerical Performance Indicator:	0.909	0.843
Percent Recovery:	-2.00	-2.67
Status vs Numerical Indicator:	80.39%	75.60%
Upper % Recovery Limits:	Pass	N/A
Lower % Recovery Limits:	135%	135%
	60%	60%

Duplicate Sample Assessment	Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D.:	Sample I.D.:
Duplicate Sample I.D.:	Sample MS I.D.:
Sample Result (pCi/L, g, F):	Sample MSD I.D.:
Sample Duplicate Result (pCi/L, g, F):	Sample Matrix Spike Result:
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):
Are sample and/or duplicate results below RL?	Duplicate Numerical Performance Indicator:
Duplicate Numerical Performance Indicator:	Duplicate Numerical Performance Indicator:
Duplicate Status vs Numerical Indicator:	(Based on the Percent Recoveries) MS/MSD Duplicate RPD:
Duplicate Status vs RPD:	MS/MSD Duplicate Status vs Numerical Indicator:
% RPD Limit:	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:  
\*The method blank result is below the reporting limit for this analysis and is acceptable.

*VAR*  
*9/8/23*



# Quality Control Sample Performance Assessment

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-226  
 Analyst: SLC  
 Date: 9/21/2023  
 Worklist: 75040  
 Matrix: WT

Method Blank Assessment	
MB Sample ID	2977130
MB concentration:	0.086
MB 2 Sigma CSU:	0.097
MB MDC:	0.188
MB Numerical Performance Indicator:	1.72
MB Status vs Numerical Indicator:	Pass
MB Status vs MDC:	N/A

Laboratory Control Sample Assessment		
	LCS0 (Y or N)?	Y
	Count Date:	9/8/2023
Spike ID:	LCS75040	LCS075040
Decay Corrected Spike Concentration (pCi/mL):	19-033	19-033
Volume Used (mL):	24.013	24.013
Alliquot Volume (L, g, F):	0.10	0.10
Target Conc. (pCi/L, g, F):	0.503	0.503
Uncertainty (Calculated):	4.779	4.771
Result (pCi/L, g, F):	0.057	0.057
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	5.033	5.858
Numerical Performance Indicator:	0.911	1.031
Percent Recovery:	105.33%	2.06
Status vs Numerical Indicator:	Pass	122.77%
Status vs Recovery:	N/A	Warning
Upper % Recovery Limits:	125%	N/A
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS75040	92681890014
Duplicate Sample I.D.:	LCS075040	92681890014DUP
Sample Result (pCi/L, g, F):	5.033	0.081
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.911	0.132
Sample Duplicate Result (pCi/L, g, F):	5.858	0.046
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.031	0.115
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-1.175	0.388
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	15.30%	54.79%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

Sample Matrix Spike Control Assessment		
Sample Collection Date:		
Sample I.D.:	MS/MSD 1	MS/MSD 2
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 Alliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Alliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (Calculated):		
MSD Spike Uncertainty (Calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

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

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

Comments:

*M 9/8/23*

*W 9/18/23*





# Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226  
 Analyst: SLC  
 Date: 9/2/2023  
 Worklist: 75041  
 Matrix: W/T

Method Blank Assessment	
MB Sample ID	2977138
MB Concentration:	0.093
MB 2 Sigma CSU:	0.137
MB MDC:	0.301
MB Numerical Performance Indicator:	1.33
MB Status vs Numerical Indicator:	Pass
MB Status vs MDC:	N/A

Laboratory Control Sample Assessment		
Count Date:	LCSD (Y or N)?	Y
9/8/2023	LCSD75041	LCSD75041
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.013	24.013
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.509
Target Conc. (pCi/L, g, F):	4.723	4.719
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	6.089	5.435
LCSLCSD 2 Sigma CSU (pCi/L, g, F):	1.073	0.974
Numerical Performance Indicator:	2.49	1.44
Percent Recovery:	128.92%	115.19%
Status vs Numerical Indicator:	Warning	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	Duplicate Sample I.D.:	RPD Limit:
LCSD75041	92683138001	25%
Duplicate Sample I.D.:	LCSD75041	25%
Sample Result (pCi/L, g, F):	6.089	0.119
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.073	0.138
Sample Duplicate Result (pCi/L, g, F):	5.435	0.263
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.974	0.147
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.884	-1.390
Duplicate Percent Recoveries): Duplicate RPD:	11.25%	74.93%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.:	Sample MS I.D.:	Sample MSD I.D.:
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
Duplicate Percent Recoveries): 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:

*MPA 9/8/23*

*Ume 18/23*

# Quality Control Sample Performance Assessment



*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-226  
Analyst: SLC  
Date: 9/12/2023  
Worklist: 75103  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2982186
MB concentration:	0.199
MB 2 Sigma CSU:	0.286
MB MDC:	0.622
MB Numerical Performance Indicator:	1.36
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS75103	LCS/D75103
Count Date:	9/13/2023	9/13/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.031	25.031
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.509
Target Conc. (pCi/L, g, F):	4.965	4.920
Uncertainty (Calculated):	0.233	0.231
Result (pCi/L, g, F):	5.960	4.641
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.214	1.014
Numerical Performance Indicator:	1.58	-0.53
Percent Recovery:	120.03%	94.32%
Status vs Numerical Indicator:	Pass	Pass
Upper % Recovery Limits:	N/A	N/A
Lower % Recovery Limits:	125%	125%
	75%	75%

Duplicate Sample Assessment	LCS/D (Y or N)?	
	LCS75103	LCS/D75103
Sample I.D.:	92682115021	92682115021DUP
Duplicate Sample I.D.:	0.432	0.432
Sample Result (pCi/L, g, F):	1.214	1.214
Sample Duplicate Result (pCi/L, g, F):	4.641	0.258
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.014	0.271
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.634	0.844
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	23.99%	50.51%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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

Comments:

*[Handwritten Signature]*

LAM 9/13/23

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D. Sample MS I.D. Sample MSD I.D. Sample Matrix Spike Result: Matrix Spike Result 2 Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F): Duplicate Numerical Performance Indicator: 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:



August 22, 2023

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

RE: Project: Pool Hammond Pooled Upgradient  
Pace Project No.: 92681885

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on August 09, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

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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

Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Pool Hammond Pooled Upgradient  
Pace Project No.: 92681885

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92681885001	HAM-HGWA-1	Water	08/08/23 10:47	08/09/23 11:40
92681885002	HAM-HGWA-2	Water	08/08/23 16:08	08/09/23 11:40
92681885003	HAM-HGWA-3	Water	08/08/23 14:45	08/09/23 11:40
92681885004	HAM-HGWA-43D	Water	08/08/23 11:05	08/09/23 11:40
92681885005	HAM-HGWA-44D	Water	08/08/23 10:59	08/09/23 11:40

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92681885001	HAM-HGWA-1	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92681885002	HAM-HGWA-2	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92681885003	HAM-HGWA-3	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92681885004	HAM-HGWA-43D	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92681885005	HAM-HGWA-44D	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3

PASI-A = Pace Analytical Services - Asheville

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

### REPORT OF LABORATORY ANALYSIS

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**SUMMARY OF DETECTION**

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681885001</b>	<b>HAM-HGWA-1</b>					
EPA 6010D	Iron	0.35	mg/L	0.040	08/12/23 06:33	
EPA 6010D	Manganese	0.29	mg/L	0.040	08/12/23 06:33	
EPA 6010D	Potassium	0.79	mg/L	0.50	08/12/23 06:33	
EPA 6010D	Sodium	37.0	mg/L	1.0	08/12/23 06:33	
EPA 6010D	Calcium	118	mg/L	1.0	08/12/23 06:33	
EPA 6010D	Magnesium	4.7	mg/L	0.050	08/12/23 06:33	
EPA 6020B	Barium	0.039	mg/L	0.0050	08/18/23 18:29	
EPA 6020B	Boron	0.023J	mg/L	0.040	08/18/23 18:29	
EPA 6020B	Cobalt	0.00080J	mg/L	0.0050	08/18/23 18:29	
SM 2540C-2015	Total Dissolved Solids	457	mg/L	25.0	08/11/23 14:00	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO <sub>3</sub> )	331	mg/L	5.0	08/16/23 11:12	
SM 2320B-2011	Alkalinity, Total as CaCO <sub>3</sub>	331	mg/L	5.0	08/16/23 11:12	
SM 4500-S2D-2011	Sulfide	0.043J	mg/L	0.10	08/15/23 06:15	
EPA 300.0 Rev 2.1 1993	Chloride	26.0	mg/L	1.0	08/12/23 19:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.088J	mg/L	0.10	08/12/23 19:54	
EPA 300.0 Rev 2.1 1993	Sulfate	67.7	mg/L	1.0	08/12/23 19:54	
<b>92681885002</b>	<b>HAM-HGWA-2</b>					
EPA 6010D	Iron	0.29	mg/L	0.040	08/12/23 06:28	
EPA 6010D	Manganese	0.90	mg/L	0.040	08/12/23 06:28	
EPA 6010D	Potassium	1.1	mg/L	0.50	08/12/23 06:28	
EPA 6010D	Sodium	10.9	mg/L	1.0	08/12/23 06:28	
EPA 6010D	Calcium	30.7	mg/L	1.0	08/12/23 06:28	
EPA 6010D	Magnesium	4.3	mg/L	0.050	08/12/23 06:28	
EPA 6020B	Barium	0.068	mg/L	0.0050	08/18/23 18:33	
EPA 6020B	Beryllium	0.00022J	mg/L	0.00050	08/18/23 18:33	
EPA 6020B	Boron	0.060	mg/L	0.040	08/18/23 18:33	
EPA 6020B	Cadmium	0.00026J	mg/L	0.00050	08/18/23 18:33	
EPA 6020B	Cobalt	0.029	mg/L	0.0050	08/18/23 18:33	
EPA 6020B	Lithium	0.0017J	mg/L	0.030	08/18/23 18:33	
EPA 6020B	Selenium	0.0019J	mg/L	0.0050	08/18/23 18:33	
SM 2540C-2015	Total Dissolved Solids	189	mg/L	25.0	08/14/23 13:15	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO <sub>3</sub> )	20.2	mg/L	5.0	08/15/23 21:59	
SM 2320B-2011	Alkalinity, Total as CaCO <sub>3</sub>	20.2	mg/L	5.0	08/15/23 21:59	
EPA 300.0 Rev 2.1 1993	Chloride	6.6	mg/L	1.0	08/12/23 20:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.070J	mg/L	0.10	08/12/23 20:08	
EPA 300.0 Rev 2.1 1993	Sulfate	89.9	mg/L	1.0	08/12/23 20:08	
<b>92681885003</b>	<b>HAM-HGWA-3</b>					
EPA 6010D	Iron	0.87	mg/L	0.040	08/12/23 06:38	
EPA 6010D	Manganese	0.24	mg/L	0.040	08/12/23 06:38	
EPA 6010D	Potassium	0.45J	mg/L	0.50	08/12/23 06:38	
EPA 6010D	Sodium	5.6	mg/L	1.0	08/12/23 06:38	
EPA 6010D	Calcium	78.3	mg/L	1.0	08/12/23 06:38	
EPA 6010D	Magnesium	5.2	mg/L	0.050	08/12/23 06:38	
EPA 6020B	Barium	0.12	mg/L	0.0050	08/18/23 18:37	
EPA 6020B	Boron	0.011J	mg/L	0.040	08/18/23 18:37	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	08/18/23 18:37	

**REPORT OF LABORATORY ANALYSIS**

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## SUMMARY OF DETECTION

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681885003</b>	<b>HAM-HGWA-3</b>					
SM 2540C-2015	Total Dissolved Solids	285	mg/L	25.0	08/14/23 13:16	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	212	mg/L	5.0	08/15/23 22:06	
SM 2320B-2011	Alkalinity, Total as CaCO3	212	mg/L	5.0	08/15/23 22:06	M1
EPA 300.0 Rev 2.1 1993	Chloride	5.3	mg/L	1.0	08/12/23 20:23	
EPA 300.0 Rev 2.1 1993	Fluoride	0.055J	mg/L	0.10	08/12/23 20:23	
EPA 300.0 Rev 2.1 1993	Sulfate	35.0	mg/L	1.0	08/12/23 20:23	
<b>92681885004</b>	<b>HAM-HGWA-43D</b>					
EPA 6010D	Iron	0.29	mg/L	0.040	08/12/23 06:43	
EPA 6010D	Manganese	0.017J	mg/L	0.040	08/12/23 06:43	
EPA 6010D	Potassium	0.86	mg/L	0.50	08/12/23 06:43	
EPA 6010D	Sodium	22.2	mg/L	1.0	08/12/23 06:43	
EPA 6010D	Calcium	52.8	mg/L	1.0	08/12/23 06:43	
EPA 6010D	Magnesium	17.7	mg/L	0.050	08/12/23 06:43	
EPA 6020B	Barium	0.30	mg/L	0.0050	08/18/23 18:48	
EPA 6020B	Boron	0.038J	mg/L	0.040	08/18/23 18:48	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	08/18/23 18:48	
EPA 6020B	Molybdenum	0.0019J	mg/L	0.010	08/18/23 18:48	
SM 2540C-2015	Total Dissolved Solids	274	mg/L	25.0	08/14/23 13:16	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	251	mg/L	5.0	08/16/23 11:21	
SM 2320B-2011	Alkalinity, Total as CaCO3	251	mg/L	5.0	08/16/23 11:21	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	08/12/23 21:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.18	mg/L	0.10	08/12/23 21:08	
EPA 300.0 Rev 2.1 1993	Sulfate	25.6	mg/L	1.0	08/12/23 21:08	
<b>92681885005</b>	<b>HAM-HGWA-44D</b>					
EPA 6010D	Iron	0.065	mg/L	0.040	08/12/23 06:13	
EPA 6010D	Potassium	2.6	mg/L	0.50	08/12/23 06:13	
EPA 6010D	Sodium	135	mg/L	1.0	08/12/23 06:13	
EPA 6010D	Calcium	8.1	mg/L	1.0	08/12/23 06:13	
EPA 6010D	Magnesium	3.9	mg/L	0.050	08/12/23 06:13	
EPA 6020B	Barium	0.12	mg/L	0.0050	08/18/23 18:52	
EPA 6020B	Boron	0.55	mg/L	0.20	08/22/23 13:32	
EPA 6020B	Lithium	0.092	mg/L	0.030	08/18/23 18:52	
EPA 6020B	Molybdenum	0.0013J	mg/L	0.010	08/18/23 18:52	
SM 2540C-2015	Total Dissolved Solids	361	mg/L	25.0	08/14/23 13:17	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	279	mg/L	5.0	08/15/23 15:02	
SM 2320B-2011	Alkalinity, Total as CaCO3	279	mg/L	5.0	08/15/23 15:02	
SM 4500-S2D-2011	Sulfide	0.14	mg/L	0.10	08/15/23 06:17	M1, R1
EPA 300.0 Rev 2.1 1993	Chloride	27.0	mg/L	1.0	08/12/23 21:23	M1
EPA 300.0 Rev 2.1 1993	Fluoride	1.3	mg/L	0.10	08/12/23 21:23	M1
EPA 300.0 Rev 2.1 1993	Sulfate	1.3	mg/L	1.0	08/12/23 21:23	

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## ANALYTICAL RESULTS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Sample: HAM-HGWA-1		Lab ID: 92681885001		Collected: 08/08/23 10:47		Received: 08/09/23 11:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	0.35	mg/L	0.040	0.025	1	08/11/23 14:21	08/12/23 06:33	7439-89-6	
Manganese	0.29	mg/L	0.040	0.011	1	08/11/23 14:21	08/12/23 06:33	7439-96-5	
Potassium	0.79	mg/L	0.50	0.15	1	08/11/23 14:21	08/12/23 06:33	7440-09-7	
Sodium	37.0	mg/L	1.0	0.58	1	08/11/23 14:21	08/12/23 06:33	7440-23-5	
Calcium	118	mg/L	1.0	0.12	1	08/11/23 14:21	08/12/23 06:33	7440-70-2	
Magnesium	4.7	mg/L	0.050	0.012	1	08/11/23 14:21	08/12/23 06:33	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 18:29	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 18:29	7440-38-2	
Barium	0.039	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 18:29	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 18:29	7440-41-7	
Boron	0.023J	mg/L	0.040	0.0086	1	08/16/23 10:27	08/18/23 18:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 18:29	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 18:29	7440-47-3	
Cobalt	0.00080J	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 18:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 18:29	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 18:29	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 18:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 18:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 18:29	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	0.00013	1	08/15/23 10:30	08/15/23 15:03	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	457	mg/L	25.0	25.0	1		08/11/23 14:00		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	331	mg/L	5.0	5.0	1		08/16/23 11:12		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 11:12		
Alkalinity, Total as CaCO3	331	mg/L	5.0	5.0	1		08/16/23 11:12		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	0.043J	mg/L	0.10	0.022	1		08/15/23 06:15	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	26.0	mg/L	1.0	0.60	1		08/12/23 19:54	16887-00-6	

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### ANALYTICAL RESULTS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Sample: HAM-HGWA-1 Lab ID: 92681885001 Collected: 08/08/23 10:47 Received: 08/09/23 11:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.088J</b>	mg/L	0.10	0.050	1		08/12/23 19:54	16984-48-8	
Sulfate	<b>67.7</b>	mg/L	1.0	0.50	1		08/12/23 19:54	14808-79-8	

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## ANALYTICAL RESULTS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Sample: HAM-HGWA-2		Lab ID: 92681885002		Collected: 08/08/23 16:08		Received: 08/09/23 11:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	0.29	mg/L	0.040	0.025	1	08/11/23 14:21	08/12/23 06:28	7439-89-6	
Manganese	0.90	mg/L	0.040	0.011	1	08/11/23 14:21	08/12/23 06:28	7439-96-5	
Potassium	1.1	mg/L	0.50	0.15	1	08/11/23 14:21	08/12/23 06:28	7440-09-7	
Sodium	10.9	mg/L	1.0	0.58	1	08/11/23 14:21	08/12/23 06:28	7440-23-5	
Calcium	30.7	mg/L	1.0	0.12	1	08/11/23 14:21	08/12/23 06:28	7440-70-2	
Magnesium	4.3	mg/L	0.050	0.012	1	08/11/23 14:21	08/12/23 06:28	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 18:33	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 18:33	7440-38-2	
Barium	0.068	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 18:33	7440-39-3	
Beryllium	0.00022J	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 18:33	7440-41-7	
Boron	0.060	mg/L	0.040	0.0086	1	08/16/23 10:27	08/18/23 18:33	7440-42-8	
Cadmium	0.00026J	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 18:33	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 18:33	7440-47-3	
Cobalt	0.029	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 18:33	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 18:33	7439-92-1	
Lithium	0.0017J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 18:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 18:33	7439-98-7	
Selenium	0.0019J	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 18:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 18:33	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	0.00013	1	08/15/23 10:30	08/15/23 15:06	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	189	mg/L	25.0	25.0	1		08/14/23 13:15		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	20.2	mg/L	5.0	5.0	1		08/15/23 21:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/15/23 21:59		
Alkalinity, Total as CaCO3	20.2	mg/L	5.0	5.0	1		08/15/23 21:59		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:16	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	6.6	mg/L	1.0	0.60	1		08/12/23 20:08	16887-00-6	

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### ANALYTICAL RESULTS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Sample: HAM-HGWA-2 Lab ID: 92681885002 Collected: 08/08/23 16:08 Received: 08/09/23 11:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.070J</b>	mg/L	0.10	0.050	1		08/12/23 20:08	16984-48-8	
Sulfate	<b>89.9</b>	mg/L	1.0	0.50	1		08/12/23 20:08	14808-79-8	

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### ANALYTICAL RESULTS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Sample: HAM-HGWA-3		Lab ID: 92681885003		Collected: 08/08/23 14:45		Received: 08/09/23 11:40		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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									
Iron	0.87	mg/L	0.040	0.025	1	08/11/23 14:21	08/12/23 06:38	7439-89-6	
Manganese	0.24	mg/L	0.040	0.011	1	08/11/23 14:21	08/12/23 06:38	7439-96-5	
Potassium	0.45J	mg/L	0.50	0.15	1	08/11/23 14:21	08/12/23 06:38	7440-09-7	
Sodium	5.6	mg/L	1.0	0.58	1	08/11/23 14:21	08/12/23 06:38	7440-23-5	
Calcium	78.3	mg/L	1.0	0.12	1	08/11/23 14:21	08/12/23 06:38	7440-70-2	
Magnesium	5.2	mg/L	0.050	0.012	1	08/11/23 14:21	08/12/23 06:38	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 18:37	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 18:37	7440-38-2	
Barium	0.12	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 18:37	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 18:37	7440-41-7	
Boron	0.011J	mg/L	0.040	0.0086	1	08/16/23 10:27	08/18/23 18:37	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 18:37	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 18:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 18:37	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 18:37	7439-92-1	
Lithium	0.0031J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 18:37	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 18:37	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 18:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 18:37	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	08/15/23 10:30	08/15/23 15:08	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	285	mg/L	25.0	25.0	1		08/14/23 13:16		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	212	mg/L	5.0	5.0	1		08/15/23 22:06		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/15/23 22:06		
Alkalinity, Total as CaCO3	212	mg/L	5.0	5.0	1		08/15/23 22:06		M1
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:16	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	5.3	mg/L	1.0	0.60	1		08/12/23 20:23	16887-00-6	

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### ANALYTICAL RESULTS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Sample: HAM-HGWA-3 Lab ID: 92681885003 Collected: 08/08/23 14:45 Received: 08/09/23 11:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.055J</b>	mg/L	0.10	0.050	1		08/12/23 20:23	16984-48-8	
Sulfate	<b>35.0</b>	mg/L	1.0	0.50	1		08/12/23 20:23	14808-79-8	

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### ANALYTICAL RESULTS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

**Sample: HAM-HGWA-43D**      **Lab ID: 92681885004**      Collected: 08/08/23 11:05      Received: 08/09/23 11:40      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									
Iron	0.29	mg/L	0.040	0.025	1	08/11/23 14:21	08/12/23 06:43	7439-89-6	
Manganese	0.017J	mg/L	0.040	0.011	1	08/11/23 14:21	08/12/23 06:43	7439-96-5	
Potassium	0.86	mg/L	0.50	0.15	1	08/11/23 14:21	08/12/23 06:43	7440-09-7	
Sodium	22.2	mg/L	1.0	0.58	1	08/11/23 14:21	08/12/23 06:43	7440-23-5	
Calcium	52.8	mg/L	1.0	0.12	1	08/11/23 14:21	08/12/23 06:43	7440-70-2	
Magnesium	17.7	mg/L	0.050	0.012	1	08/11/23 14:21	08/12/23 06:43	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 18:48	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 18:48	7440-38-2	
Barium	0.30	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 18:48	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 18:48	7440-41-7	
Boron	0.038J	mg/L	0.040	0.0086	1	08/16/23 10:27	08/18/23 18:48	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 18:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 18:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 18:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 18:48	7439-92-1	
Lithium	0.0021J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 18:48	7439-93-2	
Molybdenum	0.0019J	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 18:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 18:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 18:48	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	08/15/23 10:30	08/15/23 15:11	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	274	mg/L	25.0	25.0	1		08/14/23 13:16		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	251	mg/L	5.0	5.0	1		08/16/23 11:21		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 11:21		
Alkalinity, Total as CaCO3	251	mg/L	5.0	5.0	1		08/16/23 11:21		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:16	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	3.5	mg/L	1.0	0.60	1		08/12/23 21:08	16887-00-6	

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### ANALYTICAL RESULTS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Sample: HAM-HGWA-43D Lab ID: 92681885004 Collected: 08/08/23 11:05 Received: 08/09/23 11:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.18	mg/L	0.10	0.050	1		08/12/23 21:08	16984-48-8	
Sulfate	25.6	mg/L	1.0	0.50	1		08/12/23 21:08	14808-79-8	

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### ANALYTICAL RESULTS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

**Sample: HAM-HGWA-44D**      **Lab ID: 92681885005**      Collected: 08/08/23 10:59      Received: 08/09/23 11:40      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									
Iron	<b>0.065</b>	mg/L	0.040	0.025	1	08/11/23 14:21	08/12/23 06:13	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	08/11/23 14:21	08/12/23 06:13	7439-96-5	
Potassium	<b>2.6</b>	mg/L	0.50	0.15	1	08/11/23 14:21	08/12/23 06:13	7440-09-7	
Sodium	<b>135</b>	mg/L	1.0	0.58	1	08/11/23 14:21	08/12/23 06:13	7440-23-5	
Calcium	<b>8.1</b>	mg/L	1.0	0.12	1	08/11/23 14:21	08/12/23 06:13	7440-70-2	
Magnesium	<b>3.9</b>	mg/L	0.050	0.012	1	08/11/23 14:21	08/12/23 06:13	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 18:52	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 18:52	7440-38-2	
Barium	<b>0.12</b>	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 18:52	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 18:52	7440-41-7	
Boron	<b>0.55</b>	mg/L	0.20	0.043	5	08/16/23 10:27	08/22/23 13:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 18:52	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 18:52	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 18:52	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 18:52	7439-92-1	
Lithium	<b>0.092</b>	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 18:52	7439-93-2	
Molybdenum	<b>0.0013J</b>	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 18:52	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 18:52	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 18:52	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	08/15/23 10:30	08/15/23 15:14	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>361</b>	mg/L	25.0	25.0	1		08/14/23 13:17		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>279</b>	mg/L	5.0	5.0	1		08/15/23 15:02		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/15/23 15:02		
Alkalinity, Total as CaCO3	<b>279</b>	mg/L	5.0	5.0	1		08/15/23 15:02		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	<b>0.14</b>	mg/L	0.10	0.022	1		08/15/23 06:17	18496-25-8	M1,R1
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>27.0</b>	mg/L	1.0	0.60	1		08/12/23 21:23	16887-00-6	M1

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### ANALYTICAL RESULTS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Sample: HAM-HGWA-44D Lab ID: 92681885005 Collected: 08/08/23 10:59 Received: 08/09/23 11:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	1.3	mg/L	0.10	0.050	1		08/12/23 21:23	16984-48-8	M1
Sulfate	1.3	mg/L	1.0	0.50	1		08/12/23 21:23	14808-79-8	

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**QUALITY CONTROL DATA**

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

QC Batch: 792418 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004, 92681885005

METHOD BLANK: 4106293 Matrix: Water  
 Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004, 92681885005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/12/23 04:46	
Iron	mg/L	ND	0.040	0.025	08/12/23 04:46	
Magnesium	mg/L	ND	0.050	0.012	08/12/23 04:46	
Manganese	mg/L	ND	0.040	0.011	08/12/23 04:46	
Potassium	mg/L	ND	0.50	0.15	08/12/23 04:46	
Sodium	mg/L	ND	1.0	0.58	08/12/23 04:46	

LABORATORY CONTROL SAMPLE: 4106294

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.98J	98	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.0	105	80-120	
Manganese	mg/L	1	1.0	105	80-120	
Potassium	mg/L	1	1.1	111	80-120	
Sodium	mg/L	1	1.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4106295 4106296

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		92680804001	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Calcium	mg/L	40.7	1	1	41.4	41.0	71	33	75-125	1	20	M1	
Iron	mg/L	0.13	1	1	1.2	1.1	111	102	75-125	8	20		
Magnesium	mg/L	22.1	1	1	22.9	22.8	81	67	75-125	1	20	M1	
Manganese	mg/L	0.020J	1	1	1.1	1.1	106	105	75-125	1	20		
Potassium	mg/L	1.3	1	1	2.3	2.3	108	102	75-125	3	20		
Sodium	mg/L	1.8	1	1	2.8	2.8	100	97	75-125	1	20		

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**QUALITY CONTROL DATA**

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

QC Batch:	793883	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004, 92681885005

METHOD BLANK: 4113580 Matrix: Water

Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004, 92681885005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/18/23 18:03	
Arsenic	mg/L	ND	0.010	0.0037	08/18/23 18:03	
Barium	mg/L	ND	0.0050	0.00067	08/18/23 18:03	
Beryllium	mg/L	ND	0.00050	0.000054	08/18/23 18:03	
Boron	mg/L	ND	0.040	0.0086	08/18/23 18:03	
Cadmium	mg/L	ND	0.00050	0.00011	08/18/23 18:03	
Chromium	mg/L	ND	0.0050	0.0011	08/18/23 18:03	
Cobalt	mg/L	ND	0.0050	0.00039	08/18/23 18:03	
Lead	mg/L	ND	0.0010	0.00012	08/18/23 18:03	
Lithium	mg/L	ND	0.030	0.00073	08/18/23 18:03	
Molybdenum	mg/L	ND	0.010	0.00074	08/18/23 18:03	
Selenium	mg/L	ND	0.0050	0.0014	08/18/23 18:03	
Thallium	mg/L	ND	0.0010	0.00018	08/18/23 18:03	

LABORATORY CONTROL SAMPLE: 4113581

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.094	94	80-120	
Beryllium	mg/L	0.1	0.11	108	80-120	
Boron	mg/L	1	1.1	108	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.11	107	80-120	
Lithium	mg/L	0.1	0.11	113	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.11	107	80-120	
Thallium	mg/L	0.1	0.10	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113582 4113583

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92681883002	Result	Spike Conc.	Spike Conc.								
Antimony	mg/L	ND	0.1	0.1	0.1	0.10	105	100	75-125	5	20		
Arsenic	mg/L	ND	0.1	0.1	0.1	0.10	106	100	75-125	6	20		

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**QUALITY CONTROL DATA**

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Parameter	Units	4113582		4113583		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92681883002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.032	0.1	0.1	0.14	0.13	109	103	75-125	4	20		
Beryllium	mg/L	ND	0.1	0.1	0.097	0.092	97	92	75-125	5	20		
Boron	mg/L	0.18	1	1	1.2	1.2	102	98	75-125	3	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.096	100	95	75-125	4	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20		
Lead	mg/L	ND	0.1	0.1	0.11	0.10	109	104	75-125	5	20		
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Molybdenum	mg/L	0.0039J	0.1	0.1	0.11	0.10	102	99	75-125	3	20		
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	110	104	75-125	6	20		
Thallium	mg/L	ND	0.1	0.1	0.11	0.10	108	103	75-125	5	20		

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**QUALITY CONTROL DATA**

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

QC Batch:	793520	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004, 92681885005

METHOD BLANK: 4112011 Matrix: Water  
 Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004, 92681885005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/15/23 14:00	

LABORATORY CONTROL SAMPLE: 4112012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112013 4112014

Parameter	Units	4112013		4112014		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	0.0022	0.0023	82	87	75-125	5	20	

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### QUALITY CONTROL DATA

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

QC Batch: 793055

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: 92681885001

METHOD BLANK: 4109645

Matrix: Water

Associated Lab Samples: 92681885001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/11/23 13:55	

LABORATORY CONTROL SAMPLE: 4109646

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	430	108	80-120	

SAMPLE DUPLICATE: 4109647

Parameter	Units	92682122001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	184	194	5	10	

SAMPLE DUPLICATE: 4109648

Parameter	Units	92681884001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	214	264	21	10	D6

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### QUALITY CONTROL DATA

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

QC Batch: 793414 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: 92681885002, 92681885003, 92681885004, 92681885005

METHOD BLANK: 4111318 Matrix: Water  
 Associated Lab Samples: 92681885002, 92681885003, 92681885004, 92681885005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/14/23 13:14	

LABORATORY CONTROL SAMPLE: 4111319

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	436	109	80-120	

SAMPLE DUPLICATE: 4111320

Parameter	Units	92681885002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	189	193	2	10	

SAMPLE DUPLICATE: 4111321

Parameter	Units	92682120003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	61.0	62.0	2	10	

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**QUALITY CONTROL DATA**

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

QC Batch: 793564 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004

METHOD BLANK: 4112177 Matrix: Water

Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/15/23 19:14	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/15/23 19:14	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/15/23 19:14	

LABORATORY CONTROL SAMPLE: 4112178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.7	105	80-120	

LABORATORY CONTROL SAMPLE: 4112179

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.3	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112180 4112181

Parameter	Units	92681885003		4112180		4112181		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec				
Alkalinity, Total as CaCO3	mg/L	212	50	50	267	273	109	122	80-120	2	25 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112182 4112183

Parameter	Units	92681885004		4112182		4112183		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec				
Alkalinity, Total as CaCO3	mg/L	251	50	50	308	301	114	100	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: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

QC Batch: 793596

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92681885005

METHOD BLANK: 4112305

Matrix: Water

Associated Lab Samples: 92681885005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/15/23 11:24	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/15/23 11:24	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/15/23 11:24	

LABORATORY CONTROL SAMPLE: 4112306

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	53.7	107	80-120	

LABORATORY CONTROL SAMPLE: 4112307

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.7	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112308 4112309

Parameter	Units	4112308		4112309		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	99.9	50	50	159	163	118	126	80-120	2	25 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112310 4112311

Parameter	Units	4112310		4112311		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	5.3	50	50	58.0	58.8	105	107	80-120	1	25

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**QUALITY CONTROL DATA**

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

QC Batch: 793499 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004, 92681885005

METHOD BLANK: 4111952 Matrix: Water  
 Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004, 92681885005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	08/15/23 06:10	

LABORATORY CONTROL SAMPLE: 4111953

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.50	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111954 4111955

Parameter	Units	92681883001		4111954		4111955		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	0.16	0.5	0.5	0.5	0.68	0.59	102	84	80-120	14	10	R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111956 4111957

Parameter	Units	92681885005		4111956		4111957		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	0.14	0.5	0.5	0.5	0.53	0.60	79	93	80-120	12	10	M1,R1

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

QC Batch: 793207 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: 92681885001, 92681885002, 92681885003, 92681885004, 92681885005

METHOD BLANK: 4110503 Matrix: Water  
 Associated Lab Samples: 92681885001, 92681885002, 92681885003, 92681885004, 92681885005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/12/23 16:56	
Fluoride	mg/L	ND	0.10	0.050	08/12/23 16:56	
Sulfate	mg/L	ND	1.0	0.50	08/12/23 16:56	

LABORATORY CONTROL SAMPLE: 4110504

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	49.9	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4110505 4110506

Parameter	Units	92681883001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	MSD Result	% Rec	% Rec					
Chloride	mg/L	3.6	50	50	51.2	52.5	95	98	90-110	3	10		
Fluoride	mg/L	0.19	2.5	2.5	2.4	2.5	90	92	90-110	2	10		
Sulfate	mg/L	2.2	50	50	49.7	51.1	95	98	90-110	3	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4110507 4110508

Parameter	Units	92681885005		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	MSD Result	% Rec	% Rec					
Chloride	mg/L	27.0	50	50	71.4	72.9	89	92	90-110	2	10	M1	
Fluoride	mg/L	1.3	2.5	2.5	3.3	3.4	83	86	90-110	2	10	M1	
Sulfate	mg/L	1.3	50	50	47.3	48.3	92	94	90-110	2	10		

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**REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

---

### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

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

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Pool Hammond Pooled Upgradient

Pace Project No.: 92681885

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92681885001	HAM-HGWA-1	EPA 3010A	792418	EPA 6010D	793158
92681885002	HAM-HGWA-2	EPA 3010A	792418	EPA 6010D	793158
92681885003	HAM-HGWA-3	EPA 3010A	792418	EPA 6010D	793158
92681885004	HAM-HGWA-43D	EPA 3010A	792418	EPA 6010D	793158
92681885005	HAM-HGWA-44D	EPA 3010A	792418	EPA 6010D	793158
92681885001	HAM-HGWA-1	EPA 3005A	793883	EPA 6020B	794015
92681885002	HAM-HGWA-2	EPA 3005A	793883	EPA 6020B	794015
92681885003	HAM-HGWA-3	EPA 3005A	793883	EPA 6020B	794015
92681885004	HAM-HGWA-43D	EPA 3005A	793883	EPA 6020B	794015
92681885005	HAM-HGWA-44D	EPA 3005A	793883	EPA 6020B	794015
92681885001	HAM-HGWA-1	EPA 7470A	793520	EPA 7470A	793623
92681885002	HAM-HGWA-2	EPA 7470A	793520	EPA 7470A	793623
92681885003	HAM-HGWA-3	EPA 7470A	793520	EPA 7470A	793623
92681885004	HAM-HGWA-43D	EPA 7470A	793520	EPA 7470A	793623
92681885005	HAM-HGWA-44D	EPA 7470A	793520	EPA 7470A	793623
92681885001	HAM-HGWA-1	SM 2540C-2015	793055		
92681885002	HAM-HGWA-2	SM 2540C-2015	793414		
92681885003	HAM-HGWA-3	SM 2540C-2015	793414		
92681885004	HAM-HGWA-43D	SM 2540C-2015	793414		
92681885005	HAM-HGWA-44D	SM 2540C-2015	793414		
92681885001	HAM-HGWA-1	SM 2320B-2011	793564		
92681885002	HAM-HGWA-2	SM 2320B-2011	793564		
92681885003	HAM-HGWA-3	SM 2320B-2011	793564		
92681885004	HAM-HGWA-43D	SM 2320B-2011	793564		
92681885005	HAM-HGWA-44D	SM 2320B-2011	793596		
92681885001	HAM-HGWA-1	SM 4500-S2D-2011	793499		
92681885002	HAM-HGWA-2	SM 4500-S2D-2011	793499		
92681885003	HAM-HGWA-3	SM 4500-S2D-2011	793499		
92681885004	HAM-HGWA-43D	SM 4500-S2D-2011	793499		
92681885005	HAM-HGWA-44D	SM 4500-S2D-2011	793499		
92681885001	HAM-HGWA-1	EPA 300.0 Rev 2.1 1993	793207		
92681885002	HAM-HGWA-2	EPA 300.0 Rev 2.1 1993	793207		
92681885003	HAM-HGWA-3	EPA 300.0 Rev 2.1 1993	793207		
92681885004	HAM-HGWA-43D	EPA 300.0 Rev 2.1 1993	793207		
92681885005	HAM-HGWA-44D	EPA 300.0 Rev 2.1 1993	793207		

### REPORT OF LABORATORY ANALYSIS

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DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

*GA Power*

Project #:

WO# 92681885



Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *8/9/23*  
*COM*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:

IR Gun ID:

*2/4*

Type of Ice:

Wet  Blue  None

Cooler Temp:

*2.1*

Correction Factor: Add/Subtract (°C)

*0.0*

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C):

*2.1*

USDA Regulated Soil (  N/A, water sample)

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

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

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

Date:

Project Manager SRF Review:

Date:



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

**WO# : 92681885**  
 RM: BV      Due Date: 08/23/23  
 CLIENT: 92- GP-HAM

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

Project #

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	V69T-40 mL VOA Na2SO3 (N/A)	V69U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
1	2	1																											
2	2	1																											
3	2	1																											
4	2	1																											
5	2	1																											
6																													
7																													
8																													
9																													
10																													
11																													
12																													

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).



**Section A** Required Client Information: **Section B** Required Project Information: **Section C** Invoice Information:

Company: GA Power  
Address: Atlanta, GA  
Copy To: Geosyntec Contacts  
Purchase Order No.:  
Project Name: Plant Hammond Pooled Upgrade/ret  
Project Number:  
Attention: Southern Co.  
Company Name:  
Address:  
Pace Quote Reference: Pace Pooled Manager: Barrie Vang  
Pace Profile #: 10839-16465-9100  
REGULATORY AGENCY: NPDES GROUND WATER DRINKING WATER  
UST RCRA OTHER COR—  
Site Location: GA  
STATE: GA

ITEM #	Section D Required Client Information Valid Matrix Codes MATRIX CODE (see valid codes to left) SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test					Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.		
		DATE	TIME			H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Chloride, Fluoride, Sulfate	Full App. III and IV metals	RAD 226/228	TDS	Major Ions (Profile 10839-2):				
1	HAM-HQWA-1	WT G	8/8/23	1047	7	3	3	3	3	3	3	3	3	3	X	X	X	X	X	N	0261665
2	HAM-HQWA-2	WT G	8/8/23	1608	7	3	3	3	3	3	3	3	3	3	X	X	X	X	X	N	0261665
3	HAM-HQWA-3	WT G	8/8/23	1445	7	3	3	3	3	3	3	3	3	3	X	X	X	X	X	N	0261665
4	HAM-HQWA-43D	WT G	8/8/23	1106	7	3	3	3	3	3	3	3	3	3	X	X	X	X	X	N	0261665
5	HAM-HQWA-44D	WT G	8/8/23	1059	7	3	3	3	3	3	3	3	3	3	X	X	X	X	X	N	0261665

REINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
						Received on ice (Y/N)	Custody Sealed Cooler (Y/N)
Thomas Koder / GEOSYNTEC	8/9/23	0800	Christy W. McDonald (GWS)	8/9/23	800		
Christy W. McDonald	8/9/23	1140	Ryan Williams / Pace	8/9/23	1140		
Ryan Williams / Pace	8/9/23	1415	Christy W. McDonald (GWS)	8/9/23	1415		

Temp in °C: \_\_\_\_\_  
Received on ice (Y/N): \_\_\_\_\_  
Custody Sealed Cooler (Y/N): \_\_\_\_\_  
Samples Intact (Y/N): \_\_\_\_\_

SAAMPLER NAME AND SIGNATURE: \_\_\_\_\_  
PRINT Name of SAMPLER: \_\_\_\_\_  
SIGNATURE of SAMPLER: \_\_\_\_\_

DATE Signed (MM/DD/YY): \_\_\_\_\_  
/ Geosyntec Consultants, Inc.

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.  
F-FALL-Q-020rev.07, 15-Feb-2007



September 12, 2023

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

RE: Project: Plant Hammond Pooled Up- RADs  
Pace Project No.: 92681881

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on August 09, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

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### Pace Analytical Services Pennsylvania

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

ANAB DOD-ELAP Rad Accreditation #: L2417

ANABISO/IEC 17025:2017 Rad Cert#: L24170

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 2950

Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA010

Louisiana DEQ/TNI Certification #: 04086

Maine Certification #: 2023021

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification #: 9991

Missouri Certification #: 235

Montana Certification #: Cert0082

Nebraska Certification #: NE-OS-29-14

Nevada Certification #: PA014572023-03

New Hampshire/TNI Certification #: 297622

New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-015

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN02867

Texas/TNI Certification #: T104704188-22-18

Utah/TNI Certification #: PA014572223-14

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

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Plant Hammond Pooled Up- RADs  
Pace Project No.: 92681881

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92681881001	HAM-HGWA-1	Water	08/08/23 10:47	08/09/23 11:40
92681881002	HAM-HGWA-2	Water	08/08/23 16:08	08/09/23 11:40
92681881003	HAM-HGWA-3	Water	08/08/23 14:45	08/09/23 11:40
92681881004	HAM-HGWA-43D	Water	08/08/23 11:05	08/09/23 11:40
92681881005	HAM-HGWA-44D	Water	08/08/23 10:59	08/09/23 11:40

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92681881001	HAM-HGWA-1	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92681881002	HAM-HGWA-2	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92681881003	HAM-HGWA-3	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92681881004	HAM-HGWA-43D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92681881005	HAM-HGWA-44D	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681881001</b>	<b>HAM-HGWA-1</b>					
EPA 9315	Radium-226	0.0885U ± 0.147 (0.331)	pCi/L		09/06/23 18:49	
EPA 9320	Radium-228	C:89% T:NA 0.106U ± 0.437 (0.985)	pCi/L		08/31/23 12:13	
Total Radium Calculation	Total Radium	C:85% T:73% 0.195U ± 0.584 (1.32)	pCi/L		09/11/23 09:31	
<b>92681881002</b>	<b>HAM-HGWA-2</b>					
EPA 9315	Radium-226	0.175U ± 0.160 (0.305)	pCi/L		09/06/23 18:56	
EPA 9320	Radium-228	C:89% T:NA -0.273U ± 0.419 (1.02)	pCi/L		08/31/23 12:14	
Total Radium Calculation	Total Radium	C:87% T:68% 0.175U ± 0.579 (1.33)	pCi/L		09/11/23 09:31	
<b>92681881003</b>	<b>HAM-HGWA-3</b>					
EPA 9315	Radium-226	0.140U ± 0.152 (0.308)	pCi/L		09/07/23 08:44	
EPA 9320	Radium-228	C:79% T:NA 0.271U ± 0.371 (0.795)	pCi/L		08/31/23 12:13	
Total Radium Calculation	Total Radium	C:86% T:80% 0.411U ± 0.523 (1.10)	pCi/L		09/11/23 09:31	
<b>92681881004</b>	<b>HAM-HGWA-43D</b>					
EPA 9315	Radium-226	0.377 ± 0.213 (0.334)	pCi/L		09/06/23 13:09	
EPA 9320	Radium-228	C:90% T:NA 0.126U ± 0.398 (0.893)	pCi/L		08/31/23 12:12	
Total Radium Calculation	Total Radium	C:82% T:79% 0.503U ± 0.611 (1.23)	pCi/L		09/11/23 09:31	

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**SUMMARY OF DETECTION**

Project: Plant Hammond Pooled Up- RADs  
 Pace Project No.: 92681881

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92681881005</b>	<b>HAM-HGWA-44D</b>					
EPA 9315	Radium-226	0.163U ± 0.150 (0.285) C:89% T:NA	pCi/L		09/07/23 15:00	
EPA 9320	Radium-228	-0.116U ± 0.258 (0.640) C:86% T:83%	pCi/L		08/31/23 15:30	
Total Radium Calculation	Total Radium	0.163U ± 0.408 (0.925)	pCi/L		09/08/23 17:15	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

<b>Sample:</b> HAM-HGWA-1	<b>Lab ID:</b> 92681881001	Collected: 08/08/23 10:47	Received: 08/09/23 11:40	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>0.0885U ± 0.147 (0.331)</b> <b>C:89% T:NA</b>	pCi/L	09/06/23 18:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.106U ± 0.437 (0.985)</b> <b>C:85% T:73%</b>	pCi/L	08/31/23 12:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.195U ± 0.584 (1.32)</b>	pCi/L	09/11/23 09:31	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

**Sample: HAM-HGWA-2**      **Lab ID: 92681881002**      Collected: 08/08/23 16:08      Received: 08/09/23 11:40      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>0.175U ± 0.160 (0.305)</b> <b>C:89% T:NA</b>	pCi/L	09/06/23 18:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.273U ± 0.419 (1.02)</b> <b>C:87% T:68%</b>	pCi/L	08/31/23 12:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.175U ± 0.579 (1.33)</b>	pCi/L	09/11/23 09:31	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-3</b> <b>Lab ID: 92681881003</b> Collected: 08/08/23 14:45      Received: 08/09/23 11:40      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.140U ± 0.152 (0.308)</b> <b>C:79% T:NA</b>	pCi/L	09/07/23 08:44	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.271U ± 0.371 (0.795)</b> <b>C:86% T:80%</b>	pCi/L	08/31/23 12:13	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.411U ± 0.523 (1.10)</b>	pCi/L	09/11/23 09:31	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

**Sample: HAM-HGWA-43D**      **Lab ID: 92681881004**      Collected: 08/08/23 11:05      Received: 08/09/23 11:40      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>0.377 ± 0.213 (0.334)</b> <b>C:90% T:NA</b>	pCi/L	09/06/23 13:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.126U ± 0.398 (0.893)</b> <b>C:82% T:79%</b>	pCi/L	08/31/23 12:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.503U ± 0.611 (1.23)</b>	pCi/L	09/11/23 09:31	7440-14-4	

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### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: HAM-HGWA-44D</b> <b>Lab ID: 92681881005</b> Collected: 08/08/23 10:59      Received: 08/09/23 11:40      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.163U ± 0.150 (0.285)</b> <b>C:89% T:NA</b>	pCi/L	09/07/23 15:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.116U ± 0.258 (0.640)</b> <b>C:86% T:83%</b>	pCi/L	08/31/23 15:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.163U ± 0.408 (0.925)</b>	pCi/L	09/08/23 17:15	7440-14-4	

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

QC Batch: 610549

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92681881001, 92681881002, 92681881003, 92681881004

METHOD BLANK: 2971498

Matrix: Water

Associated Lab Samples: 92681881001, 92681881002, 92681881003, 92681881004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.453 ± 0.248 (0.409) C:88% T:87%	pCi/L	08/31/23 12:16	

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

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**QUALITY CONTROL - RADIOCHEMISTRY**

Project: Plant Hammond Pooled Up- RADs  
 Pace Project No.: 92681881

QC Batch: 610551	Analysis Method: EPA 9320
QC Batch Method: EPA 9320	Analysis Description: 9320 Radium 228
	Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92681881005

METHOD BLANK: 2971504 Matrix: Water

Associated Lab Samples: 92681881005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0282 ± 0.177 (0.418) C:85% T:91%	pCi/L	08/31/23 15:33	

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

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

QC Batch: 611645

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92681881005

METHOD BLANK: 2977130

Matrix: Water

Associated Lab Samples: 92681881005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0856 ± 0.0973 (0.188) C:95% T:NA	pCi/L	09/07/23 15:00	

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

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### QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

QC Batch: 610646

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92681881001, 92681881002, 92681881003, 92681881004

METHOD BLANK: 2971911

Matrix: Water

Associated Lab Samples: 92681881001, 92681881002, 92681881003, 92681881004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0783 ± 0.129 (0.288) C:89% T:NA	pCi/L	09/06/23 10:17	

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

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## QUALIFIERS

Project: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

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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: Plant Hammond Pooled Up- RADs

Pace Project No.: 92681881

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92681881001	HAM-HGWA-1	EPA 9315	610646		
92681881002	HAM-HGWA-2	EPA 9315	610646		
92681881003	HAM-HGWA-3	EPA 9315	610646		
92681881004	HAM-HGWA-43D	EPA 9315	610646		
92681881005	HAM-HGWA-44D	EPA 9315	611645		
92681881001	HAM-HGWA-1	EPA 9320	610549		
92681881002	HAM-HGWA-2	EPA 9320	610549		
92681881003	HAM-HGWA-3	EPA 9320	610549		
92681881004	HAM-HGWA-43D	EPA 9320	610549		
92681881005	HAM-HGWA-44D	EPA 9320	610551		
92681881001	HAM-HGWA-1	Total Radium Calculation	614459		
92681881002	HAM-HGWA-2	Total Radium Calculation	614459		
92681881003	HAM-HGWA-3	Total Radium Calculation	614459		
92681881004	HAM-HGWA-43D	Total Radium Calculation	614459		
92681881005	HAM-HGWA-44D	Total Radium Calculation	614326		

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DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

*G A Power*

Project #:

WO#: 92681881



Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: *8/9/23*  
*COG*

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: *214* Type of Ice:  Wet  Blue  None

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

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

Cooler Temp Corrected (°C): *2.1*

USDA Regulated Soil (  N/A, water sample)

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

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

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

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92681881

PM: BV

Due Date: 08/30/23

CLIENT: 92- GP-HAM

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

pH Adjustment Log for Preserved Samples

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

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

**Section A** Required Client Information: **Section B** Required Project Information: **Section C** Invoice Information:

Company: GA Power Report To: SCS Contacts Attention: Southern Co.

Address: Atlanta, GA Copy To: Geosyntec Contacts

Email To: SCS Contacts Purchase Order No.: Address:

Phone: SCS Contacts Project Name: Plant Hammond Pooled Upgradient Pace Quota: Bonnie Vang

Requested Due Date/TAT: 10 Day Project Number: Pace Project Reference: Manager: Pace Profile #: 10839-1502-376

**REGULATORY AGENCY**

NPDES  GROUND WATER  DRINKING WATER

UST  RCRA  OTHER CCR

Site Location STATE: GA

**Section D** Requested Client Information

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

Valid Matrix Codes  
MATRIX CODE  
DRAINAGE WATER DW  
WATER WWT  
WASTE WATER WW  
PRODUCT P  
SOIL/SOLID S  
OIL OI  
WIRE WI  
AIR AI  
OTHER OT  
TSS TS

ITEM #	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test		Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)
			DATE	TIME											Y	N		
1	HAM-HGWA-1	G	8/8/23	1047	19	7	3	3	3	1	X	X	X	X	X	X	X	N
2	HAM-HGWA-2	G	8/8/23	1608	19	7	3	3	3	1	X	X	X	X	X	X	X	N
3	HAM-HGWA-3	G	8/8/23	1445	19	7	3	3	3	1	X	X	X	X	X	X	X	N
4	HAM-HGWA-43D	G	8/8/23	1105	18	7	3	3	3	1	X	X	X	X	X	X	X	N
5	HAM-HGWA-44D	G	8/8/23	1059	19	7	3	3	3	1	X	X	X	X	X	X	X	N
6																		N
7																		N
8																		N
9																		N
10																		N
11																		N
12																		N

**ADDITIONAL COMMENTS**

RELINQUISHED BY / AFFILIATION: **Thomas Lester / Geosyntec** DATE: **8/9/23** TIME: **0922**

ACCEPTED BY / AFFILIATION: **Richard McDonald (Geo)** DATE: **8/9/23** TIME: **800**

RELINQUISHED BY / AFFILIATION: **Ryan Williams / Pace** DATE: **8/9/23** TIME: **1445**

ACCEPTED BY / AFFILIATION: **Richard McDonald (Geo)** DATE: **8/9/23** TIME: **1445**

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: \_\_\_\_\_

SIGNATURE of SAMPLER: \_\_\_\_\_

DATE Signed (MM/DD/YY): \_\_\_\_\_

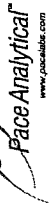
Temp in °C \_\_\_\_\_

Received on Ice (Y/N) \_\_\_\_\_

Custody Sealed Cooler (Y/N) \_\_\_\_\_

Samples Intact (Y/N) \_\_\_\_\_

# Quality Control Sample Performance Assessment



Analyst **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-228  
Analyst: JJS1  
Date: 8/26/2023  
Worklist: 74945  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2971498
MB concentration:	0.453
M/B 2 Sigma CSU:	0.248
MB MDC:	0.409
MB Numerical Performance Indicator:	3.58
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment		LCS D (Y or N)?	Y
Count Date:	8/31/2023	LCS D74945	8/31/2023
Spike I.D.:	23-043		23-043
Decay Corrected Spike Concentration (pCi/mL):	40.012		40.012
Volume Used (mL):	0.10		0.10
Aliquot Volume (L, g, F):	0.818		0.818
Target Conc. (pCi/L, g, F):	4.890		4.890
Uncertainty (Calculated):	0.240		0.240
Result (pCi/L, g, F):	3.106		4.025
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.732		-1.84
Numerical Performance Indicator:	-4.54		82.32%
Percent Recovery:	63.51%		N/A
Status vs Numerical Indicator:	N/A		Pass
Upper % Recovery Limits:	135%		135%
Lower % Recovery Limits:	60%		60%

Duplicate Sample Assessment	
Sample I.D.:	LCS74945
Duplicate Sample I.D.:	LCS D74945
Sample Result (pCi/L, g, F):	3.106
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.732
Sample Duplicate Result (pCi/L, g, F):	4.025
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.889
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	-1.565
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	25.80%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

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

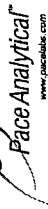
Comments:  
\*The method blank result is below the reporting limit for this analysis and is acceptable.

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	
Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	
Matrix Spike 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:	

Handwritten: 12/15/23

# Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228  
Analyst: ZPC  
Date: 8/29/2023  
Worklist: 74946  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2971504
MB concentration:	0.028
M/B 2 Sigma CSU:	0.177
MB MDC:	0.418
MB Numerical Performance Indicator:	0.31
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS74946	Y
Count Date:	8/31/2023	8/31/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	40.010	40.010
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.816	0.815
Target Conc. (pCi/L, g, F):	4.905	4.908
Uncertainty (Calculated):	0.240	0.240
Result (pCi/L, g, F):	4.584	4.915
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.002	1.070
Numerical Performance Indicator:	-0.59	0.01
Percent Recovery:	93.66%	100.15%
Status vs Numerical Indicator:	N/A	N/A
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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

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

Comments:

*Jasper*

VAM 9/5/23



# Quality Control Sample Performance Assessment

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-226  
Analyst: SLC  
Date: 9/21/2023  
Worklist: 74954  
Matrix: WT

Method Blank Assessment	
MB Sample ID	2971911
MB concentration:	0.078
MB 2 Sigma CSU:	0.129
MB MDC:	0.288
MB Numerical Performance Indicator:	1.19
MB Status vs Numerical Indicator:	Pass
MB Status vs MDC:	N/A

Laboratory Control Sample Assessment		
Count Date:	LCS# (Y or N)?	Y
9/6/2023	LCS74954	LCS#74954
Decay Corrected Spike Concentration (pCi/mL):	19.033	19.033
Volume Used (mL):	24.014	24.014
Alliquot Volume (L, g, F):	0.10	0.503
Target Conc. (pCi/L, g, F):	4.775	4.753
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.365	5.002
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.001	0.935
Numerical Performance Indicator:	1.15	0.52
Percent Recovery:	112.37%	105.23%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS#74954	92681881004
Duplicate Sample I.D.	LCS#74954	92681881004DUP
Sample Result (pCi/L, g, F):	5.365	0.377
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.001	0.213
Sample Duplicate Result (pCi/L, g, F):	5.002	0.203
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.935	0.178
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	0.520	1.231
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.56%	60.17%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

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

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.:	Sample MS I.D.	Sample MSD I.D.
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
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:

MM 9/1/23





# Quality Control Sample Performance Assessment

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-226  
 Analyst: SLC  
 Date: 9/21/2023  
 Worklist: 75040  
 Matrix: WT

Method Blank Assessment	
MB Sample ID	2977130
MB concentration:	0.086
MB 2 Sigma CSU:	0.097
MB MDC:	0.188
MB Numerical Performance Indicator:	1.72
MB Status vs Numerical Indicator:	Pass
MB Status vs MDC:	N/A

Laboratory Control Sample Assessment		
	LCS0 (Y or N)?	Y
	LCS75040	LCS075040
Count Date:	9/8/2023	9/8/2023
Spike ID:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.013	24.013
Volume Used (mL):	0.10	0.10
Alliquot Volume (L, g, F):	0.503	0.503
Target Conc. (pCi/L, g, F):	4.779	4.771
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.033	5.858
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.911	1.031
Numerical Performance Indicator:	0.55	2.06
Percent Recovery:	105.33%	122.77%
Status vs Numerical Indicator:	Pass	Warning
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS75040	92681890014
Duplicate Sample I.D.:	LCS075040	92681890014DUP
Sample Result (pCi/L, g, F):	5.033	0.081
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.911	0.132
Sample Duplicate Result (pCi/L, g, F):	5.858	0.046
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.031	0.115
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-1.175	0.388
Duplicate Percent Recoveries) Duplicate RPD:	15.30%	54.79%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

Sample Matrix Spike Control Assessment		
Sample Collection Date:	MS/MSD 1	MS/MSD 2
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 Alliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Alliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.:	MS/MSD 1	MS/MSD 2
Sample MS I.D.:		
Sample MSD I.D.:		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
Duplicate 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:

*M 9/8/23*

*W 9/18/23*

# SURFACE WATER (AUGUST 2023)



August 16, 2023

Kelley Sharpe  
ARCADIS - Atlanta  
2839 Paces Ferry Rd  
STE 900  
Atlanta, GA 30339

RE: Project: Plant Hammond-CCR Ash Pond  
Pace Project No.: 92681229

Dear Kelley Sharpe:

Enclosed are the analytical results for sample(s) received by the laboratory on August 08, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Maiya Parks  
maiya.parks@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Jordan Gamble, ARCADIS - Atlanta  
Ben Hodges, Georgia Power-CCR  
Warren Johnson, ARCADIS - Atlanta  
Allison Keefer, Southern Company  
Laura Midkiff, Georgia Power  
Tina Sullivan, ERM



## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.



## CERTIFICATIONS

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

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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

Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Plant Hammond-CCR Ash Pond  
Pace Project No.: 92681229

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92681229001	HAM-AP2-UP	Water	08/07/23 11:44	08/08/23 09:51
92681229002	HAM-AP2-MID	Water	08/07/23 11:27	08/08/23 09:51
92681229003	HAM-AP2-DOWN	Water	08/07/23 10:37	08/08/23 09:51
92681229004	HAM-H+0.25	Water	08/07/23 10:45	08/08/23 09:51
92681229005	HAM-H+0.35	Water	08/07/23 10:42	08/08/23 09:51
92681229006	HAM-H+0.75	Water	08/07/23 10:33	08/08/23 09:51

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92681229001	HAM-AP2-UP	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	3	PASI-A
		EPA 9056A	CDC	3	PASI-A
92681229002	HAM-AP2-MID	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	3	PASI-A
		EPA 9056A	CDC	3	PASI-A
92681229003	HAM-AP2-DOWN	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	3	PASI-A
		EPA 9056A	CDC	3	PASI-A
92681229004	HAM-H+0.25	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	3	PASI-A
		EPA 9056A	CDC	3	PASI-A
92681229005	HAM-H+0.35	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	3	PASI-A
		EPA 9056A	CDC	3	PASI-A
92681229006	HAM-H+0.75	EPA 6010D	MS	5	PASI-GA
		EPA 6020B	CW1	1	PASI-GA
		SM 2540C-2015	DL1	1	PASI-GA
		SM 2320B-2011	SMS	3	PASI-A
		EPA 9056A	CDC	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.: 92681229

Sample: HAM-AP2-UP	Lab ID: 92681229001	Collected: 08/07/23 11:44	Received: 08/08/23 09:51	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								
Boron	ND	mg/L	0.040	1	08/09/23 11:26	08/10/23 04:34	7440-42-8	
Potassium	0.77	mg/L	0.50	1	08/09/23 11:26	08/10/23 04:34	7440-09-7	
Sodium	1.7	mg/L	1.0	1	08/09/23 11:26	08/10/23 04:34	7440-23-5	
Calcium	47.7	mg/L	1.0	1	08/09/23 11:26	08/10/23 04:34	7440-70-2	
Magnesium	5.2	mg/L	0.050	1	08/09/23 11:26	08/10/23 04:34	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/09/23 10:15	08/10/23 15:38	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	156	mg/L	25.0	1		08/08/23 16:31		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	130	mg/L	5.0	1		08/09/23 19:27		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		08/09/23 19:27		
Alkalinity, Total as CaCO3	130	mg/L	5.0	1		08/09/23 19:27		
<b>9056 IC anions 28 Days</b>								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	1.4	mg/L	1.0	1		08/09/23 16:54	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/09/23 16:54	16984-48-8	M1
Sulfate	5.2	mg/L	1.0	1		08/09/23 16:54	14808-79-8	

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

Sample: HAM-AP2-MID	Lab ID: 92681229002	Collected: 08/07/23 11:27	Received: 08/08/23 09:51	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								
Boron	ND	mg/L	0.040	1	08/09/23 11:26	08/10/23 04:39	7440-42-8	
Potassium	0.64	mg/L	0.50	1	08/09/23 11:26	08/10/23 04:39	7440-09-7	
Sodium	1.8	mg/L	1.0	1	08/09/23 11:26	08/10/23 04:39	7440-23-5	
Calcium	49.8	mg/L	1.0	1	08/09/23 11:26	08/10/23 04:39	7440-70-2	
Magnesium	5.6	mg/L	0.050	1	08/09/23 11:26	08/10/23 04:39	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/09/23 10:15	08/10/23 15:41	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	147	mg/L	25.0	1		08/08/23 16:31		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	131	mg/L	5.0	1		08/09/23 19:36		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		08/09/23 19:36		
Alkalinity, Total as CaCO3	131	mg/L	5.0	1		08/09/23 19:36		
<b>9056 IC anions 28 Days</b>								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	1.6	mg/L	1.0	1		08/09/23 17:41	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/09/23 17:41	16984-48-8	
Sulfate	8.7	mg/L	1.0	1		08/09/23 17:41	14808-79-8	

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

Sample: HAM-AP2-DOWN	Lab ID: 92681229003	Collected: 08/07/23 10:37	Received: 08/08/23 09:51	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								
Boron	ND	mg/L	0.040	1	08/09/23 11:26	08/10/23 04:44	7440-42-8	
Potassium	2.1	mg/L	0.50	1	08/09/23 11:26	08/10/23 04:44	7440-09-7	
Sodium	11.3	mg/L	1.0	1	08/09/23 11:26	08/10/23 04:44	7440-23-5	
Calcium	17.9	mg/L	1.0	1	08/09/23 11:26	08/10/23 04:44	7440-70-2	
Magnesium	4.6	mg/L	0.050	1	08/09/23 11:26	08/10/23 04:44	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/09/23 10:15	08/10/23 15:56	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	105	mg/L	25.0	1		08/10/23 11:49		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	60.2	mg/L	5.0	1		08/09/23 19:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		08/09/23 19:46		
Alkalinity, Total as CaCO3	60.2	mg/L	5.0	1		08/09/23 19:46		
<b>9056 IC anions 28 Days</b>								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	6.3	mg/L	1.0	1		08/09/23 18:27	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/09/23 18:27	16984-48-8	
Sulfate	18.0	mg/L	1.0	1		08/09/23 18:27	14808-79-8	

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

Sample: HAM-H+0.25	Lab ID: 92681229004	Collected: 08/07/23 10:45	Received: 08/08/23 09:51	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								
Boron	ND	mg/L	0.040	1	08/09/23 11:26	08/10/23 04:49	7440-42-8	
Potassium	1.9	mg/L	0.50	1	08/09/23 11:26	08/10/23 04:49	7440-09-7	
Sodium	7.0	mg/L	1.0	1	08/09/23 11:26	08/10/23 04:49	7440-23-5	
Calcium	15.7	mg/L	1.0	1	08/09/23 11:26	08/10/23 04:49	7440-70-2	
Magnesium	4.2	mg/L	0.050	1	08/09/23 11:26	08/10/23 04:49	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/09/23 10:15	08/10/23 16:00	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	79.0	mg/L	25.0	1		08/10/23 11:49		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	58.5	mg/L	5.0	1		08/09/23 19:53		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		08/09/23 19:53		
Alkalinity, Total as CaCO3	58.5	mg/L	5.0	1		08/09/23 19:53		
<b>9056 IC anions 28 Days</b>								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	5.7	mg/L	1.0	1		08/09/23 18:43	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/09/23 18:43	16984-48-8	
Sulfate	10.3	mg/L	1.0	1		08/09/23 18:43	14808-79-8	

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

Sample: HAM-H+0.35	Lab ID: 92681229005	Collected: 08/07/23 10:42	Received: 08/08/23 09:51	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								
Boron	ND	mg/L	0.040	1	08/09/23 11:26	08/10/23 05:03	7440-42-8	
Potassium	1.8	mg/L	0.50	1	08/09/23 11:26	08/10/23 05:03	7440-09-7	
Sodium	8.8	mg/L	1.0	1	08/09/23 11:26	08/10/23 05:03	7440-23-5	
Calcium	16.3	mg/L	1.0	1	08/09/23 11:26	08/10/23 05:03	7440-70-2	
Magnesium	4.3	mg/L	0.050	1	08/09/23 11:26	08/10/23 05:03	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/09/23 10:15	08/10/23 16:04	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	89.0	mg/L	25.0	1		08/10/23 11:49		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	57.2	mg/L	5.0	1		08/09/23 20:00		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		08/09/23 20:00		
Alkalinity, Total as CaCO3	57.2	mg/L	5.0	1		08/09/23 20:00		
<b>9056 IC anions 28 Days</b>								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	5.8	mg/L	1.0	1		08/09/23 18:58	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/09/23 18:58	16984-48-8	
Sulfate	14.7	mg/L	1.0	1		08/09/23 18:58	14808-79-8	

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### ANALYTICAL RESULTS

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

Sample: HAM-H+0.75	Lab ID: 92681229006	Collected: 08/07/23 10:33	Received: 08/08/23 09:51	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								
Boron	ND	mg/L	0.040	1	08/09/23 11:26	08/10/23 05:08	7440-42-8	
Potassium	2.3	mg/L	0.50	1	08/09/23 11:26	08/10/23 05:08	7440-09-7	
Sodium	8.8	mg/L	1.0	1	08/09/23 11:26	08/10/23 05:08	7440-23-5	
Calcium	16.8	mg/L	1.0	1	08/09/23 11:26	08/10/23 05:08	7440-70-2	
Magnesium	4.5	mg/L	0.050	1	08/09/23 11:26	08/10/23 05:08	7439-95-4	
<b>6020 MET ICPMS</b>								
Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Pace Analytical Services - Peachtree Corners, GA								
Cobalt	ND	mg/L	0.0050	1	08/09/23 10:15	08/10/23 16:19	7440-48-4	
<b>2540C Total Dissolved Solids</b>								
Analytical Method: SM 2540C-2015								
Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	91.0	mg/L	25.0	1		08/10/23 11:50		
<b>2320B Alkalinity</b>								
Analytical Method: SM 2320B-2011								
Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	58.9	mg/L	5.0	1		08/09/23 20:06		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		08/09/23 20:06		
Alkalinity, Total as CaCO3	58.9	mg/L	5.0	1		08/09/23 20:06		
<b>9056 IC anions 28 Days</b>								
Analytical Method: EPA 9056A								
Pace Analytical Services - Asheville								
Chloride	5.9	mg/L	1.0	1		08/09/23 19:14	16887-00-6	
Fluoride	ND	mg/L	0.10	1		08/09/23 19:14	16984-48-8	
Sulfate	13.7	mg/L	1.0	1		08/09/23 19:14	14808-79-8	

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

QC Batch:	792372	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92681229001, 92681229002, 92681229003, 92681229004, 92681229005, 92681229006

METHOD BLANK: 4105953 Matrix: Water  
 Associated Lab Samples: 92681229001, 92681229002, 92681229003, 92681229004, 92681229005, 92681229006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	08/11/23 13:47	
Calcium	mg/L	ND	1.0	08/11/23 13:47	
Magnesium	mg/L	ND	0.050	08/11/23 13:47	
Potassium	mg/L	ND	0.50	08/11/23 13:47	
Sodium	mg/L	ND	1.0	08/11/23 13:47	

LABORATORY CONTROL SAMPLE: 4105954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.89	89	80-120	
Calcium	mg/L	1	.96J	96	80-120	
Magnesium	mg/L	1	0.96	96	80-120	
Potassium	mg/L	1	1.2	115	80-120	
Sodium	mg/L	1	.95J	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4105955 4105956

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92680717001 Result	Spike Conc.	Spike Conc.	Result						
Boron	mg/L	0.79	1	1	1.8	1.8	99	98	75-125	1	20
Calcium	mg/L	11.8	1	1	13.1	12.7	122	89	75-125	3	20
Magnesium	mg/L	11.6	1	1	13.0	12.7	131	104	75-125	2	20 M1
Potassium	mg/L	9.7	1	1	10.7	10.1	106	39	75-125	6	20 M1
Sodium	mg/L	15.0	1	1	16.4	15.8	133	79	75-125	3	20 M1

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

QC Batch:	792350	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92681229001, 92681229002, 92681229003, 92681229004, 92681229005, 92681229006

METHOD BLANK: 4105911 Matrix: Water  
 Associated Lab Samples: 92681229001, 92681229002, 92681229003, 92681229004, 92681229005, 92681229006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cobalt	mg/L	ND	0.0050	08/10/23 15:30	

LABORATORY CONTROL SAMPLE: 4105912

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4105913 4105914

Parameter	Units	92681229002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	

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### QUALITY CONTROL DATA

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

QC Batch:	792102	Analysis Method:	SM 2540C-2015
QC Batch Method:	SM 2540C-2015	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	92681229001, 92681229002	Laboratory:	Pace Analytical Services - Peachtree Corners, GA

METHOD BLANK: 4104415 Matrix: Water  
 Associated Lab Samples: 92681229001, 92681229002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	08/08/23 16:22	

LABORATORY CONTROL SAMPLE: 4104416

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	444	111	80-120	

SAMPLE DUPLICATE: 4104417

Parameter	Units	92680804006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	188	197	5	10	

SAMPLE DUPLICATE: 4104418

Parameter	Units	92681230001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1150	1140	1	10	

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

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QC Batch:	792695	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: 92681229003, 92681229004, 92681229005, 92681229006

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METHOD BLANK: 4107685 Matrix: Water  
 Associated Lab Samples: 92681229003, 92681229004, 92681229005, 92681229006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	08/10/23 11:47	

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LABORATORY CONTROL SAMPLE: 4107686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	434	108	80-120	

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SAMPLE DUPLICATE: 4107687

Parameter	Units	92681784001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1850	1860	1	10	

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SAMPLE DUPLICATE: 4107688

Parameter	Units	92681229006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	91.0	92.0	1	10	

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

QC Batch: 792488 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92681229001, 92681229002, 92681229003, 92681229004, 92681229005, 92681229006

METHOD BLANK: 4106824 Matrix: Water  
 Associated Lab Samples: 92681229001, 92681229002, 92681229003, 92681229004, 92681229005, 92681229006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	08/09/23 19:09	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	08/09/23 19:09	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	08/09/23 19:09	

LABORATORY CONTROL SAMPLE: 4106825

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.0	102	80-120	

LABORATORY CONTROL SAMPLE: 4106826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	53.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4106827 4106828

Parameter	Units	92680804003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	56.2	55.5	104	103	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4106829 4106830

Parameter	Units	92680804004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	193	50	50	253	262	122	140	80-120	4	25 M1	

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

**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

QC Batch: 792320 Analysis Method: EPA 9056A  
 QC Batch Method: EPA 9056A Analysis Description: 9056 IC anions 28 Days  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92681229001, 92681229002, 92681229003, 92681229004, 92681229005, 92681229006

METHOD BLANK: 4105846 Matrix: Water  
 Associated Lab Samples: 92681229001, 92681229002, 92681229003, 92681229004, 92681229005, 92681229006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	08/09/23 16:39	
Fluoride	mg/L	ND	0.10	08/09/23 16:39	
Sulfate	mg/L	ND	1.0	08/09/23 16:39	

LABORATORY CONTROL SAMPLE: 4105847

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.4	97	90-110	
Fluoride	mg/L	2.5	2.4	98	90-110	
Sulfate	mg/L	50	48.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4105848 4105849

Parameter	Units	92681229001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.4	50	50	48.3	48.5	94	94	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.3	2.3	87	88	90-110	1	10	M1
Sulfate	mg/L	5.2	50	50	52.4	52.6	94	95	90-110	0	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.: 92681229

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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: Plant Hammond-CCR Ash Pond

Pace Project No.: 92681229

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92681229001	HAM-AP2-UP	EPA 3010A	792372	EPA 6010D	792458
92681229002	HAM-AP2-MID	EPA 3010A	792372	EPA 6010D	792458
92681229003	HAM-AP2-DOWN	EPA 3010A	792372	EPA 6010D	792458
92681229004	HAM-H+0.25	EPA 3010A	792372	EPA 6010D	792458
92681229005	HAM-H+0.35	EPA 3010A	792372	EPA 6010D	792458
92681229006	HAM-H+0.75	EPA 3010A	792372	EPA 6010D	792458
92681229001	HAM-AP2-UP	EPA 3005A	792350	EPA 6020B	792479
92681229002	HAM-AP2-MID	EPA 3005A	792350	EPA 6020B	792479
92681229003	HAM-AP2-DOWN	EPA 3005A	792350	EPA 6020B	792479
92681229004	HAM-H+0.25	EPA 3005A	792350	EPA 6020B	792479
92681229005	HAM-H+0.35	EPA 3005A	792350	EPA 6020B	792479
92681229006	HAM-H+0.75	EPA 3005A	792350	EPA 6020B	792479
92681229001	HAM-AP2-UP	SM 2540C-2015	792102		
92681229002	HAM-AP2-MID	SM 2540C-2015	792102		
92681229003	HAM-AP2-DOWN	SM 2540C-2015	792695		
92681229004	HAM-H+0.25	SM 2540C-2015	792695		
92681229005	HAM-H+0.35	SM 2540C-2015	792695		
92681229006	HAM-H+0.75	SM 2540C-2015	792695		
92681229001	HAM-AP2-UP	SM 2320B-2011	792488		
92681229002	HAM-AP2-MID	SM 2320B-2011	792488		
92681229003	HAM-AP2-DOWN	SM 2320B-2011	792488		
92681229004	HAM-H+0.25	SM 2320B-2011	792488		
92681229005	HAM-H+0.35	SM 2320B-2011	792488		
92681229006	HAM-H+0.75	SM 2320B-2011	792488		
92681229001	HAM-AP2-UP	EPA 9056A	792320		
92681229002	HAM-AP2-MID	EPA 9056A	792320		
92681229003	HAM-AP2-DOWN	EPA 9056A	792320		
92681229004	HAM-H+0.25	EPA 9056A	792320		
92681229005	HAM-H+0.35	EPA 9056A	792320		
92681229006	HAM-H+0.75	EPA 9056A	792320		

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information: Company: ARCADIS - Atlanta Address: 2839 Pace Ferry Rd Atlanta, GA 30339

Section B Required Project Information: Report To: Kelly Shupe, Warren Johnson Copy To: Ben Hodges, Joli Abraham Purchase Order #: GPC11066180 Project Name: Plant Hammond/CRA-sh Pond Closure Project #: [blank]

Section C Invoice Information: Invoiced By: Kelly Shupe, Warren Johnson Company Name: ARCADIS Address: [blank] Pace Quote: [blank] Pace Project Manager: malya.parker@arcadis.com Pace Profile #: 12590

Regulatory Agency: GA State / Location: GA

Phone: (770)394-6564 Fax: [blank] Email: kelly\_shupe@arcadis.com

Requested Due Date: 5 Day TAT

Requested Analysis Filtered (Y/N): [blank]

Page: 1 of 1

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		DATE	TIME	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
			START	END								
1	HAM-AP2 Up	WGG	8/7/13	1144								
2	HAM-AP2 MID	WGG	8/7/13	1127								
3	HAM-AP2 Down	WGG	8/7/13	1057								
4	HAM-H+0.25	WGG	8/7/13	1045								
5	HAM-H+0.35	WGG	8/7/13	1042								
6	HAM-H+0.75	WGG	8/7/13	1035								
7												
8												
9												
10												
11												
12												

ADDITIONAL COMMENTS	NEE INCURRED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	PL/Arceus	8/8/13	0950	AKG	8-8	08X	

WO#: 92681229

92681229

SAMPLER NAME AND SIGNATURE: PRINT Name of SAMPLER: SIGNATURE of SAMPLER: DATE signed: 8-8-13

TEMP in C: Received on ice (Y/N): Custody Sealed Cooler (Y/N): Samples Intact (Y/N)



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

ARCADIS

Project

WO#: 92681229

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

PM: IP Due Date: 08/15/23 CLIENT: GA-ArcadAtl

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 0-0-23 JAK

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID: 083

Type of Ice:  Wet  Blue  None

Cooler Temp: 6.8 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): 6.8

USDA Regulated Soil (  N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92681229

PM: MP

Due Date: 08/15/23

CLIENT: GA-ArcadAtI

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

**pH Adjustment Log for Preserved Samples**

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

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

# VALIDATION REPORTS



January 2023

## Memorandum

Date: May 24, 2023  
To: Whitney Law  
From: Amani Royce  
CC: K. Henderson  
Subject: **Stage 2A Data Validation - Level II Data Deliverable – Pace Analytical Services, LLC Project Number 92648446**

**SITE: Plant Hammond AP-1/ AP-2/ AP-3 (Pooled Upgradient)**

### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of five aqueous samples, collected 23 and 24 January 2023, 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 USEPA Methods 3005A/6020B
- Mercury by USEPA 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 USEPA Method 300.0

### EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data are usable for supporting project objectives.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);

- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006); and
- American National Standard, Verification and Validation of Radiological Data for use in Waste Management and Environmental Remediation, February 15, 2012 (ANSI/ANS-41.5-2012).

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

Laboratory ID	Client ID
92648446001	HAM-HGWA-3
92648446002	HAM-HGWA-2
92648446003	HAM-HGWA-43D

Laboratory ID	Client ID
92648446004	HAM-HGWA-44D
92648446005	HAM-HGWA-1

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

The sample collection time was not listed on the chain of custody (COC) for sample HAM-HGWA-1. The laboratory assigned collection times of 9:35.

The laboratory report revised on 5 May 2023 was used for data validation.

The results flagged as “ND” in the electronic data deliverable (EDD) were changed to U.

The field pH data included in the laboratory report were not validated.

## 1.0 METALS

The samples were analyzed for metals by USEPA methods 3010A/6010D and USEPA 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 supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

### **1.2 Holding 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). Four method blanks were reported (batches 752651, 752956, 752599, and 753097). 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 calcium by US EPA method, using sample HAM-HGWA-3. The relative percent difference (RPD) result was within the laboratory specified acceptance criteria, and the recoveries of calcium in the MS/MSD pair using sample HAM-HGWA-3 were low and outside of the laboratory specified acceptance criteria. Since the calcium concentration in sample HAM-HGWA-3 was greater than four times the spike concentration, no qualifications were applied to the data.

One batch MS/MSD pair was reported for calcium. Since this was batch QC, the result does not affect the samples in this data set and qualifications were not applied to the data.

One sample set specific MS/MSD pair was reported for metals by US EPA method 6020B, using sample HAM-HGWA-3. The recovery and RPD results were within the laboratory specified acceptance criteria.

One batch MS/MSD pair was reported for metals by US EPA method 6020B. Since this was batch QC, the result does not affect the samples in this data set and qualifications were not applied to the data.

### **1.5 Laboratory Control Sample (LCS)**

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Four LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

### **1.6 Equipment Blank**

An equipment blank was not collected with the sample set.

### **1.7 Field Blank**

A field blank was not collected with the sample set.

### **1.8 Field Duplicate**

A field duplicate sample was not collected with the sample set.

### **1.9 Sensitivity**

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

### **1.10 Electronic Data Deliverable Review**

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

## **2.0 MERCURY**

The samples were analyzed for mercury by USEPA 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 supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

## **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). One method blank was reported (batch 752854). Mercury was not detected in the method blank above the MDL.

## **2.4 Matrix Spike/Matrix Spike Duplicate**

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples).

One batch MS/MSD pair was reported. Since this was batch QC, the result does 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). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

## **2.6 Equipment Blank**

An equipment blank was not collected with the sample set.

## **2.7 Field Blank**

A field blank was not collected with the sample set.

## **2.8 Field Duplicate**

A field duplicate sample was not collected with the sample set.

## **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 USEPA 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 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 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). One method blank was reported for TDS (batch 752254) and three method blanks were reported for the anions (batches 751618, 752456, and 752690). 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).

Six batch MS/MSD pairs were 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). One LCS was reported for TDS and three LCSs were reported for the anions. The recovery results were within the laboratory specified acceptance criteria.

### **3.6 Laboratory Duplicate**

Two batch laboratory duplicates were 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**

An equipment blank was not collected with the sample set.



### **3.8 Field Blank**

A field blank was not collected with the sample set.

### **3.9 Field Duplicate**

A field duplicate sample was not collected with the sample set.

### **3.10 Sensitivity**

The samples were reported to the MDLs for the anions and the reporting limit (RL) for TDS. 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.

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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: June 13, 2023  
To: Whitney Law  
From: Amani Royce  
CC: K. Henderson  
Subject: **Stage 2A Data Validation - Level II Data Deliverable – Pace Analytical Services, LLC Project Number 92648448**

**SITE: Plant Hammond AP-1/ AP-2/ AP-3 (Pooled Upgradient RADS)**

### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of five aqueous samples, collected 23 and 24 January 2023, as part of the Plant Hammond AP on-site sampling event.

The samples were analyzed at Pace Analytical Services, LLC, Greensburg, Pennsylvania, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 9315
- Radium-228 by US EPA Method 9320
- Total Radium by Calculation

### EXECUTIVE SUMMARY

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.

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
92648448001	HAM-HGWA-3
92648448002	HAM-HGWA-2
92648448003	HAM-HGWA-43D

Laboratory ID	Client ID
92648448004	HAM-HGWA-44D
92648448005	HAM-HGWA-1

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

The sample collection time was not listed on the COC for sample HAM-HGWA-1. The laboratory assigned collection time of 9:35.

## 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-228 data (batch 567029). One method blank was reported for the radium-226 data (batch 567003). 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 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 batch laboratory duplicate was reported for radium-226 and one batch laboratory duplicate was reported for radium-228. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

## **1.7 Tracers and Carriers**

Carriers were reported for the radium-226 and radium-228 analyses and a tracer was reported for the radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

## **1.8 Equipment Blank**

An equipment blank was not collected with the sample set.

## **1.9 Field Blank**

A field blank was not collected with the sample set.

**1.10 Field Duplicate**

A field duplicate was not collected with the sample set.

**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

## Memorandum

Date: June 2, 2023  
To: Whitney Law  
From: Amani Royce  
CC: K. Henderson  
Subject: **Stage 2A Data Validation - Level II Data Deliverable – Pace Analytical Services, LLC Project Number 92648451**

**SITE: Plant Hammond AP-2**

### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of eighteen aqueous samples, one field duplicate, one field blank, and one equipment blank, collected 23, 27, and 30 January 2023 and 1 February 2023, 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 USEPA Methods 3005A/6020B
- Mercury by USEPA Method 7470A
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C

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

- Anions (Chloride, Fluoride and Sulfate) by USEPA Method 300.0
- Alkalinity by SM Method 2320B
- Sulfide by SM Method 4500S2D

### EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for supporting project objectives. The qualified data should be used within the limitations of the qualifications. If there are results with two or more different qualifications due to multiple QC failures, the final qualification is reconciled in the electronic data deliverable (EDD) with qualifications.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006); and
- American National Standard, Verification and Validation of Radiological Data for use in Waste Management and Environmental Remediation, February 15, 2012 (ANSI/ANS-41.5-2012).

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

Laboratory ID	Client ID
92648451001	HAM-HGWA-4
92648451002	HAM-HGWA-42D
92648451003	HAM-HGWC-17
92648451004	HAM-MW-22
92648451005	HAM-MW-34D
92648451006	HAM-MW-37D
92648451007	HAM-HGWC-14
92648451008	HAM-HGWC-15
92648451009	HAM-HGWC-16
92648451010	HAM-HGWC-18
92648451011	HAM-MW-23D

Laboratory ID	Client ID
92648451012	HAM-MW-35
92648451013	HAM-MW-51
92648451014	HAM-AP-2-EB-02
92648451015	HAM-AP-2-FB-02
92648451016	HAM-AP-2-FD-02
92648451017	HAM-MW-52
92649378001	HAM-HGWA-5
92649378002	HAM-HGWA-6
92649378003	HAM-MW-21D
92649378004	HAM-MW-33

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

Field duplicate sample HAM-AP-2-FD-02 was not listed on the chain of custody (COC). The laboratory assigned the collection date and time of 1 February 2023 0:00.

The final receipt signature, association, date, and time were not recorded on the COC for sample HAM-MW-52.

Calcium for sample HAM-MW-21D was reported by USEPA methods 3005A/6020B due to insufficient sample volume for additional analysis by USEPA methods 3010A/6010D.

The laboratory report revised on 27 April 2023 was used for data validation.

The results flagged as “ND” in the EDD were changed to U.

The field pH data included in the laboratory report were not validated.

## 1.0 METALS

The samples were analyzed for metals by USEPA methods 3010A/6010D and USEPA 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 supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

The calcium concentration in sample HAM-MW-21D was E flagged by the laboratory to indicate the concentration exceeded the calibration range. Therefore, based on professional and technical judgment, the calcium concentration in sample HAM-MW-21D was J qualified as estimated.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HAM-MW-21D	Calcium	281	E	281	J	10

mg/L-milligrams per liter

E - Laboratory flag indicating the value is outside the calibration range.

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

\*\*Reason codes are defined in Attachment 2 at the end of this report.

## **1.2 Holding Time**

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

## **1.3 Method Blank**

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Seven method blanks were reported (batches 752232, 762460, 755531, 752226, 753737, 756320, and 755827). 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).

Two sample set specific MS/MSD pairs were reported for calcium by US EPA method 6010D, using samples HAM-HGWC-17 and HAM-MW-33. The relative percent difference (RPD) result was within the laboratory specified acceptance criteria, and the recoveries of calcium in the MS/MSD pair using samples HAM-HGWC-17 and HAM-MW-33 were high and outside of the laboratory specified acceptance criteria. Since the calcium concentrations in samples HAM-HGWC-17 and HAM-MW-33 were greater than four times the spike concentrations, no qualifications were applied to the data.

Two batch MS/MSD pairs were reported for calcium. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

Three sample set specific MS/MSD pairs were reported for metals by US EPA method 6020B, using samples HAM-HGWA-4, HAM-MW-22, and HAM-HGWC-14. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of boron in the MS/MSD pair using sample HAM-HGWC-14 were low and outside of the laboratory specified acceptance criteria. Since the boron concentration in sample HAM-HGWC-14 was greater than four times the spike concentrations, no qualifications were applied to the data.

One batch MS/MSD pair was reported for metals by US EPA method 6020B. Since this was a batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

### **1.5 Laboratory Control Sample (LCS)**

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Seven 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, HAM-AP-2-EB-02. Metals were not detected in the equipment blank above the MDLs.

### **1.7 Field Blank**

One field blank was collected with the sample set, HAM-AP-2-FB-02. 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, HAM-AP-2-FD-02. Acceptable precision ( $RPD \leq 30\%$ ) was demonstrated between the field duplicate and the original sample, HAM-MW-23D.

### **1.9 Sensitivity**

The samples were reported to the MDLs. Elevated non-detect results were reported due to dilutions analyzed.

### **1.10 Electronic Data Deliverable Review**

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

## **2.0 MERCURY**

The samples were analyzed for mercury by USEPA 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 supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

## **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). Three method blanks were reported (batches 752854, 754353, and 754637). 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 set specific MS/MSD pairs were reported, using samples HAM-HGWA-42D and HAM-HGWC-17. The recovery and RPD results were within the laboratory specified acceptance criteria.

One batch MS/MSD pair was reported. Since this was a 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, HAM-AP-2-EB-02. Mercury was not detected in the equipment blank above the MDL.

## **2.7 Field Blank**

One field blank was collected with the sample set, HAM-AP-2-FB-02. Mercury was not detected in the field blank above the MDL.

## **2.8 Field Duplicate**

One field duplicate sample was collected with the sample set, HAM-AP-2-FD-02. Acceptable precision ( $RPD \leq 30\%$ ) was demonstrated between the field duplicate and the original sample, HAM-MW-23D.

## **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 SM 2540C, anions by USEPA method 300.0, alkalinity by SM Method 2320, and sulfide by SM Method 4500S2D.

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 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 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 time for the alkalinity analysis of a water sample is 14 days from sample collection to analysis. The holding time for the sulfide 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). Four method blanks were reported for TDS (batches 752254, 753439, 753440, and 754118), four method blanks were reported for the anions (batches 751618, 753396, 753665, and 754257), one method blank was reported for the alkalinity (batch 754305), and one method blank was reported for the sulfide (batch 754464). The wet chemistry parameters were not detected in the method blanks above the MDLs.

### **3.4 Matrix Spike/Matrix Spike Duplicate**

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples).

Two sample set specific MS/MSD pairs were reported for anions, using samples HAM-MW-33 and HAM-MW-35. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of chloride and sulfate in the MS/MSD pair using sample HAM-MW-33 were low and outside of the laboratory specified acceptance criteria. Since the sulfate concentration in sample HAM-MW-33 was greater than four times the spike concentration, no qualifications were applied to the sulfate data. However, the chloride concentration in sample HAM-MW-33 was J-qualified as estimated with low bias.

One or both the recoveries of chloride and sulfate in the MS/MSD pair using sample HAM-MW-35 were low and the recovery of fluoride was high and outside of the laboratory specified acceptance criteria. Since the sulfate concentration in sample HAM-MW-35 was greater than four times the spike concentration, no qualifications were applied to the sulfate data. However, the chloride concentration in sample HAM-MW-35 was J- qualified as estimated with low bias and the fluoride concentration in sample HAM-MW-35 was J+ qualified as estimated with high bias.

Six batch MS/MSD pairs were 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.

Two batch MS/MSD pairs were reported for alkalinity. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

Two batch MS/MSD pairs were reported for sulfide. 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	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-MW-33	Chloride	83.4	M1	83.4	J-	4
HAM-MW-35	Chloride	189	M1	189	J-	4
HAM-MW-35	Fluoride	0.10	M1	0.10	J+	4

mg/L-milligrams 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). Four LCSs were reported for TDS, four LCSs were reported for anions, two LCSs were reported for alkalinity, and one LCS was reported for sulfide. The recovery results were within the laboratory specified acceptance criteria.

### 3.6 Laboratory Duplicate

One sample set specific laboratory duplicates were reported for TDS, using sample HAM-HGWC-14. The RPD results were within the laboratory specified acceptance criteria.

Seven batch laboratory duplicates were 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 HAM-AP-2-EB-02. The wet chemistry parameters were not detected in the equipment blank above the MDLs, with the following exception.

TDS (28 mg/L) was detected in the equipment blank at a concentration greater than the reporting limit (RL). Since the TDS concentration in the equipment blank was U qualified as not detected at the sample concentration due to field blank contamination, and based on professional and technical judgment, no additional qualifications were applied to the data.

### 3.8 Field Blank

One field blank was collected with the sample set, HAM-AP2-FB-02. The wet chemistry parameters were not detected in the field blank above the MDLs, with the following exception.

TDS (58 mg/L) was detected in the field blank at a concentration greater than the RL. Therefore, the TDS concentration in equipment blank HAM-AP2-EB-02 was U qualified as not detected at the sample concentration and the TDS concentrations in samples HAM-HGWA-4, HAM-HGWA-42D, HAM-HGWA-5, HAM-MW-37D, and HAM-HGWA-6 were J+ qualified as estimated with high biases. Since TDS was detected at concentrations 10x greater than the field blank contamination in the remaining samples, no additional qualifications were applied to the data.

Sample ID	Compound	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-AP2-EB-02	TDS	28	NA	28	U	3
HAM-HGWA-4	TDS	128	NA	128	J+	3
HAM-HGWA-42D	TDS	168	NA	168	J+	3
HAM-HGWA-5	TDS	182	NA	182	J+	3
HAM-MW-37D	TDS	226	NA	226	J+	3
HAM-HGWA-6	TDS	229	NA	229	J+	3

mg/L-milligrams per liter

NA-Not Applicable

### **3.9 Field Duplicate**

One field duplicate sample was collected with the sample set, HAM-AP-2-FD-02. Acceptable precision ( $RPD \leq 30\%$ ) was demonstrated between the field duplicate and the original sample, HAM-MW-23D.

### **3.10 Sensitivity**

The samples were reported to the MDLs for the anions and sulfide, and the RLs for TDS and alkalinity. 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.

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\* \* \* \* \*

**ATTACHMENT 1**  
**DATA VALIDATION QUALIFIER DEFINITIONS**  
**AND INTERPRETATION KEY**  
**Assigned by Geosyntec's Data Validation Team**

**DATA QUALIFIER DEFINITIONS**

- U The analyte was analyzed for but was not detected at or above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to “not detected at or above the reported result”.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
- J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
- UJ The analyte was not detected at or 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: June 1, 2023  
To: Whitney Law  
From: Amani Royce  
CC: K. Henderson  
Subject: **Stage 2A Data Validation - Level II Data Deliverable – Pace Analytical Services, LLC Project Number 92648450**

**SITE: Plant Hammond AP-2 (RADS)**

### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of seventeen aqueous samples, one field duplicate, one field blank, and one equipment blank, collected 23, 27, and 30 January 2023 and 1 February 2023, as part of the Plant Hammond AP on-site sampling event.

The samples were analyzed at Pace Analytical Services, LLC, Greensburg, Pennsylvania, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 9315
- Radium-228 by US EPA Method 9320
- Total Radium by Calculation

### EXECUTIVE SUMMARY

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.

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
92648450001	HAM-HGWA-4
92648450002	HAM-HGWA-42D
92648450003	HAM-HGWA-5
92648450004	HAM-HGWA-6
92648450005	HAM-MW-21D
92648450006	HAM-MW-33
92648450007	HAM-HGWC-17
92648450008	HAM-MW-22
92648450009	HAM-MW-34D
92648450010	HAM-MW-37D

Laboratory ID	Client ID
92648450011	HAM-HGWC-14
92648450012	HAM-HGWC-15
92648450013	HAM-HGWC-16
92648450014	HAM-HGWC-18
92648450015	HAM-MW-23D
92648450016	HAM-MW-35
92648450017	HAM-MW-51
92648450018	HAM-AP-2-EB-02
92648450019	HAM-AP-2-FB-02
92648450020	HAM-AP-2-FD-02

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

Field duplicate sample HAM-AP-2-FD-02 was not listed on the chain of custody (COC). The laboratory assigned the collection date and time of 1 February 2023 0:00.

## 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). Four method blanks were reported for the radium-228 data (batches 564276, 565150, 565967, and 565965). Four method blanks were reported for the radium-226 data (batches 564275, 565151, 565966, and 565964). Radium-226 and radium-228 were not detected in the method blanks above the minimum detectable concentrations (MDCs), with the following exception.

Radium-226 was detected in the method blank in batch 565966 (0.221 pCi/L) at the MDC. Since radium-226 was not detected in the associated samples above the MDCs, no qualifications were applied to the data.

### **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). Four 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.

### **1.6 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.

### **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, HAM-AP-2-EB-02. 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, HAM-AP-2-FB-02. Radium-226 and radium-228 were not detected in the field blank above the MDCs.

### **1.10 Field Duplicate**

One field duplicate sample was collected with the sample set, HAM-AP-2-FD-02. Acceptable precision ( $RER (1\sigma) < 3$ ) was demonstrated between the field duplicate and the original sample, HAM-MW-23D.

### **1.11 Sensitivity**

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

### **1.12 Electronic Data Deliverable Review (EDD)**

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

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\* \* \* \* \*

**ATTACHMENT 1**  
**DATA VALIDATION QUALIFIER DEFINITIONS**  
**AND INTERPRETATION KEY**  
**Assigned by Geosyntec's Data Validation Team**

**DATA QUALIFIER DEFINITIONS**

- U The analyte was analyzed for but was not detected at or above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to “not detected at or above the reported result.”
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
- J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
- UJ The analyte was not detected at or 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

August 2023

Date: 10 November 2023  
To: Thomas Kessler  
From: Derek Yeadon  
CC: Kristoffer Henderson  
**Subject: Hammond AP-2 - Stages 2A Validation - Level II Data Deliverable –  
Pace Analytical Services, Project Numbers: 92681886 and 92681885**

**SITE: Plant Hammond AP-2**

**INTRODUCTION**

This report summarizes the findings of the Stage 2A data validation of twenty-two aqueous samples, one field duplicate, one field blank, and one equipment blank, collected 8 August and 12-13 August, 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 USEPA Methods 3005A/6020B
- Mercury by USEPA 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 USEPA Method 300.0
- Sulfide by Standard method 4500-S2D

**EXECUTIVE SUMMARY**

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for supporting project objectives. The qualified data should be used within the limitations of the qualifications. If there are results with two or more different qualifications due to multiple QC failures, the final qualification is reconciled in the electronic data deliverable (EDD) with qualifications.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV,

September 2011);

- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006); and
- American National Standard, Verification and Validation of Radiological Data for use in Waste Management and Environmental Remediation, February 15, 2012 (ANSI/ANS-41.5-2012).

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

Laboratory ID	Client ID
92681885001	HAM-HGWA-1
92681885002	HAM-HGWA-2
92681885003	HAM-HGWA-3
92681885004	HAM-HGWA-43D
92681885005	HAM-HGWA-44D
92681886001	HAM-HGWA-4
92681886002	HAM-HGWA-5
92681886003	HAM-HGWA-6
92681886004	HAM-HGWA-42D
92681886005	HAM-HGWC-14
92681886006	HAM-HGWC-15
92681886007	HAM-HGWC-16
92681886008	HAM-HGWC-17

Laboratory ID	Client ID
92681886009	HAM-HGWC-18
92681886010	HAM-MW-22
92681886011	HAM-MW-23D
92681886012	HAM-MW-33
92681886013	HAM-MW-37D
92681886014	HAM-AP2-FB-02
92681886015	HAM-AP2-EB-02
92681886016	HAM-AP2-FD-02
92682572001	HAM-MW-21D
92682572002	HAM-MW-34D
92682572003	HAM-MW-35
92682572004	HAM-MW-51

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

The laboratory reports revised on 22 August and 30 August 2023 were used for data validation.

The results flagged as “ND” in the EDD were changed to U.

The field pH data included in the laboratory report were not validated.

## 1.0 METALS

The samples were analyzed for metals by USEPA methods 3010A/6010D and USEPA 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 supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

The antimony concentration in sample HAM-HGWC-14 was flagged BC to indicate the analyte was detected in both the sample and an associated blank greater than ½ the RL. Therefore, based on professional and technical judgment the antimony concentration for sample HAM-HGWC-14 was J+ qualified as estimated with high bias.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HAM-HGWC-14	Antimony	0.0032	BC	0.0032	J+	3

Mg/L-milligrams per liter

BC-The same analyte was detected in an associated blank at a concentration above 1/2 the reporting limit but below the laboratory reporting limit.

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

\*\*Reason codes are defined in Attachment 2 at the end of this report

### 1.2 Holding Time

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

### 1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Six method blanks were reported (batches 792418, 793883, 794188, 795114, 794177, and 794885). 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). Two sample set specific MS/MSD pairs were reported, using samples HAM-HGWA-44D and HAM-HGWA-4. The recovery and RPD results were within the laboratory specified acceptance criteria except as noted below.



The recoveries of calcium, magnesium, potassium and sodium in the MS/MSD pair using HAM-HGWC-14 were outside of the laboratory specified acceptance criteria. Since the calcium, magnesium, potassium, and sodium concentrations in sample HAM-HGWC-14 were greater than four times the spiked amounts, no qualifications were applied to the data.

Five 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.

### 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). Six 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, HAM-AP2-EB-02. Metals were not detected in the equipment blank at or above the MDLs, with the following exceptions.

Boron (0.017 mg/L) was detected in the equipment blank at an estimated concentration greater than the MDL and less than the RL. Since the boron concentration in the equipment blank 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, HAM-AP2-FB-02. Metals were not detected in the field blank at or above the MDLs, with the following exceptions.

Boron (0.031 mg/L) was detected in the field blank at an estimated concentration greater than the MDL and less than the RL. Therefore, the estimated boron concentrations in the associated samples were U qualified as not detected at the RL. In addition, based on professional and technical judgment the boron concentrations in samples HAM-HGWA-2, HAM-HGWA-42D and HAM-MW-37D were J+ qualified as estimated with high bias.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HAM-HGWA-1	Boron	0.023	J	0.04	U	3
HAM-HGWA-2	Boron	0.06	NA	0.06	J+	3
HAM-HGWA-3	Boron	0.011	J	0.04	U	3
HAM-HGWA-43D	Boron	0.038	J	0.04	U	3
HAM-HGWA-4	Boron	0.029	J	0.04	U	3
HAM-HGWA-5	Boron	0.025	J	0.04	U	3
HAM-HGWA-6	Boron	0.017	J	0.04	U	3
HAM-HGWA-42D	Boron	0.048	NA	0.048	J+	3

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
HAM-MW-37D	Boron	0.14	NA	0.14	J+	3
HAM-AP2-EB-02	Boron	0.017	J	0.04	U	3

mg/L-milligrams per liter

J-estimated concentration greater than or equal to the MDL and less than the RL

NA-not applicable

### 1.8 Field Duplicate

One field duplicate sample was collected with the sample set, HAM-AP2-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original sample, HAM-HGWC-15.

### 1.9 Sensitivity

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

### 1.10 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

## 2.0 MERCURY

The samples were analyzed for mercury by USEPA 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 supporting project objectives.

The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

## **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). Three method blanks were reported (batches 793520, 794228, 794866, and 794869). 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). Three batch MS/MSD pairs were reported, using samples 92680804007, 92682396014, 92683125002, and 92682122016. 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). 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, HAM-AP2-EB-02. Mercury was not detected in the equipment blank above the MDL, with the following exception.

## **2.7 Field Blank**

One field blank was collected with the sample set, HAM-AP2-FB-02. Mercury was not detected in the field blank above the MDL, with the following exception.

## **2.8 Field Duplicate**

One field duplicate sample was collected with the sample set, HAM-AP2-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original sample, HAM-HGWC-15.

## 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, alkalinity by Standard method 2320B, TDS by Standard method 2540C, sulfide by Standard method 4500-S2D, and anions by USEPA 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 Time and Preservation
- ✓ 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 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 data set is 100%.

The TDS concentration for sample HAM-MW-21D was flagged 1g to indicate the sample residue exceeded the method criteria. Therefore, based on professional and technical judgment the TDS concentration for sample HAM-MW-21D was J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-MW-21D	Total Dissolved Solids	2200	1g	2200	J	13

mg/L-milligrams per liter

1g-Sample residue exceeded method SM 2540C recommended 200 mg

### 3.2 Holding Time & Preservation

The holding times for the wet chemistry parameters are listed below.

Analyte	Method	Holding Time
Anions	US EPA Method 300	28 days from collection to analysis
Alkalinity	SM 2320B	14 days from collection to analysis
TDS	SM 2540C	7 days from collection to analysis
Sulfide	SM 4500-S2D	28 days from 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). Four method blanks were reported for TDS (batches 793055, 793414, 794562, and 794564), six method blanks were reported for alkalinity (batches 793564, 793596, 794234, 794235, and 794644), three method blanks were reported for sulfide (batches 793499, 794102, and 794103), and five method blanks were reported for anions (batches 793207, 793553, 793554, 793837, and 793838). 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). Six sample set specific MS/MSD pairs were reported for alkalinity, using samples HAM-HGWA-3, HAM-HGWA-43D, HAM-HGWC-15, HAM-HGWC-16, HAM-MW-37D, and HAM-AP2-FB-02. Two sample set specific MS/MSD pairs were reported for sulfide, using samples HAM-HGWA-44D and HAM-MW-33. Four sample set specific MS/MSD pairs were reported for anions, using samples HAM-HGWA-44D, HAM-MW-34D, and HAM-MW-33). The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions:

The recovery of alkalinity in the MSD using sample HAM-HGWA-3 was high and outside the laboratory specified acceptance criteria. Since the alkalinity concentration of HAM-HGWA-3 was greater than four times the spiked amount, no qualifications were applied to the data.

The recoveries of alkalinity in the MSD using sample HAM-HGWC-16 were high and outside the laboratory specified acceptance criteria. Since the alkalinity concentration of HAM-HGWA-3 was

greater than four times the spiked amount, no qualifications were applied to the data.

The recovery of sulfide in the MS using sample HAM-HGWA-44D was low and outside of the laboratory specified acceptance criteria and the RPD in the MS/MSD pair was high and outside the laboratory specified acceptance criteria. Therefore, the sulfide concentration in sample HAM-HGWA-44D was J qualified as estimated.

One or both the recoveries of chloride and fluoride in the MS/MSD pair using sample HAM-HGWA-44D were low and outside of the laboratory specified acceptance criteria. Therefore, the chloride and fluoride concentrations in sample HAM-HGWA-44D were J- qualified as estimated with low bias.

The recoveries of chloride and sulfate in the MSD using sample HAM-MW-33 were low and outside of the laboratory specified acceptance criteria. Therefore, the chloride concentration in sample HAM-MW-33 was J- qualified as estimated with low bias. Since the sulfate concentration in sample HAM-MW-33 was greater than four times the spiked amount, no qualifications were applied to the data.

The recoveries of chloride and sulfate in the MSD using sample HAM-MW-34D were low and outside of the laboratory specified acceptance criteria. Therefore, the chloride concentration in sample HAM-MW-34D was J- qualified as estimated with low bias. Since the sulfate concentration in sample HAM-MW-34D was greater than four times the spiked amount, no qualifications were applied to the data.

Precision and accuracy were assessed using the laboratory control sample (LCS)/LCS duplicate (LCSD) pair for batches 793564 and 793596. No additional qualifications were applied to the data.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
HAM-HGWA-44D	Chloride	27	M1	27	J-	4
HAM-HGWA-44D	Fluoride	1.3	M1	1.3	J-	4
HAM-HGWA-44D	Sulfide	0.14	R1 M1	0.14	J	4
HAM-MW-33	Chloride	99	M1	99	J-	4
HAM-MW-34D	Chloride	157	M1	157	J-	4

mg/L-milligrams per liter

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

Eight additional batch MS/MSD pairs were reported (samples 92681908004, 92681908005, 92682576004, 92682576005, 92682650011, 92682671001, 92682815002, 92682397016) for alkalinity, four additional batch MS/MSD pairs were reported (samples 92681883001, 92682834002, 92682576011, and 92682397012) for sulfide, and six additional batch MS/MSD were reported (samples 92681883001, 92682397002, 92682398009, 92682572002, 92682576008, 92682815002, and 92682650006) for 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). Five LCSs were reported for TDS, fourteen LCSs were reported for alkalinity, four LCSs were reported for sulfide, and six LCSs were reported for anions. The recovery results were within the laboratory specified acceptance criteria.

### **3.6 Laboratory Duplicate**

Two sample set specific laboratory duplicates were reported for TDS, using samples HAM-HGWA-2 and HAM-MW-33 were within the laboratory specified acceptance criteria.

The batch duplicates for samples 92682122001, 92681884001, 92682120003, 92682462004, 92682397014 and 92683141005 were 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, HAM-AP2-EB-02. 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, HAM-AP2-FB-02. The wet chemistry parameters were not detected in the field blank above the MDLs.

### **3.9 Field Duplicate**

One field duplicate sample was collected with the sample set, HAM-AP2-FD-02. Acceptable precision (RPD < 30%) was demonstrated between the field duplicate and the original sample, HAM-HGWC-15.

### **3.10 Sensitivity**

The samples were reported to the MDLs for the anions and the RL for TDS. 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.

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\* \* \* \* \*

**ATTACHMENT 1  
DATA VALIDATION QUALIFIER DEFINITIONS  
AND INTERPRETATION KEY  
Assigned by Geosyntec's Data Validation Team**

**DATA QUALIFIER DEFINITIONS**

- U The analyte was analyzed for but was not detected at or above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to “not detected at or above the reported result.”
  
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
  
- J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
  
- J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
  
- UJ The analyte was not detected at or 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: November 9, 2023  
To: Christine Hug  
From: Kristoffer Henderson  
CC: Matthew Richardson  
Subject: **Stage 2A Data Validation - Level II Data Deliverables – Pace Analytical Services, LLC Project Numbers 92681879 and 92681881**

**SITE: Plant Hammond AP-2**

### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twenty-two aqueous samples, collected 8 and 12-13 August 2023, as part of the Plant Hammond AP on-site sampling event.

The samples were analyzed at Pace Analytical Services, LLC, Greensburg, Pennsylvania, for the following analytical tests:

- Radium-226 by United States (US) Environmental Protection Agency (EPA) Method 9315
- Radium-228 by US EPA Method 9320
- Total Radium by Calculation

### EXECUTIVE SUMMARY

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for supporting project objectives. The qualified data should be used within the limitations of the qualifications.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment, and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006); and

- American National Standard, Verification and Validation of Radiological Data for use in Waste Management and Environmental Remediation, February 15, 2012 (ANSI/ANS-41.5-2012).

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

Laboratory ID	Client ID
92681881001	HAM-HGWA-1
92681881002	HAM-HGWA-2
92681881003	HAM-HGWA-3
92681881004	HAM-HGWA-43D
92681881005	HAM-HGWA-44D
92681879001	HAM-HGWA-4
92681879002	HAM-HGWA-5
92681879003	HAM-HGWA-6
92681879004	HAM-HGWA-42D
92681879006	HAM-HGWC-14
92681879007	HAM-HGWC-15
92681879008	HAM-HGWC-16
92681879009	HAM-HGWC-17

Laboratory ID	Client ID
92681879010	HAM-HGWC-18
92681879011	HAM-MW-22
92681879012	HAM-MW-23D
92681879013	HAM-MW-33
92681879014	HAM-MW-37D
92681879015	HAM-AP2-FB-02
92681879016	HAM-AP2-EB-02
92681879017	HAM-AP2-FD-02
92681879018	HAM-MW-21D
92681879019	HAM-MW-34D
92681879020	HAM-MW-35
92681879021	HAM-MW-51

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

The sample collection time was not listed on the chain of custody (COC) for sample HAM-HGWA-1. The laboratory assigned collection time of 9:35.

## 1.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by US EPA method 9315, radium-228 by US EPA method 9320 and total radium by calculation.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ⊗ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ⊗ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Tracers and Carriers
- ✓ Equipment Blank

- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

## 1.1 Overall Assessment

The radium-226 and radium-228 data reported in this data set are considered usable for supporting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

Radium-226 was detected at concentrations greater than the minimum detectable concentration (MDC) in samples HAM-HGWA-42D, HAM-HGWC-16, HAM-MW-33, HAM-MW-21D, HAM-MW-35 and HAM-HGWA-43D; however, the combined radium 226+228 results for these samples were U flagged as less than the MDC. Based on professional and technical judgment, the U flags were removed for these samples.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier*	Reason Code*
HAM-HGWA-43D	Combined Radium 226 + 228	0.503	U	0.503	NA	14
HAM-HGWA-42D	Combined Radium 226 + 228	0.463	U	0.463	NA	14
HAM-HGWC-16	Combined Radium 226 + 228	0.281	U	0.281	NA	14
HAM-MW-33	Combined Radium 226 + 228	0.773	U	0.773	NA	14
HAM-MW-21D	Combined Radium 226 + 228	0.297	U	0.297	NA	14
HAM-MW-35	Combined Radium 226 + 228	0.897	U	0.897	NA	14

pCi/L – picocuries per liter

U – not detected at or above the MDC

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

\*\* Reason codes are defined in Attachment 2 at the end of this report

## 1.2 Holding Times

The holding times for the radium-226 and radium-228 analyses of a water sample are 180 days from sample collection to analysis. The holding times were met for the sample analyses.

### 1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three method blanks were reported for the radium-228 data (batches 610549, 610551 and 611586). Four method blanks were reported for the radium-226 data (batches 611645, 610646, 611647 and 612651). Radium-226 and radium-228 were not detected in the method blanks above the MDCs, with the following exception.

Radium-228 (0.453 pCi/L) was detected in the method blank in batch 610549 at a concentration greater than the MDC. Since radium-228 was not detected at concentrations greater than the MDC in the associated samples, no qualifications were applied to the data.

Radium-228 (0.830 pCi/L) was detected in the method blank in batch 611586 at a concentration greater than the MDC. Since radium-228 was not detected at concentrations greater than the MDC in the associated samples, no qualifications were applied to the data.

### 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 was 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 recovery of radium-226 in the LCS in batch 611647 was high and outside the laboratory specified acceptance criteria. Therefore, the radium-226 and combined radium 226+228 concentrations greater than the MDC in the associated samples were J+ qualified as estimated with high biases.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
HAM-HGWC-16	Radium-226	0.264	NA	0.264	J+	5
HAM-HGWC-16	Combined Radium 226 + 228	0.281	U	0.281	J+	5
HAM-HGWC-18	Radium-226	0.439	NA	0.439	J+	5
HAM-HGWC-18	Combined Radium 226 + 228	1.03	NA	1.03	J+	5
HAM-MW-33	Radium-226	0.333	NA	0.333	J+	5
HAM-MW-33	Combined Radium 226 + 228	0.773	U	0.773	J+	5

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
HAM-MW-21D	Radium-226	0.295	NA	0.295	J+	5
HAM-MW-21D	Combined Radium 226 + 228	0.297	U	0.297	J+	5
HAM-MW-35	Radium-226	0.39	NA	0.39	J+	5
HAM-MW-35	Combined Radium 226 + 228	0.897	U	0.897	J+	5

pCi/L – picocuries per liter

U – not detected at or above the MDC

NA – not applicable

### 1.6 Laboratory Duplicate

One sample set specific laboratory duplicate was reported using sample HAM-HGWA-43D. The RER result was within the laboratory specified acceptance criteria.

Three batch laboratory duplicates were reported for radium-226. Since these were batch QC, the results do not affect the samples in this data set and qualifications were not applied to the data.

### 1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses and a tracer was reported for the radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

### 1.8 Equipment Blank

One equipment blank was collected with the sample set, HAM-AP2-EB-02. 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, HAM-AP2-FB-02. Radium-226 and radium-228 were not detected in the field blank above the MDCs.

### 1.10 Field Duplicate

One field duplicate sample was collected with the sample set, HAM-AP2-FD-02. Acceptable precision (RER ( $1\sigma$ ) < 3) was demonstrated between the field duplicate and the original sample, HAM-HGWC-15.

### 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

January 2023

# Low-Flow Test Report:

Test Date / Time: 1/24/2023 9:00:17 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: 22.49 ft</b> <b>Total Depth: 32.49 ft</b> <b>Initial Depth to Water: 10.05 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 27.49 ft</b> <b>Estimated Total Volume Pumped: 4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.63 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883533</b>
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## Test Notes:

Five bottles: Full App. III and IV.

## Weather Conditions:

Sunny, 30 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/24/2023 9:00 AM	00:00	6.90 pH	13.36 °C	707.06 µS/cm	1.45 mg/L	1.50 NTU	-14.6 mV	10.55 ft	200.00 ml/min
1/24/2023 9:05 AM	05:00	6.76 pH	15.30 °C	684.25 µS/cm	0.82 mg/L	1.12 NTU	-38.1 mV	10.68 ft	200.00 ml/min
1/24/2023 9:10 AM	10:00	6.74 pH	15.59 °C	674.83 µS/cm	0.40 mg/L	0.85 NTU	-53.2 mV	10.69 ft	200.00 ml/min
1/24/2023 9:15 AM	15:00	6.75 pH	15.71 °C	670.89 µS/cm	0.17 mg/L	0.70 NTU	-62.5 mV	10.65 ft	200.00 ml/min
1/24/2023 9:20 AM	20:00	6.76 pH	15.84 °C	667.23 µS/cm	0.10 mg/L	0.57 NTU	-69.0 mV	10.67 ft	200.00 ml/min
1/24/2023 9:25 AM	25:00	6.75 pH	15.88 °C	664.63 µS/cm	0.07 mg/L	0.48 NTU	-73.7 mV	10.68 ft	200.00 ml/min
1/24/2023 9:30 AM	30:00	6.76 pH	15.98 °C	661.32 µS/cm	0.06 mg/L	0.84 NTU	-76.5 mV	10.68 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-1	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/24/2023 8:50:01 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: 7.96 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 22.95 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: 8.05 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966090</b>
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## Test Notes:

Five bottles: Full App. III and IV.

## Weather Conditions:

Sunny 28 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
1/24/2023 8:50 AM	00:00	5.37 pH	15.92 °C	216.37 µS/cm	1.95 mg/L	74.60 NTU	164.4 mV	8.05 ft	200.00 ml/min
1/24/2023 8:55 AM	05:00	5.30 pH	16.05 °C	221.01 µS/cm	0.58 mg/L	16.40 NTU	133.9 mV	8.05 ft	200.00 ml/min
1/24/2023 9:00 AM	10:00	5.29 pH	16.10 °C	222.99 µS/cm	0.41 mg/L	9.97 NTU	119.9 mV	8.05 ft	200.00 ml/min
1/24/2023 9:05 AM	15:00	5.27 pH	16.19 °C	221.63 µS/cm	0.36 mg/L	6.72 NTU	109.2 mV	8.05 ft	200.00 ml/min
1/24/2023 9:10 AM	20:00	5.25 pH	16.19 °C	220.30 µS/cm	0.48 mg/L	5.21 NTU	101.6 mV	8.05 ft	200.00 ml/min
1/24/2023 9:15 AM	25:00	5.24 pH	16.28 °C	219.03 µS/cm	0.59 mg/L	4.43 NTU	95.7 mV	8.05 ft	200.00 ml/min
1/24/2023 9:20 AM	30:00	5.20 pH	16.36 °C	221.26 µS/cm	0.29 mg/L	3.35 NTU	93.3 mV	8.05 ft	200.00 ml/min
1/24/2023 9:25 AM	35:00	5.22 pH	16.37 °C	221.85 µS/cm	0.28 mg/L	2.68 NTU	87.9 mV	8.05 ft	200.00 ml/min
1/24/2023 9:30 AM	40:00	5.22 pH	16.38 °C	221.37 µS/cm	0.41 mg/L	2.49 NTU	86.4 mV	8.05 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-1	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/23/2023 4:14:39 PM

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: 34.51 ft</b> <b>Total Depth: 44.51 ft</b> <b>Initial Depth to Water: 7.53 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 39.51 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: 966090</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	+/- 5	
1/23/2023 4:14 PM	00:00	7.24 pH	15.85 °C	463.88 µS/cm	2.68 mg/L	7.83 NTU	-31.1 mV	7.53 ft	200.00 ml/min
1/23/2023 4:19 PM	05:00	7.31 pH	16.42 °C	459.57 µS/cm	0.98 mg/L	7.64 NTU	-49.6 mV	7.53 ft	200.00 ml/min
1/23/2023 4:24 PM	10:00	7.32 pH	16.54 °C	459.25 µS/cm	0.65 mg/L	4.84 NTU	-82.6 mV	7.53 ft	200.00 ml/min
1/23/2023 4:29 PM	15:00	7.32 pH	16.55 °C	459.71 µS/cm	0.38 mg/L	3.16 NTU	-88.0 mV	7.53 ft	200.00 ml/min
1/23/2023 4:34 PM	20:00	7.33 pH	16.67 °C	458.35 µS/cm	0.28 mg/L	2.46 NTU	-89.3 mV	7.53 ft	200.00 ml/min
1/23/2023 4:39 PM	25:00	7.34 pH	16.59 °C	457.27 µS/cm	0.23 mg/L	2.48 NTU	-58.6 mV	7.53 ft	200.00 ml/min
1/23/2023 4:44 PM	30:00	7.32 pH	16.58 °C	457.27 µS/cm	0.20 mg/L	1.02 NTU	-87.8 mV	7.53 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-3	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/23/2023 4:24:07 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWA-4</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 15.76 ft</b> <b>Total Depth: 25.76 ft</b> <b>Initial Depth to Water: 4.94 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 63.03 ft</b> <b>Estimated Total Volume Pumped: 7.9 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: 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	+/- 5	
1/23/2023 4:24 PM	00:00	5.73 pH	16.82 °C	217.08 µS/cm	6.25 mg/L	9.37 NTU	157.7 mV	5.07 ft	200.00 ml/min
1/23/2023 4:25 PM	01:27	5.67 pH	15.52 °C	215.53 µS/cm	5.99 mg/L	9.37 NTU	193.0 mV	5.07 ft	200.00 ml/min
1/23/2023 4:29 PM	04:55	5.64 pH	15.95 °C	219.56 µS/cm	6.01 mg/L	8.71 NTU	195.5 mV	5.20 ft	200.00 ml/min
1/23/2023 4:34 PM	09:55	5.62 pH	15.94 °C	218.74 µS/cm	6.01 mg/L	8.91 NTU	146.3 mV	5.25 ft	200.00 ml/min
1/23/2023 4:39 PM	14:55	5.61 pH	16.15 °C	219.90 µS/cm	5.96 mg/L	6.80 NTU	185.3 mV	5.25 ft	200.00 ml/min
1/23/2023 4:44 PM	19:55	5.61 pH	15.93 °C	218.70 µS/cm	5.94 mg/L	4.94 NTU	181.4 mV	5.25 ft	200.00 ml/min
1/23/2023 4:49 PM	24:55	5.62 pH	15.79 °C	217.02 µS/cm	5.95 mg/L	4.39 NTU	134.5 mV	5.25 ft	200.00 ml/min
1/23/2023 4:54 PM	29:55	5.62 pH	15.75 °C	216.09 µS/cm	5.94 mg/L	3.59 NTU	130.7 mV	5.25 ft	200.00 ml/min
1/23/2023 4:59 PM	34:55	5.62 pH	15.84 °C	216.64 µS/cm	5.93 mg/L	3.23 NTU	128.1 mV	5.25 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-4	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/27/2023 9:29:08 AM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: HGWA-5</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 18.72 ft</b> <b>Total Depth: 28.72 ft</b> <b>Initial Depth to Water: 4.25 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 23.72 ft</b> <b>Estimated Total Volume Pumped: 18 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 1.31 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883533</b>
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## Test Notes:

Five bottles: Full App. III and IV.

## Weather Conditions:

Sunny, 30 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/27/2023 9:29 AM	00:00	6.55 pH	15.10 °C	253.28 µS/cm	1.32 mg/L	13.30 NTU	-20.9 mV	4.80 ft	200.00 ml/min
1/27/2023 9:34 AM	05:00	6.59 pH	15.51 °C	247.50 µS/cm	0.71 mg/L	11.10 NTU	-25.4 mV	5.01 ft	200.00 ml/min
1/27/2023 9:39 AM	10:00	6.59 pH	15.73 °C	238.73 µS/cm	0.54 mg/L	11.70 NTU	-23.6 mV	5.11 ft	200.00 ml/min
1/27/2023 9:44 AM	15:00	6.58 pH	15.82 °C	233.57 µS/cm	0.50 mg/L	9.84 NTU	-22.5 mV	5.22 ft	200.00 ml/min
1/27/2023 9:49 AM	20:00	6.58 pH	15.88 °C	235.44 µS/cm	0.34 mg/L	8.60 NTU	-23.8 mV	5.30 ft	200.00 ml/min
1/27/2023 9:54 AM	25:00	6.57 pH	15.98 °C	230.80 µS/cm	0.32 mg/L	9.42 NTU	-30.5 mV	5.38 ft	200.00 ml/min
1/27/2023 9:59 AM	30:00	6.56 pH	16.02 °C	230.85 µS/cm	0.24 mg/L	7.63 NTU	-21.6 mV	5.43 ft	200.00 ml/min
1/27/2023 10:04 AM	35:00	6.55 pH	16.14 °C	228.21 µS/cm	0.20 mg/L	8.08 NTU	-21.2 mV	5.47 ft	200.00 ml/min
1/27/2023 10:09 AM	40:00	6.55 pH	16.19 °C	227.51 µS/cm	0.18 mg/L	7.90 NTU	-20.4 mV	5.54 ft	200.00 ml/min
1/27/2023 10:14 AM	45:00	6.55 pH	16.28 °C	225.59 µS/cm	0.17 mg/L	6.67 NTU	-19.4 mV	5.59 ft	200.00 ml/min
1/27/2023 10:19 AM	50:00	6.54 pH	16.38 °C	228.57 µS/cm	0.15 mg/L	6.14 NTU	-20.6 mV	5.61 ft	200.00 ml/min
1/27/2023 10:24 AM	55:00	6.54 pH	16.42 °C	226.01 µS/cm	0.15 mg/L	6.11 NTU	-19.7 mV	5.68 ft	200.00 ml/min
1/27/2023 10:29 AM	01:00:00	6.54 pH	16.35 °C	227.01 µS/cm	0.13 mg/L	5.65 NTU	-19.2 mV	5.66 ft	200.00 ml/min



1/27/2023 10:34 AM	01:05:00	6.54 pH	16.37 °C	226.84 µS/cm	0.10 mg/L	5.39 NTU	-19.4 mV	5.63 ft	200.00 ml/min
1/27/2023 10:39 AM	01:10:00	6.54 pH	16.41 °C	226.65 µS/cm	0.07 mg/L	5.26 NTU	-19.3 mV	5.60 ft	200.00 ml/min
1/27/2023 10:44 AM	01:15:00	6.54 pH	16.38 °C	227.41 µS/cm	0.06 mg/L	5.55 NTU	-19.8 mV	5.88 ft	200.00 ml/min
1/27/2023 10:49 AM	01:20:00	6.53 pH	16.42 °C	224.83 µS/cm	0.05 mg/L	5.16 NTU	-17.9 mV	5.56 ft	200.00 ml/min
1/27/2023 10:54 AM	01:25:00	6.52 pH	16.41 °C	223.81 µS/cm	0.05 mg/L	4.94 NTU	-16.8 mV	5.56 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-5	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/27/2023 9:30:18 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWA-6</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 39.66 ft</b> <b>Total Depth: 49.66 ft</b> <b>Initial Depth to Water: 3.62 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 44.66 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: 2.13 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966090</b>
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## Test Notes:

Five bottles: Full App. III and IV.

## Weather Conditions:

Sunny, 35 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
1/27/2023 9:30 AM	00:00	7.61 pH	12.98 °C	365.53 µS/cm	3.83 mg/L	2.18 NTU	-29.6 mV	3.95 ft	200.00 ml/min
1/27/2023 9:35 AM	05:00	7.64 pH	15.33 °C	376.67 µS/cm	1.31 mg/L	5.68 NTU	-58.5 mV	4.91 ft	200.00 ml/min
1/27/2023 9:40 AM	10:00	7.68 pH	15.50 °C	375.94 µS/cm	1.56 mg/L	2.59 NTU	-82.6 mV	5.35 ft	200.00 ml/min
1/27/2023 9:45 AM	15:00	7.68 pH	15.47 °C	375.28 µS/cm	1.16 mg/L	1.90 NTU	-58.5 mV	5.48 ft	200.00 ml/min
1/27/2023 9:50 AM	20:00	7.66 pH	15.65 °C	377.58 µS/cm	0.87 mg/L	1.44 NTU	-93.9 mV	5.59 ft	200.00 ml/min
1/27/2023 9:55 AM	25:00	7.66 pH	15.74 °C	376.58 µS/cm	0.66 mg/L	1.24 NTU	-97.1 mV	5.66 ft	200.00 ml/min
1/27/2023 10:00 AM	30:00	7.66 pH	15.83 °C	377.34 µS/cm	0.52 mg/L	1.03 NTU	-100.6 mV	5.72 ft	200.00 ml/min
1/27/2023 10:05 AM	35:00	7.66 pH	15.86 °C	376.00 µS/cm	0.48 mg/L	1.25 NTU	-67.6 mV	5.75 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-6	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/23/2023 4:46:09 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: HGWA-42D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 58.03 ft</b> <b>Total Depth: 68.03 ft</b> <b>Initial Depth to Water: 9.37 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 63.08 ft</b> <b>Estimated Total Volume Pumped: 9.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 2.26 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883533</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	
1/23/2023 4:46 PM	00:00	7.51 pH	17.45 °C	294.80 µS/cm	0.24 mg/L	6.42 NTU	16.6 mV	11.25 ft	200.00 ml/min
1/23/2023 4:51 PM	05:00	7.52 pH	17.53 °C	297.37 µS/cm	0.20 mg/L	8.52 NTU	7.9 mV	11.40 ft	200.00 ml/min
1/23/2023 4:56 PM	10:00	7.52 pH	17.59 °C	298.09 µS/cm	0.16 mg/L	7.47 NTU	-3.1 mV	11.53 ft	200.00 ml/min
1/23/2023 5:01 PM	15:00	7.51 pH	17.60 °C	299.02 µS/cm	0.13 mg/L	5.30 NTU	-15.1 mV	11.59 ft	200.00 ml/min
1/23/2023 5:06 PM	20:00	7.51 pH	17.65 °C	297.87 µS/cm	0.12 mg/L	2.10 NTU	-27.3 mV	11.58 ft	200.00 ml/min
1/23/2023 5:11 PM	25:00	7.51 pH	17.56 °C	298.72 µS/cm	0.12 mg/L	2.88 NTU	-35.9 mV	11.59 ft	200.00 ml/min
1/23/2023 5:16 PM	30:00	7.51 pH	17.61 °C	299.80 µS/cm	0.11 mg/L	1.95 NTU	-42.5 mV	11.59 ft	200.00 ml/min
1/23/2023 5:21 PM	35:00	7.53 pH	17.60 °C	300.44 µS/cm	0.11 mg/L	2.44 NTU	-52.2 mV	11.61 ft	200.00 ml/min
1/23/2023 5:26 PM	40:00	7.52 pH	17.66 °C	300.72 µS/cm	0.11 mg/L	1.61 NTU	-60.4 mV	11.65 ft	200.00 ml/min
1/23/2023 5:31 PM	45:00	7.54 pH	17.65 °C	300.94 µS/cm	0.11 mg/L	1.64 NTU	-73.2 mV	11.62 ft	200.00 ml/min
1/23/2023 5:36 PM	50:00	7.52 pH	17.65 °C	301.02 µS/cm	0.10 mg/L	1.64 NTU	-86.6 mV	11.63 ft	200.00 ml/min
1/23/2023 5:41 PM	55:00	7.54 pH	17.65 °C	300.96 µS/cm	0.10 mg/L	1.27 NTU	-98.4 mV	11.62 ft	200.00 ml/min
1/23/2023 5:46 PM	01:00:00	7.54 pH	17.57 °C	301.67 µS/cm	0.10 mg/L	1.74 NTU	-104.0 mV	11.63 ft	200.00 ml/min

1/23/2023 5:51 PM	01:05:00	7.54 pH	17.63 °C	301.43 µS/cm	0.09 mg/L	1.31 NTU	-111.3 mV	11.63 ft	200.00 ml/min
1/23/2023 5:56 PM	01:10:00	7.54 pH	17.52 °C	302.05 µS/cm	0.10 mg/L	1.25 NTU	-114.8 mV	11.63 ft	200.00 ml/min
1/23/2023 6:01 PM	01:15:00	7.55 pH	17.47 °C	301.54 µS/cm	0.10 mg/L	1.21 NTU	-117.9 mV	11.63 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-42D	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/24/2023 10:20:06 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<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: 10.02 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 22.95 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: 13.52 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966090</b>
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## Test Notes:

Five bottles: Full App. III and IV.

## Weather Conditions:

Sunny, 35 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
1/24/2023 10:20 AM	00:00	7.50 pH	15.38 °C	453.99 µS/cm	1.76 mg/L	4.94 NTU	-100.1 mV	10.89 ft	200.00 ml/min
1/24/2023 10:25 AM	05:00	7.56 pH	16.19 °C	451.81 µS/cm	0.95 mg/L	8.69 NTU	-115.8 mV	11.73 ft	200.00 ml/min
1/24/2023 10:30 AM	10:00	7.58 pH	16.37 °C	450.15 µS/cm	0.92 mg/L	6.38 NTU	-114.4 mV	12.50 ft	200.00 ml/min
1/24/2023 10:35 AM	15:00	7.58 pH	16.41 °C	451.67 µS/cm	0.67 mg/L	5.04 NTU	-118.5 mV	12.97 ft	200.00 ml/min
1/24/2023 10:40 AM	20:00	7.57 pH	16.43 °C	442.00 µS/cm	0.61 mg/L	4.93 NTU	-115.4 mV	13.27 ft	200.00 ml/min
1/24/2023 10:45 AM	25:00	7.55 pH	16.59 °C	441.08 µS/cm	0.57 mg/L	4.49 NTU	-112.1 mV	13.43 ft	200.00 ml/min
1/24/2023 10:50 AM	30:00	7.56 pH	16.46 °C	437.56 µS/cm	0.67 mg/L	3.92 NTU	-111.9 mV	13.52 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-43D	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/24/2023 9:23:00 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: 103.5 ft</b> <b>Total Depth: 113.5 ft</b> <b>Initial Depth to Water: 10.72 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 103.5 ft</b> <b>Estimated Total Volume Pumped: 10 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 4.03 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:

Foggy, 30 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
1/24/2023 9:23 AM	00:00	8.16 pH	12.41 °C	55.30 µS/cm	1.94 mg/L	67.00 NTU	11.8 mV	10.95 ft	200.00 ml/min
1/24/2023 9:28 AM	05:00	8.20 pH	12.90 °C	54.41 µS/cm	1.25 mg/L	71.00 NTU	-37.5 mV	11.30 ft	200.00 ml/min
1/24/2023 9:33 AM	10:00	8.20 pH	12.94 °C	54.45 µS/cm	0.99 mg/L	12.80 NTU	-61.7 mV	11.70 ft	200.00 ml/min
1/24/2023 9:38 AM	15:00	8.21 pH	12.98 °C	54.49 µS/cm	0.89 mg/L	12.70 NTU	-75.1 mV	12.00 ft	200.00 ml/min
1/24/2023 9:43 AM	20:00	8.21 pH	13.21 °C	54.60 µS/cm	0.76 mg/L	26.50 NTU	-89.8 mV	12.30 ft	200.00 ml/min
1/24/2023 9:48 AM	25:00	8.21 pH	13.58 °C	54.65 µS/cm	0.95 mg/L	25.30 NTU	-118.5 mV	12.60 ft	200.00 ml/min
1/24/2023 9:53 AM	30:00	8.21 pH	13.70 °C	54.66 µS/cm	0.81 mg/L	31.20 NTU	-106.2 mV	12.80 ft	200.00 ml/min
1/24/2023 9:58 AM	35:00	8.20 pH	14.46 °C	55.60 µS/cm	0.71 mg/L	14.80 NTU	-131.2 mV	12.95 ft	200.00 ml/min
1/24/2023 10:03 AM	40:00	8.20 pH	14.70 °C	54.64 µS/cm	0.79 mg/L	16.80 NTU	-116.0 mV	13.10 ft	200.00 ml/min
1/24/2023 10:08 AM	45:00	8.20 pH	14.98 °C	54.61 µS/cm	0.67 mg/L	17.30 NTU	-118.3 mV	13.30 ft	200.00 ml/min
1/24/2023 10:13 AM	50:00	8.20 pH	15.19 °C	52.56 µS/cm	0.64 mg/L	16.30 NTU	-113.7 mV	13.35 ft	200.00 ml/min
1/24/2023 10:18 AM	55:00	8.21 pH	15.29 °C	54.53 µS/cm	0.47 mg/L	17.70 NTU	-121.9 mV	13.42 ft	200.00 ml/min
1/24/2023 10:23 AM	01:00:00	8.21 pH	15.26 °C	54.41 µS/cm	0.60 mg/L	14.20 NTU	-128.2 mV	13.55 ft	200.00 ml/min

1/24/2023 10:28 AM	01:05:00	8.21 pH	15.33 °C	54.56 µS/cm	0.75 mg/L	11.14 NTU	-133.1 mV	14.70 ft	200.00 ml/min
1/24/2023 10:33 AM	01:10:00	8.21 pH	15.32 °C	54.58 µS/cm	0.49 mg/L	14.75 NTU	-135.2 mV	14.75 ft	200.00 ml/min
1/24/2023 10:38 AM	01:15:00	8.21 pH	15.41 °C	54.48 µS/cm	0.47 mg/L	9.05 NTU	-137.7 mV	14.75 ft	200.00 ml/min
1/24/2023 10:43 AM	01:20:00	8.21 pH	15.49 °C	54.36 µS/cm	0.35 mg/L	8.27 NTU	-141.0 mV	14.75 ft	200.00 ml/min
1/24/2023 10:48 AM	01:25:00	8.21 pH	15.36 °C	54.54 µS/cm	0.42 mg/L	6.79 NTU	-141.9 mV	14.75 ft	200.00 ml/min
1/24/2023 10:53 AM	01:30:00	8.22 pH	15.16 °C	54.68 µS/cm	0.29 mg/L	4.41 NTU	-144.2 mV	14.75 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-44D	Grab.

# Low-Flow Test Report:

Test Date / Time: 2/1/2023 2:20:19 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWC-14</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 32.98 ft</b> <b>Total Depth: 42.98 ft</b> <b>Initial Depth to Water: 18.01 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 37.988 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: 0.1 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966090</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Cloudy, 55 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
2/1/2023 2:20 PM	00:00	4.91 pH	18.53 °C	2,186.7 µS/cm	0.76 mg/L	5.31 NTU	155.5 mV	18.11 ft	200.00 ml/min
2/1/2023 2:25 PM	05:00	4.89 pH	18.78 °C	2,200.9 µS/cm	0.52 mg/L	4.35 NTU	146.7 mV	18.11 ft	200.00 ml/min
2/1/2023 2:30 PM	10:00	4.91 pH	18.94 °C	2,195.4 µS/cm	0.49 mg/L	2.68 NTU	139.9 mV	18.11 ft	200.00 ml/min
2/1/2023 2:35 PM	15:00	4.91 pH	19.07 °C	2,192.4 µS/cm	0.36 mg/L	2.06 NTU	196.5 mV	18.11 ft	200.00 ml/min
2/1/2023 2:40 PM	20:00	4.92 pH	19.22 °C	2,198.0 µS/cm	0.50 mg/L	1.69 NTU	134.9 mV	18.11 ft	200.00 ml/min
2/1/2023 2:45 PM	25:00	4.93 pH	19.22 °C	2,194.0 µS/cm	0.44 mg/L	1.33 NTU	128.2 mV	18.11 ft	200.00 ml/min
2/1/2023 2:50 PM	30:00	4.93 pH	19.18 °C	2,193.2 µS/cm	0.37 mg/L	1.10 NTU	125.9 mV	18.11 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWC-14	Grab.



# Low-Flow Test Report:

Test Date / Time: 2/1/2023 2:08:55 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: HGWC-15</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 27.96 ft</b> <b>Total Depth: 37.96 ft</b> <b>Initial Depth to Water: 15.06 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 33 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: 0.49 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883533</b>
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## Test Notes:

Five bottles: Full App. III and IV.

## Weather Conditions:

Cloudy, 50 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
2/1/2023 2:08 PM	00:00	6.32 pH	17.63 °C	1,311.2 µS/cm	0.56 mg/L	0.69 NTU	58.5 mV	15.54 ft	200.00 ml/min
2/1/2023 2:13 PM	05:00	6.29 pH	18.03 °C	1,297.6 µS/cm	0.19 mg/L	1.04 NTU	61.0 mV	15.56 ft	200.00 ml/min
2/1/2023 2:18 PM	10:00	6.27 pH	18.08 °C	1,292.1 µS/cm	0.16 mg/L	0.80 NTU	61.9 mV	15.56 ft	200.00 ml/min
2/1/2023 2:23 PM	15:00	6.25 pH	18.10 °C	1,289.7 µS/cm	0.12 mg/L	0.53 NTU	78.8 mV	15.56 ft	200.00 ml/min
2/1/2023 2:28 PM	20:00	6.25 pH	18.26 °C	1,281.8 µS/cm	0.11 mg/L	0.92 NTU	64.3 mV	15.56 ft	200.00 ml/min
2/1/2023 2:33 PM	25:00	6.24 pH	18.43 °C	1,270.2 µS/cm	0.10 mg/L	0.75 NTU	64.8 mV	15.55 ft	200.00 ml/min
2/1/2023 2:38 PM	30:00	6.22 pH	18.66 °C	1,257.1 µS/cm	0.11 mg/L	1.06 NTU	65.7 mV	15.55 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWC-15	Grab.

# Low-Flow Test Report:

Test Date / Time: 2/1/2023 11:55:09 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWC-16</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 23.06 ft</b> <b>Total Depth: 33.06 ft</b> <b>Initial Depth to Water: 13.25 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 28.06 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: 0.77 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966090</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Cloudy, 43 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
2/1/2023 11:55 AM	00:00	7.07 pH	16.74 °C	1,276.0 µS/cm	0.80 mg/L	2.10 NTU	3.4 mV	13.77 ft	200.00 ml/min
2/1/2023 12:00 PM	05:00	7.10 pH	17.47 °C	1,259.1 µS/cm	0.38 mg/L	0.67 NTU	-42.7 mV	13.82 ft	200.00 ml/min
2/1/2023 12:05 PM	10:00	7.13 pH	17.55 °C	1,243.6 µS/cm	0.35 mg/L	0.76 NTU	-75.2 mV	13.92 ft	200.00 ml/min
2/1/2023 12:10 PM	15:00	7.15 pH	17.89 °C	1,221.2 µS/cm	0.33 mg/L	0.80 NTU	-78.7 mV	13.95 ft	200.00 ml/min
2/1/2023 12:15 PM	20:00	7.15 pH	17.79 °C	1,216.2 µS/cm	0.30 mg/L	0.64 NTU	-77.9 mV	13.99 ft	200.00 ml/min
2/1/2023 12:20 PM	25:00	7.16 pH	17.71 °C	1,210.3 µS/cm	0.33 mg/L	0.66 NTU	-50.9 mV	14.02 ft	200.00 ml/min
2/1/2023 12:25 PM	30:00	7.15 pH	17.73 °C	1,185.4 µS/cm	0.35 mg/L	0.61 NTU	-76.2 mV	14.02 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWC-16	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/30/2023 2:50:46 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWC-17</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 17.79 ft</b> <b>Total Depth: 27.79 ft</b> <b>Initial Depth to Water: 17.61 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 22.79 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: 0.34 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966090</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Cloudy, 50 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
1/30/2023 2:50 PM	00:00	6.54 pH	17.96 °C	1,602.0 µS/cm	3.64 mg/L	16.80 NTU	151.1 mV	17.75 ft	200.00 ml/min
1/30/2023 2:55 PM	05:00	6.49 pH	18.42 °C	1,578.2 µS/cm	1.59 mg/L	17.40 NTU	79.0 mV	17.89 ft	200.00 ml/min
1/30/2023 3:00 PM	10:00	6.46 pH	18.56 °C	1,618.1 µS/cm	0.87 mg/L	13.60 NTU	59.6 mV	17.89 ft	200.00 ml/min
1/30/2023 3:05 PM	15:00	6.46 pH	18.53 °C	1,630.1 µS/cm	0.53 mg/L	8.74 NTU	52.4 mV	17.92 ft	200.00 ml/min
1/30/2023 3:10 PM	20:00	6.46 pH	18.51 °C	1,629.5 µS/cm	0.71 mg/L	6.42 NTU	49.3 mV	17.92 ft	200.00 ml/min
1/30/2023 3:15 PM	25:00	6.45 pH	18.55 °C	1,403.2 µS/cm	0.48 mg/L	4.68 NTU	46.0 mV	17.95 ft	200.00 ml/min
1/30/2023 3:20 PM	30:00	6.45 pH	18.56 °C	1,646.0 µS/cm	0.77 mg/L	3.40 NTU	45.3 mV	17.95 ft	200.00 ml/min
1/30/2023 3:25 PM	35:00	6.45 pH	18.56 °C	1,654.5 µS/cm	0.24 mg/L	3.30 NTU	44.1 mV	17.95 ft	200.00 ml/min
1/30/2023 3:30 PM	40:00	6.44 pH	18.60 °C	1,674.6 µS/cm	0.51 mg/L	2.31 NTU	42.8 mV	17.95 ft	200.00 ml/min
1/30/2023 3:35 PM	45:00	6.43 pH	18.59 °C	1,656.1 µS/cm	0.30 mg/L	2.06 NTU	42.1 mV	17.95 ft	200.00 ml/min
1/30/2023 3:40 PM	50:00	6.44 pH	18.51 °C	1,695.6 µS/cm	0.22 mg/L	1.61 NTU	58.1 mV	17.95 ft	200.00 ml/min
1/30/2023 3:45 PM	55:00	6.44 pH	18.57 °C	1,699.5 µS/cm	0.20 mg/L	1.39 NTU	59.3 mV	17.95 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWC-17	Grab.

# Low-Flow Test Report:

Test Date / Time: 2/1/2023 10:19:59 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWC-18</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 17.71 ft</b> <b>Total Depth: 27.71 ft</b> <b>Initial Depth to Water: 18.31 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 21.71 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: 0.23 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966090</b>
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## Test Notes:

Five bottles: Full app. III and IV.

## Weather Conditions:

Cloudy, 46 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
2/1/2023 10:19 AM	00:00	4.64 pH	15.40 °C	1,603.3 µS/cm	1.68 mg/L	14.30 NTU	233.2 mV	18.37 ft	200.00 ml/min
2/1/2023 10:24 AM	05:00	4.63 pH	15.65 °C	1,539.3 µS/cm	1.56 mg/L	5.57 NTU	224.8 mV	18.54 ft	200.00 ml/min
2/1/2023 10:29 AM	10:00	4.64 pH	15.65 °C	1,552.3 µS/cm	1.51 mg/L	7.18 NTU	218.9 mV	18.54 ft	200.00 ml/min
2/1/2023 10:34 AM	15:00	4.65 pH	15.69 °C	1,498.4 µS/cm	1.45 mg/L	5.31 NTU	213.8 mV	18.54 ft	200.00 ml/min
2/1/2023 10:39 AM	20:00	4.66 pH	15.98 °C	1,570.2 µS/cm	1.26 mg/L	5.66 NTU	206.8 mV	18.54 ft	200.00 ml/min
2/1/2023 10:44 AM	25:00	4.66 pH	16.01 °C	1,625.7 µS/cm	1.22 mg/L	4.97 NTU	210.5 mV	18.54 ft	200.00 ml/min
2/1/2023 10:49 AM	30:00	4.66 pH	15.80 °C	1,568.1 µS/cm	1.20 mg/L	4.34 NTU	208.2 mV	18.54 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HGWC-18	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/27/2023 3:31:37 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-21D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 41.88 ft</b> <b>Total Depth: 51.88 ft</b> <b>Initial Depth to Water: 16.8 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 53.21 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: 0.45 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:

Cloudy, 46 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
1/27/2023 3:31 PM	00:00	7.05 pH	17.27 °C	2,142.0 µS/cm	0.30 mg/L	34.60 NTU	-111.3 mV	17.25 ft	200.00 ml/min
1/27/2023 3:36 PM	05:00	7.11 pH	17.18 °C	2,129.6 µS/cm	0.16 mg/L	42.40 NTU	-132.9 mV	17.25 ft	200.00 ml/min
1/27/2023 3:41 PM	10:00	7.16 pH	17.04 °C	2,127.1 µS/cm	0.11 mg/L	38.50 NTU	-132.8 mV	17.25 ft	200.00 ml/min
1/27/2023 3:46 PM	15:00	7.19 pH	17.09 °C	2,133.2 µS/cm	0.11 mg/L	34.70 NTU	-132.0 mV	17.25 ft	200.00 ml/min
1/27/2023 3:51 PM	20:00	7.21 pH	17.01 °C	2,131.3 µS/cm	0.11 mg/L	29.50 NTU	-130.7 mV	17.25 ft	200.00 ml/min
1/27/2023 3:56 PM	25:00	7.23 pH	17.00 °C	2,128.9 µS/cm	0.11 mg/L	25.70 NTU	-107.1 mV	17.25 ft	200.00 ml/min
1/27/2023 4:01 PM	30:00	7.25 pH	17.00 °C	2,127.9 µS/cm	0.11 mg/L	21.90 NTU	-105.6 mV	17.25 ft	200.00 ml/min
1/27/2023 4:06 PM	35:00	7.26 pH	17.00 °C	2,129.1 µS/cm	0.11 mg/L	20.30 NTU	-104.8 mV	17.25 ft	200.00 ml/min
1/27/2023 4:11 PM	40:00	7.27 pH	17.11 °C	2,124.6 µS/cm	0.12 mg/L	17.40 NTU	-125.1 mV	17.25 ft	200.00 ml/min
1/27/2023 4:16 PM	45:00	7.28 pH	17.07 °C	2,125.5 µS/cm	0.11 mg/L	14.10 NTU	-124.5 mV	17.25 ft	200.00 ml/min
1/27/2023 4:21 PM	50:00	7.28 pH	17.07 °C	2,122.0 µS/cm	0.11 mg/L	12.20 NTU	-103.1 mV	17.25 ft	200.00 ml/min
1/27/2023 4:26 PM	55:00	7.29 pH	17.09 °C	2,125.4 µS/cm	0.11 mg/L	11.62 NTU	-102.9 mV	17.25 ft	200.00 ml/min

1/27/2023 4:31 PM	01:00:00	7.29 pH	17.06 °C	2,125.1 μS/cm	0.11 mg/L	10.14 NTU	-122.4 mV	17.25 ft	200.00 ml/min
1/27/2023 4:36 PM	01:05:00	7.30 pH	17.00 °C	2,124.5 μS/cm	0.11 mg/L	9.95 NTU	-102.2 mV	17.25 ft	200.00 ml/min
1/27/2023 4:41 PM	01:10:00	7.30 pH	17.04 °C	2,120.7 μS/cm	0.11 mg/L	8.14 NTU	-101.5 mV	17.25 ft	200.00 ml/min
1/27/2023 4:46 PM	01:15:00	7.30 pH	17.23 °C	2,115.0 μS/cm	0.11 mg/L	6.89 NTU	-101.5 mV	17.25 ft	200.00 ml/min
1/27/2023 4:51 PM	01:20:00	7.31 pH	17.05 °C	2,122.6 μS/cm	0.11 mg/L	6.24 NTU	-120.8 mV	17.25 ft	200.00 ml/min
1/27/2023 4:56 PM	01:25:00	7.31 pH	16.99 °C	2,122.3 μS/cm	0.12 mg/L	5.64 NTU	-120.3 mV	17.25 ft	200.00 ml/min
1/27/2023 5:01 PM	01:30:00	7.31 pH	17.09 °C	2,121.3 μS/cm	0.11 mg/L	4.98 NTU	-101.4 mV	17.25 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-21D	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/30/2023 5:10:05 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: MW-22</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 27.47 ft</b> <b>Total Depth: 37.47 ft</b> <b>Initial Depth to Water: 11.91 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 32.47 ft</b> <b>Estimated Total Volume Pumped: 9.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 8.33 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883533</b>
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## Test Notes:

Five bottles: Full App. III and IV.

## Weather Conditions:

Cloudy, 50 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
1/30/2023 5:10 PM	00:00	5.52 pH	17.42 °C	1,377.1 µS/cm	3.15 mg/L	2.52 NTU	177.9 mV	15.06 ft	250.00 ml/min
1/30/2023 5:15 PM	05:00	5.51 pH	17.47 °C	1,351.3 µS/cm	3.84 mg/L	1.75 NTU	240.8 mV	16.52 ft	250.00 ml/min
1/30/2023 5:20 PM	10:00	5.50 pH	17.45 °C	1,338.3 µS/cm	3.69 mg/L	1.44 NTU	183.1 mV	17.73 ft	250.00 ml/min
1/30/2023 5:25 PM	15:00	5.49 pH	17.47 °C	1,351.3 µS/cm	3.48 mg/L	1.26 NTU	240.5 mV	18.90 ft	250.00 ml/min
1/30/2023 5:30 PM	20:00	5.49 pH	17.09 °C	1,346.4 µS/cm	3.36 mg/L	0.92 NTU	182.8 mV	19.12 ft	100.00 ml/min
1/30/2023 5:35 PM	25:00	5.48 pH	16.88 °C	1,352.5 µS/cm	2.75 mg/L	1.16 NTU	241.5 mV	19.29 ft	100.00 ml/min
1/30/2023 5:40 PM	30:00	5.47 pH	16.92 °C	1,353.9 µS/cm	2.25 mg/L	0.98 NTU	238.4 mV	19.43 ft	100.00 ml/min
1/30/2023 5:45 PM	35:00	5.47 pH	16.88 °C	1,354.9 µS/cm	1.88 mg/L	0.83 NTU	239.1 mV	19.59 ft	100.00 ml/min
1/30/2023 5:50 PM	40:00	5.47 pH	16.95 °C	1,353.0 µS/cm	1.60 mg/L	0.92 NTU	181.2 mV	19.73 ft	100.00 ml/min
1/30/2023 5:55 PM	45:00	5.46 pH	16.96 °C	1,355.6 µS/cm	1.42 mg/L	0.93 NTU	246.1 mV	19.85 ft	100.00 ml/min
1/30/2023 6:00 PM	50:00	5.47 pH	16.96 °C	1,353.9 µS/cm	1.28 mg/L	1.14 NTU	176.5 mV	19.99 ft	100.00 ml/min
1/30/2023 6:05 PM	55:00	5.46 pH	16.94 °C	1,356.2 µS/cm	1.19 mg/L	1.04 NTU	240.4 mV	20.11 ft	100.00 ml/min
1/30/2023 6:10 PM	01:00:00	5.47 pH	16.96 °C	1,355.3 µS/cm	1.13 mg/L	1.01 NTU	179.9 mV	20.24 ft	100.00 ml/min

**Samples**

Sample ID:	Description:
HAM-MW-22	Grab.



# Low-Flow Test Report:

Test Date / Time: 2/1/2023 12:45:43 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: MW-23D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 52.24 ft</b> <b>Total Depth: 62.24 ft</b> <b>Initial Depth to Water: 16.35 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 57.24 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: 0.14 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883533</b>
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## Test Notes:

Five bottles: Full App. III and IV.

## 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	
2/1/2023 12:45 PM	00:00	6.70 pH	17.47 °C	1,735.4 µS/cm	0.31 mg/L	0.99 NTU	4.1 mV	16.48 ft	200.00 ml/min
2/1/2023 12:50 PM	05:00	6.72 pH	17.72 °C	1,737.6 µS/cm	0.20 mg/L	0.89 NTU	9.6 mV	16.48 ft	200.00 ml/min
2/1/2023 12:55 PM	10:00	6.70 pH	17.72 °C	1,751.0 µS/cm	0.16 mg/L	0.82 NTU	13.6 mV	16.48 ft	200.00 ml/min
2/1/2023 1:00 PM	15:00	6.69 pH	17.81 °C	1,750.4 µS/cm	0.13 mg/L	0.71 NTU	23.4 mV	16.49 ft	200.00 ml/min
2/1/2023 1:05 PM	20:00	6.69 pH	17.77 °C	1,755.0 µS/cm	0.12 mg/L	0.58 NTU	21.0 mV	16.49 ft	200.00 ml/min
2/1/2023 1:10 PM	25:00	6.69 pH	17.90 °C	1,752.4 µS/cm	0.10 mg/L	0.68 NTU	26.4 mV	16.49 ft	200.00 ml/min
2/1/2023 1:15 PM	30:00	6.69 pH	17.81 °C	1,753.5 µS/cm	0.09 mg/L	0.85 NTU	24.6 mV	16.49 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-23D	Grab.
HAM-AP-2-FD-02	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/27/2023 1:59:16 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-33</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 27.72 ft Total</b> <b>Depth: 37.72 ft</b> <b>Initial Depth to Water: 24.93 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 53.21 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: 0.12 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	+/- 5	
1/27/2023 1:59 PM	00:00	5.37 pH	18.30 °C	2,318.5 µS/cm	0.77 mg/L	8.25 NTU	176.8 mV	25.05 ft	200.00 ml/min
1/27/2023 2:04 PM	05:00	5.54 pH	18.43 °C	2,234.5 µS/cm	0.61 mg/L	4.22 NTU	192.7 mV	25.05 ft	200.00 ml/min
1/27/2023 2:09 PM	10:00	5.57 pH	18.45 °C	2,212.5 µS/cm	0.56 mg/L	3.88 NTU	172.7 mV	25.05 ft	200.00 ml/min
1/27/2023 2:14 PM	15:00	5.58 pH	18.25 °C	2,206.9 µS/cm	0.57 mg/L	2.44 NTU	158.7 mV	25.05 ft	200.00 ml/min
1/27/2023 2:19 PM	20:00	5.59 pH	18.34 °C	2,208.9 µS/cm	0.52 mg/L	1.59 NTU	148.2 mV	25.05 ft	200.00 ml/min
1/27/2023 2:24 PM	25:00	5.60 pH	18.21 °C	2,203.7 µS/cm	0.47 mg/L	1.25 NTU	139.7 mV	25.05 ft	200.00 ml/min
1/27/2023 2:29 PM	30:00	5.61 pH	18.39 °C	2,199.2 µS/cm	0.42 mg/L	1.38 NTU	133.3 mV	25.05 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-33	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/30/2023 12:25:24 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: MW-34D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 63.68 ft</b> <b>Total Depth: 73.68 ft</b> <b>Initial Depth to Water: 28.98 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 68.98 ft</b> <b>Estimated Total Volume Pumped: 3.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min Final Draw Down: 0.04 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966090</b>
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## Test Notes:

Five bottles; Full app. III and IV.

## Weather Conditions:

Rain, 50 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
1/30/2023 12:25 PM	00:00	7.06 pH	17.29 °C	2,548.9 µS/cm	2.28 mg/L	5.87 NTU	-18.4 mV	28.92 ft	100.00 ml/min
1/30/2023 12:30 PM	05:00	7.03 pH	17.85 °C	2,569.6 µS/cm	1.09 mg/L	6.13 NTU	-30.1 mV	28.99 ft	100.00 ml/min
1/30/2023 12:35 PM	10:00	7.03 pH	18.11 °C	2,558.8 µS/cm	0.92 mg/L	4.90 NTU	-32.0 mV	29.02 ft	100.00 ml/min
1/30/2023 12:40 PM	15:00	6.90 pH	18.30 °C	2,569.5 µS/cm	1.11 mg/L	2.33 NTU	-14.3 mV	29.02 ft	100.00 ml/min
1/30/2023 12:45 PM	20:00	6.88 pH	18.29 °C	2,555.6 µS/cm	1.22 mg/L	1.20 NTU	-13.8 mV	29.02 ft	100.00 ml/min
1/30/2023 12:50 PM	25:00	6.94 pH	18.51 °C	2,574.7 µS/cm	0.83 mg/L	2.20 NTU	-7.6 mV	29.02 ft	100.00 ml/min
1/30/2023 12:55 PM	30:00	6.98 pH	18.51 °C	2,583.3 µS/cm	0.90 mg/L	3.24 NTU	-0.9 mV	29.02 ft	100.00 ml/min
1/30/2023 1:00 PM	35:00	6.99 pH	18.42 °C	2,625.3 µS/cm	0.97 mg/L	3.88 NTU	3.8 mV	29.02 ft	100.00 ml/min

## Samples

Sample ID:	Description:
MW-34D	Grab sample.

# Low-Flow Test Report:

Test Date / Time: 2/1/2023 9:27:36 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-35</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.52 ft</b> <b>Total Depth: 23.52 ft</b> <b>Initial Depth to Water: 7.6 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.52 ft</b> <b>Estimated Total Volume Pumped: 3.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 1.3 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:

Cloudy, 50 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
2/1/2023 9:27 AM	00:00	5.08 pH	13.08 °C	2,513.4 µS/cm	2.82 mg/L	9.20 NTU	308.7 mV	8.40 ft	100.00 ml/min
2/1/2023 9:32 AM	05:00	4.93 pH	13.83 °C	2,523.2 µS/cm	2.67 mg/L	8.22 NTU	473.3 mV	8.63 ft	100.00 ml/min
2/1/2023 9:37 AM	10:00	4.91 pH	14.04 °C	2,494.7 µS/cm	2.59 mg/L	8.00 NTU	374.7 mV	8.70 ft	100.00 ml/min
2/1/2023 9:42 AM	15:00	4.90 pH	14.17 °C	2,497.7 µS/cm	2.55 mg/L	7.04 NTU	382.7 mV	8.80 ft	100.00 ml/min
2/1/2023 9:47 AM	20:00	4.89 pH	14.22 °C	2,505.0 µS/cm	2.46 mg/L	6.62 NTU	521.6 mV	8.85 ft	100.00 ml/min
2/1/2023 9:52 AM	25:00	4.89 pH	14.42 °C	2,498.5 µS/cm	2.43 mg/L	5.25 NTU	522.1 mV	8.90 ft	100.00 ml/min
2/1/2023 9:57 AM	30:00	4.89 pH	14.58 °C	2,484.1 µS/cm	2.37 mg/L	4.89 NTU	387.8 mV	8.90 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-35	Grab.

# Low-Flow Test Report:

Test Date / Time: 1/30/2023 12:31:44 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: MW-37D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 66.63 ft</b> <b>Total Depth: 76.63 ft</b> <b>Initial Depth to Water: 16.64 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 71.63 ft</b> <b>Estimated Total Volume Pumped: 42.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 30.98 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883533</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	
1/30/2023 12:31 PM	00:00	7.51 pH	16.91 °C	621.16 µS/cm	1.10 mg/L	4.65 NTU	1.7 mV	18.68 ft	200.00 ml/min
1/30/2023 12:36 PM	05:00	7.52 pH	17.01 °C	611.01 µS/cm	0.90 mg/L	2.02 NTU	11.6 mV	20.50 ft	200.00 ml/min
1/30/2023 12:41 PM	10:00	7.53 pH	17.05 °C	607.62 µS/cm	0.74 mg/L	1.60 NTU	11.6 mV	21.47 ft	200.00 ml/min
1/30/2023 12:46 PM	15:00	7.53 pH	17.10 °C	603.01 µS/cm	0.64 mg/L	1.62 NTU	11.0 mV	22.62 ft	200.00 ml/min
1/30/2023 12:51 PM	20:00	7.53 pH	17.12 °C	599.99 µS/cm	0.58 mg/L	1.45 NTU	10.1 mV	23.77 ft	200.00 ml/min
1/30/2023 12:56 PM	25:00	7.53 pH	17.18 °C	597.42 µS/cm	0.52 mg/L	1.39 NTU	8.9 mV	25.01 ft	200.00 ml/min
1/30/2023 1:01 PM	30:00	7.53 pH	17.18 °C	599.35 µS/cm	0.45 mg/L	1.36 NTU	7.1 mV	26.01 ft	200.00 ml/min
1/30/2023 1:06 PM	35:00	7.54 pH	17.18 °C	598.08 µS/cm	0.43 mg/L	1.32 NTU	4.8 mV	27.10 ft	200.00 ml/min
1/30/2023 1:11 PM	40:00	7.53 pH	17.22 °C	597.70 µS/cm	0.39 mg/L	1.44 NTU	0.1 mV	28.13 ft	200.00 ml/min
1/30/2023 1:16 PM	45:00	7.53 pH	17.23 °C	598.26 µS/cm	0.36 mg/L	1.20 NTU	-5.0 mV	29.01 ft	200.00 ml/min
1/30/2023 1:21 PM	50:00	7.53 pH	17.21 °C	596.55 µS/cm	0.34 mg/L	1.29 NTU	-30.3 mV	30.05 ft	200.00 ml/min
1/30/2023 1:26 PM	55:00	7.53 pH	17.23 °C	596.70 µS/cm	0.31 mg/L	1.64 NTU	-15.7 mV	30.91 ft	200.00 ml/min
1/30/2023 1:31 PM	01:00:00	7.53 pH	17.23 °C	595.28 µS/cm	0.30 mg/L	1.22 NTU	-42.7 mV	31.76 ft	200.00 ml/min

1/30/2023 1:36 PM	01:05:00	7.53 pH	17.28 °C	594.87 µS/cm	0.29 mg/L	1.41 NTU	-27.9 mV	32.53 ft	200.00 ml/min
1/30/2023 1:41 PM	01:10:00	7.53 pH	17.30 °C	594.85 µS/cm	0.27 mg/L	1.19 NTU	-53.6 mV	33.32 ft	200.00 ml/min
1/30/2023 1:46 PM	01:15:00	7.53 pH	17.31 °C	595.12 µS/cm	0.26 mg/L	1.46 NTU	-36.7 mV	34.21 ft	200.00 ml/min
1/30/2023 1:51 PM	01:20:00	7.53 pH	17.32 °C	594.85 µS/cm	0.26 mg/L	1.50 NTU	-62.3 mV	34.93 ft	200.00 ml/min
1/30/2023 1:56 PM	01:25:00	7.53 pH	17.36 °C	594.66 µS/cm	0.25 mg/L	1.62 NTU	-45.5 mV	35.65 ft	200.00 ml/min
1/30/2023 2:01 PM	01:30:00	7.53 pH	17.34 °C	594.39 µS/cm	0.24 mg/L	1.79 NTU	-69.1 mV	36.38 ft	200.00 ml/min
1/30/2023 2:06 PM	01:35:00	7.53 pH	17.36 °C	594.14 µS/cm	0.24 mg/L	1.79 NTU	-53.4 mV	37.01 ft	200.00 ml/min
1/30/2023 2:11 PM	01:40:00	7.53 pH	17.31 °C	594.46 µS/cm	0.23 mg/L	1.76 NTU	-57.4 mV	37.68 ft	200.00 ml/min
1/30/2023 2:16 PM	01:45:00	7.53 pH	17.30 °C	593.82 µS/cm	0.23 mg/L	1.79 NTU	-61.0 mV	38.31 ft	200.00 ml/min
1/30/2023 2:21 PM	01:50:00	7.53 pH	17.27 °C	593.86 µS/cm	0.23 mg/L	2.03 NTU	-82.1 mV	38.95 ft	200.00 ml/min
1/30/2023 2:26 PM	01:55:00	7.53 pH	17.28 °C	594.22 µS/cm	0.23 mg/L	1.40 NTU	-67.9 mV	39.53 ft	200.00 ml/min
1/30/2023 2:31 PM	02:00:00	7.53 pH	17.28 °C	593.11 µS/cm	0.24 mg/L	1.28 NTU	-88.0 mV	40.14 ft	200.00 ml/min
1/30/2023 2:36 PM	02:05:00	7.53 pH	17.23 °C	593.03 µS/cm	0.23 mg/L	1.65 NTU	-74.5 mV	40.75 ft	200.00 ml/min
1/30/2023 2:41 PM	02:10:00	7.53 pH	17.25 °C	593.38 µS/cm	0.24 mg/L	1.54 NTU	-77.2 mV	41.28 ft	200.00 ml/min
1/30/2023 2:46 PM	02:15:00	7.53 pH	17.28 °C	592.81 µS/cm	0.24 mg/L	1.36 NTU	-80.0 mV	41.84 ft	200.00 ml/min
1/30/2023 2:51 PM	02:20:00	7.54 pH	17.28 °C	593.92 µS/cm	0.25 mg/L	1.45 NTU	-82.8 mV	42.38 ft	200.00 ml/min
1/30/2023 2:56 PM	02:25:00	7.54 pH	17.29 °C	594.42 µS/cm	0.25 mg/L	1.23 NTU	-98.9 mV	42.90 ft	200.00 ml/min
1/30/2023 3:01 PM	02:30:00	7.54 pH	17.24 °C	594.04 µS/cm	0.26 mg/L	1.36 NTU	-86.7 mV	43.40 ft	200.00 ml/min
1/30/2023 3:06 PM	02:35:00	7.54 pH	17.23 °C	596.19 µS/cm	0.25 mg/L	1.31 NTU	-89.1 mV	43.93 ft	200.00 ml/min
1/30/2023 3:11 PM	02:40:00	7.54 pH	17.27 °C	596.94 µS/cm	0.26 mg/L	1.41 NTU	-90.5 mV	44.42 ft	200.00 ml/min
1/30/2023 3:16 PM	02:45:00	7.54 pH	17.21 °C	596.24 µS/cm	0.26 mg/L	1.31 NTU	-92.0 mV	44.88 ft	200.00 ml/min
1/30/2023 3:21 PM	02:50:00	7.54 pH	17.23 °C	598.54 µS/cm	0.27 mg/L	1.41 NTU	-93.2 mV	45.36 ft	200.00 ml/min
1/30/2023 3:26 PM	02:55:00	7.54 pH	17.27 °C	596.84 µS/cm	0.26 mg/L	1.51 NTU	-107.6 mV	45.80 ft	200.00 ml/min
1/30/2023 3:31 PM	03:00:00	7.54 pH	17.21 °C	602.08 µS/cm	0.27 mg/L	1.57 NTU	-96.6 mV	46.22 ft	200.00 ml/min
1/30/2023 3:36 PM	03:05:00	7.55 pH	17.24 °C	600.66 µS/cm	0.26 mg/L	1.49 NTU	-98.5 mV	46.63 ft	200.00 ml/min
1/30/2023 3:41 PM	03:10:00	7.55 pH	17.23 °C	601.84 µS/cm	0.26 mg/L	1.35 NTU	-111.6 mV	47.05 ft	200.00 ml/min
1/30/2023 3:46 PM	03:15:00	7.55 pH	17.24 °C	604.04 µS/cm	0.27 mg/L	1.51 NTU	-101.8 mV	47.45 ft	200.00 ml/min
1/30/2023 3:51 PM	03:20:00	7.55 pH	17.23 °C	611.88 µS/cm	0.26 mg/L	1.40 NTU	-103.1 mV	47.81 ft	200.00 ml/min
1/30/2023 3:56 PM	03:25:00	7.55 pH	16.96 °C	614.87 µS/cm	0.26 mg/L	1.37 NTU	-103.3 mV	47.78 ft	200.00 ml/min

1/30/2023 4:01 PM	03:30:00	7.56 pH	16.92 °C	594.32 µS/cm	0.28 mg/L	1.69 NTU	-116.6 mV	47.71 ft	200.00 ml/min
1/30/2023 4:06 PM	03:35:00	7.56 pH	16.91 °C	594.26 µS/cm	0.27 mg/L	1.44 NTU	-109.7 mV	47.62 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-37D	Grab.

# Low-Flow Test Report:

Test Date / Time: 2/1/2023 10:58:11 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-51</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 18.9 ft</b> <b>Total Depth: 28.9 ft</b> <b>Initial Depth to Water: 8.12 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 23.9 ft</b> <b>Estimated Total Volume Pumped: 3.5 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.78 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Three bottles: Full app. III and IV.

## Weather Conditions:

Cloudy, 42 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
2/1/2023 10:58 AM	00:00	6.35 pH	13.63 °C	2,382.1 µS/cm	2.39 mg/L	6.89 NTU	257.8 mV	8.75 ft	100.00 ml/min
2/1/2023 11:03 AM	05:00	6.37 pH	13.85 °C	2,392.8 µS/cm	2.32 mg/L	5.73 NTU	250.7 mV	8.80 ft	100.00 ml/min
2/1/2023 11:08 AM	10:00	6.39 pH	14.04 °C	2,380.3 µS/cm	2.24 mg/L	6.15 NTU	236.5 mV	8.85 ft	100.00 ml/min
2/1/2023 11:13 AM	15:00	6.39 pH	14.17 °C	2,362.5 µS/cm	2.17 mg/L	4.73 NTU	158.8 mV	8.87 ft	100.00 ml/min
2/1/2023 11:18 AM	20:00	6.39 pH	14.22 °C	2,374.6 µS/cm	2.17 mg/L	3.99 NTU	148.1 mV	8.90 ft	100.00 ml/min
2/1/2023 11:23 AM	25:00	6.37 pH	14.38 °C	2,375.8 µS/cm	2.10 mg/L	3.91 NTU	194.9 mV	8.90 ft	100.00 ml/min
2/1/2023 11:28 AM	30:00	6.37 pH	14.40 °C	2,366.8 µS/cm	2.13 mg/L	4.51 NTU	188.6 mV	8.90 ft	100.00 ml/min

## Samples

Sample ID:	Description:
MW-51	Grab.



August 2023

# Low-Flow Test Report:

Test Date / Time: 8/8/2023 10:12:18 AM

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: 22.49 ft</b> <b>Total Depth: 32.49 ft</b> <b>Initial Depth to Water: 22 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 27.49 m</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: 0.56 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 72 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/8/2023 10:12 AM	00:00	7.03 pH	20.35 °C	726.31 µS/cm	3.03 mg/L	4.07 NTU	-48.3 mV	22.17 ft	200.00 ml/min
8/8/2023 10:17 AM	05:00	7.04 pH	18.79 °C	756.63 µS/cm	0.48 mg/L	2.64 NTU	-60.6 mV	22.48 ft	200.00 ml/min
8/8/2023 10:22 AM	10:00	7.04 pH	18.52 °C	769.61 µS/cm	0.34 mg/L	0.78 NTU	-94.5 mV	22.52 ft	200.00 ml/min
8/8/2023 10:27 AM	15:00	7.05 pH	18.43 °C	768.89 µS/cm	0.34 mg/L	0.52 NTU	-52.6 mV	22.53 ft	200.00 ml/min
8/8/2023 10:32 AM	20:00	7.05 pH	18.34 °C	760.67 µS/cm	0.36 mg/L	0.09 NTU	-81.3 mV	22.56 ft	200.00 ml/min
8/8/2023 10:37 AM	25:00	7.05 pH	18.39 °C	755.28 µS/cm	0.33 mg/L	0.14 NTU	-75.5 mV	22.56 ft	200.00 ml/min
8/8/2023 10:42 AM	30:00	7.05 pH	18.51 °C	749.51 µS/cm	0.29 mg/L	0.10 NTU	-40.2 mV	22.56 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-1	Grab

# Low-Flow Test Report:

Test Date / Time: 8/8/2023 3:33:05 PM

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: 27.95 ft</b> <b>Total Depth: 28.45 ft</b> <b>Initial Depth to Water: 14.84 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 22.95 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: 0.06 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Cloudy, 72 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/8/2023 3:33 PM	00:00	5.07 pH	19.68 °C	270.46 µS/cm	1.45 mg/L	98.70 NTU	150.9 mV	14.90 ft	200.00 ml/min
8/8/2023 3:38 PM	05:00	5.04 pH	19.46 °C	277.38 µS/cm	0.35 mg/L	33.10 NTU	189.6 mV	14.90 ft	200.00 ml/min
8/8/2023 3:43 PM	10:00	5.03 pH	19.43 °C	279.40 µS/cm	0.21 mg/L	9.07 NTU	256.0 mV	14.90 ft	200.00 ml/min
8/8/2023 3:48 PM	15:00	5.02 pH	19.42 °C	281.09 µS/cm	0.18 mg/L	4.88 NTU	253.8 mV	14.90 ft	200.00 ml/min
8/8/2023 3:53 PM	20:00	5.01 pH	19.31 °C	281.23 µS/cm	0.15 mg/L	4.82 NTU	252.8 mV	14.90 ft	200.00 ml/min
8/8/2023 3:58 PM	25:00	5.02 pH	19.32 °C	281.85 µS/cm	0.17 mg/L	2.96 NTU	250.1 mV	14.90 ft	200.00 ml/min
8/8/2023 4:03 PM	30:00	5.01 pH	19.30 °C	282.33 µS/cm	0.16 mg/L	1.97 NTU	248.5 mV	14.90 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-2	Grab

# Low-Flow Test Report:

Test Date / Time: 8/8/2023 2:10:57 PM

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: 34.51 ft</b> <b>Total Depth: 45.20 ft</b> <b>Initial Depth to Water: 14.55 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 39.51 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: 0.01 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 72 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/8/2023 2:10 PM	00:00	7.36 pH	19.82 °C	464.66 µS/cm	0.47 mg/L	17.90 NTU	-54.2 mV	14.56 ft	200.00 ml/min
8/8/2023 2:15 PM	05:00	7.39 pH	19.66 °C	466.57 µS/cm	0.36 mg/L	10.73 NTU	-58.7 mV	14.56 ft	200.00 ml/min
8/8/2023 2:20 PM	10:00	7.41 pH	19.59 °C	465.96 µS/cm	0.19 mg/L	6.84 NTU	-90.3 mV	14.56 ft	200.00 ml/min
8/8/2023 2:25 PM	15:00	7.41 pH	19.64 °C	465.94 µS/cm	0.20 mg/L	5.85 NTU	-90.5 mV	14.56 ft	200.00 ml/min
8/8/2023 2:30 PM	20:00	7.41 pH	19.60 °C	463.55 µS/cm	0.17 mg/L	4.56 NTU	-90.3 mV	14.56 ft	200.00 ml/min
8/8/2023 2:35 PM	25:00	7.41 pH	19.55 °C	465.16 µS/cm	0.17 mg/L	3.43 NTU	-89.9 mV	14.56 ft	200.00 ml/min
8/8/2023 2:40 PM	30:00	7.42 pH	19.41 °C	464.71 µS/cm	0.19 mg/L	1.58 NTU	-89.7 mV	14.56 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-3	Grab

# Low-Flow Test Report:

Test Date / Time: 8/8/2023 11:37:02 AM

Project: GP-Plant Hammond Operator

Name: Connor Cain

<b>Location Name: HGWA-4</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 15.76 ft</b> <b>Total Depth: 24.81ft</b> <b>Initial Depth to Water: 13.69 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 20.76 ft</b> <b>Estimated Total Volume Pumped: 16 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.27 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 72 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/8/2023 11:37 AM	00:00	5.56 pH	22.43 °C	149.85 µS/cm	3.08 mg/L	9.77 NTU	102.6 mV	13.94 ft	200.00 ml/min
8/8/2023 11:42 AM	05:00	5.54 pH	21.51 °C	138.01 µS/cm	2.45 mg/L	12.70 NTU	86.3 mV	13.96 ft	200.00 ml/min
8/8/2023 11:47 AM	10:00	5.57 pH	21.37 °C	139.52 µS/cm	1.69 mg/L	9.75 NTU	79.7 mV	13.96 ft	200.00 ml/min
8/8/2023 11:52 AM	15:00	5.62 pH	21.24 °C	144.24 µS/cm	1.67 mg/L	4.12 NTU	76.8 mV	13.96 ft	200.00 ml/min
8/8/2023 11:57 AM	20:00	5.62 pH	21.15 °C	148.88 µS/cm	1.65 mg/L	2.43 NTU	76.1 mV	13.96 ft	200.00 ml/min
8/8/2023 12:02 PM	25:00	5.68 pH	21.06 °C	155.42 µS/cm	1.68 mg/L	2.51 NTU	72.7 mV	13.96 ft	200.00 ml/min
8/8/2023 12:07 PM	30:00	5.74 pH	21.02 °C	160.78 µS/cm	1.68 mg/L	1.36 NTU	72.9 mV	13.96 ft	200.00 ml/min
8/8/2023 12:12 PM	35:00	5.78 pH	21.03 °C	165.45 µS/cm	1.81 mg/L	0.98 NTU	72.2 mV	13.96 ft	200.00 ml/min
8/8/2023 12:17 PM	40:00	5.81 pH	21.03 °C	171.55 µS/cm	1.57 mg/L	1.08 NTU	68.6 mV	13.96 ft	200.00 ml/min
8/8/2023 12:22 PM	45:00	5.85 pH	21.08 °C	178.82 µS/cm	1.64 mg/L	1.02 NTU	66.9 mV	13.96 ft	200.00 ml/min
8/8/2023 12:27 PM	50:00	5.89 pH	21.19 °C	185.94 µS/cm	1.52 mg/L	0.94 NTU	65.8 mV	13.96 ft	200.00 ml/min
8/8/2023 12:32 PM	55:00	5.94 pH	21.13 °C	193.30 µS/cm	1.67 mg/L	1.10 NTU	63.9 mV	13.96 ft	200.00 ml/min
8/8/2023 12:37 PM	01:00:00	5.97 pH	21.06 °C	200.51 µS/cm	1.58 mg/L	1.07 NTU	63.8 mV	13.96 ft	200.00 ml/min

8/8/2023 12:42 PM	01:05:00	5.97 pH	20.97 °C	207.55 µS/cm	1.40 mg/L	1.12 NTU	67.0 mV	13.96 ft	200.00 ml/min
8/8/2023 12:47 PM	01:10:00	6.02 pH	21.05 °C	213.21 µS/cm	1.45 mg/L	0.97 NTU	65.9 mV	13.96 ft	200.00 ml/min
8/8/2023 12:52 PM	01:15:00	6.03 pH	21.05 °C	215.92 µS/cm	1.40 mg/L	0.99 NTU	65.4 mV	13.96 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-4	Grab

# Low-Flow Test Report:

Test Date / Time: 8/8/2023 2:13:24 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWA-5</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 18.72 ft</b> <b>Total Depth: 27.55 ft</b> <b>Initial Depth to Water: 7.12 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 23.72 ft</b> <b>Estimated Total Volume Pumped: 11 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min Final Draw Down: 0.93 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Cloudy, 82 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/8/2023 2:13 PM	00:00	6.25 pH	21.51 °C	107.29 µS/cm	1.56 mg/L	128.00 NTU	87.1 mV	7.60 ft	200.00 ml/min
8/8/2023 2:18 PM	05:00	6.28 pH	20.48 °C	159.53 µS/cm	0.87 mg/L	32.10 NTU	32.6 mV	7.75 ft	200.00 ml/min
8/8/2023 2:23 PM	10:00	6.37 pH	20.25 °C	183.34 µS/cm	0.64 mg/L	21.40 NTU	31.1 mV	7.85 ft	200.00 ml/min
8/8/2023 2:28 PM	15:00	6.41 pH	20.17 °C	194.09 µS/cm	0.51 mg/L	12.40 NTU	21.6 mV	7.90 ft	200.00 ml/min
8/8/2023 2:33 PM	20:00	6.44 pH	20.06 °C	198.58 µS/cm	0.41 mg/L	12.16 NTU	24.8 mV	7.95 ft	200.00 ml/min
8/8/2023 2:38 PM	25:00	6.46 pH	19.95 °C	204.70 µS/cm	0.37 mg/L	11.53 NTU	17.9 mV	8.00 ft	200.00 ml/min
8/8/2023 2:43 PM	30:00	6.47 pH	19.91 °C	209.22 µS/cm	0.38 mg/L	10.20 NTU	17.9 mV	8.05 ft	200.00 ml/min
8/8/2023 2:48 PM	35:00	6.47 pH	19.89 °C	207.95 µS/cm	0.33 mg/L	7.92 NTU	18.0 mV	8.05 ft	200.00 ml/min
8/8/2023 2:53 PM	40:00	6.49 pH	19.90 °C	209.98 µS/cm	0.34 mg/L	5.49 NTU	20.1 mV	8.05 ft	200.00 ml/min
8/8/2023 2:58 PM	45:00	6.50 pH	19.82 °C	212.86 µS/cm	0.39 mg/L	4.72 NTU	19.3 mV	8.05 ft	200.00 ml/min

## Samples

Sample ID:	Description:
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HAM-HGWA-5

Grab

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# Low-Flow Test Report:

Test Date / Time: 8/8/2023 3:36:51 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWA-6</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 39.66 ft</b> <b>Total Depth: 50.39 ft</b> <b>Initial Depth to Water: 7.65 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 44.66 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: 1.47 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Cloudy, 80 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/8/2023 3:36 PM	00:00	7.57 pH	20.84 °C	361.59 µS/cm	0.98 mg/L	2.35 NTU	-66.9 mV	8.40 ft	200.00 ml/min
8/8/2023 3:41 PM	05:00	7.60 pH	19.27 °C	365.04 µS/cm	1.07 mg/L	1.20 NTU	-59.0 mV	8.80 ft	200.00 ml/min
8/8/2023 3:46 PM	10:00	7.60 pH	19.12 °C	370.35 µS/cm	1.01 mg/L	0.75 NTU	-72.7 mV	8.94 ft	200.00 ml/min
8/8/2023 3:51 PM	15:00	7.61 pH	19.01 °C	367.72 µS/cm	0.64 mg/L	1.14 NTU	-71.5 mV	9.00 ft	200.00 ml/min
8/8/2023 3:56 PM	20:00	7.61 pH	18.97 °C	368.47 µS/cm	0.48 mg/L	1.21 NTU	-53.6 mV	9.08 ft	200.00 ml/min
8/8/2023 4:01 PM	25:00	7.61 pH	18.88 °C	369.75 µS/cm	0.42 mg/L	0.81 NTU	-56.8 mV	9.12 ft	200.00 ml/min
8/8/2023 4:06 PM	30:00	7.60 pH	18.79 °C	370.02 µS/cm	0.36 mg/L	0.60 NTU	-56.5 mV	9.12 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-6	Grab

# Low-Flow Test Report:

Test Date / Time: 8/8/2023 12:11:35 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWA-42D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 58.03 ft</b> <b>Total Depth: 67.85 ft</b> <b>Initial Depth to Water: 14.32 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 63.03 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: 2.18 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Seven bottles: Full app.III and IV and Major Ions.

## Weather Conditions:

Overcast, 82 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	
8/8/2023 12:11 PM	00:00	7.78 pH	21.74 °C	295.14 µS/cm	0.58 mg/L	94.80 NTU	-90.6 mV	15.51 ft	200.00 ml/min
8/8/2023 12:16 PM	05:00	7.75 pH	20.97 °C	296.18 µS/cm	0.34 mg/L	46.90 NTU	-94.2 mV	15.90 ft	200.00 ml/min
8/8/2023 12:21 PM	10:00	7.73 pH	20.76 °C	294.53 µS/cm	0.34 mg/L	19.80 NTU	-110.6 mV	16.30 ft	200.00 ml/min
8/8/2023 12:26 PM	15:00	7.71 pH	20.59 °C	294.22 µS/cm	0.39 mg/L	15.10 NTU	-106.5 mV	16.40 ft	200.00 ml/min
8/8/2023 12:31 PM	20:00	7.71 pH	20.57 °C	294.46 µS/cm	0.36 mg/L	8.97 NTU	-81.8 mV	16.50 ft	200.00 ml/min
8/8/2023 12:36 PM	25:00	7.72 pH	20.47 °C	295.08 µS/cm	0.33 mg/L	8.09 NTU	-111.2 mV	16.50 ft	200.00 ml/min
8/8/2023 12:41 PM	30:00	7.72 pH	20.39 °C	295.83 µS/cm	0.32 mg/L	5.67 NTU	-113.2 mV	16.50 ft	200.00 ml/min
8/8/2023 12:46 PM	35:00	7.72 pH	20.37 °C	295.82 µS/cm	0.29 mg/L	3.91 NTU	-115.4 mV	16.50 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWA-42D	Grab

# Low-Flow Test Report:

**Test Date / Time:** 8/8/2023 10:14:50 AM

**Project:** GP-Plant Hammond

**Operator Name:** Elisabeth McDonnell

<b>Location Name:</b> HGWA-43D <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 51.25 ft <b>Total Depth:</b> 61.85 ft <b>Initial Depth to Water:</b> 21.84 ft	<b>Pump Type:</b> Bladder pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 56.25 ft <b>Estimated Total Volume Pumped:</b> 10.4 liter <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 200 ml/min <b>Final Draw Down:</b> 3.66 ft	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 989630
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 72 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/8/2023 10:14 AM	00:00	7.41 pH	19.92 °C	504.12 µS/cm	1.58 mg/L	3.56 NTU	-59.6 mV	22.73 ft	200.00 ml/min
8/8/2023 10:19 AM	05:00	7.42 pH	18.66 °C	502.40 µS/cm	1.23 mg/L	3.47 NTU	-56.2 mV	23.49 ft	200.00 ml/min
8/8/2023 10:24 AM	10:00	7.40 pH	18.47 °C	497.35 µS/cm	1.34 mg/L	1.98 NTU	-86.4 mV	21.33 ft	200.00 ml/min
8/8/2023 10:29 AM	15:00	7.40 pH	18.39 °C	492.20 µS/cm	1.16 mg/L	1.46 NTU	-52.2 mV	24.72 ft	200.00 ml/min
8/8/2023 10:34 AM	20:00	7.40 pH	18.38 °C	489.04 µS/cm	1.00 mg/L	1.31 NTU	-92.8 mV	24.90 ft	200.00 ml/min
8/8/2023 10:39 AM	25:00	7.40 pH	18.48 °C	479.19 µS/cm	0.88 mg/L	1.58 NTU	-95.5 mV	25.15 ft	200.00 ml/min
8/8/2023 10:41 AM	26:51	7.39 pH	18.50 °C	476.93 µS/cm	0.83 mg/L	1.54 NTU	-61.1 mV	25.25 ft	200.00 ml/min
8/8/2023 10:46 AM	31:51	7.39 pH	18.49 °C	469.23 µS/cm	0.72 mg/L	0.96 NTU	-95.0 mV	25.35 ft	200.00 ml/min
8/8/2023 10:51 AM	36:51	7.39 pH	18.43 °C	463.73 µS/cm	0.71 mg/L	0.38 NTU	-55.9 mV	25.40 ft	200.00 ml/min
8/8/2023 10:56 AM	41:51	7.39 pH	18.40 °C	457.64 µS/cm	0.70 mg/L	0.86 NTU	-56.2 mV	25.50 ft	200.00 ml/min

## Samples

Sample ID:	Description:
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HAM-HGWA-43D	Grab
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# Low-Flow Test Report:

Test Date / Time: 8/8/2023 10:09:47 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: 103.5 ft</b> <b>Total Depth: 111.16 ft</b> <b>Initial Depth to Water: 21.5 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 108.5 ft</b> <b>Estimated Total Volume Pumped: 6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 2.6 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 72 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/8/2023 10:09 AM	00:00	8.16 pH	19.50 °C	610.12 µS/cm	0.63 mg/L		-101.2 mV		100.00 ml/min
8/8/2023 10:14 AM	05:00	8.16 pH	19.26 °C	605.42 µS/cm	0.50 mg/L		-104.5 mV		100.00 ml/min
8/8/2023 10:19 AM	10:00	8.15 pH	19.09 °C	603.18 µS/cm	0.43 mg/L	4.73 NTU	-149.9 mV	23.10 ft	100.00 ml/min
8/8/2023 10:24 AM	15:00	8.14 pH	19.06 °C	597.87 µS/cm	0.36 mg/L	14.80 NTU	-148.4 mV	23.30 ft	100.00 ml/min
8/8/2023 10:29 AM	20:00	8.14 pH	19.06 °C	592.68 µS/cm	0.33 mg/L	8.24 NTU	-125.7 mV	23.43 ft	100.00 ml/min
8/8/2023 10:34 AM	25:00	8.14 pH	19.22 °C	585.55 µS/cm	0.29 mg/L	6.13 NTU	-83.5 mV	23.59 ft	100.00 ml/min
8/8/2023 10:39 AM	30:00	8.17 pH	19.23 °C	582.95 µS/cm	0.26 mg/L	6.56 NTU	-123.6 mV	23.75 ft	100.00 ml/min
8/8/2023 10:44 AM	35:00	8.17 pH	19.23 °C	577.53 µS/cm	0.24 mg/L	8.07 NTU	-93.1 mV	23.90 ft	100.00 ml/min
8/8/2023 10:49 AM	40:00	8.19 pH	19.46 °C	572.46 µS/cm	0.22 mg/L	5.71 NTU	-133.2 mV	24.05 ft	100.00 ml/min
8/8/2023 10:54 AM	45:00	8.20 pH	19.47 °C	566.71 µS/cm	0.21 mg/L	4.90 NTU	-101.1 mV	24.10 ft	100.00 ml/min

## Samples

Sample ID:	Description:
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HGWA-44D	Grab
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Created using VuSitu from In-Situ, Inc.

# Low-Flow Test Report:

Test Date / Time: 8/13/2023 9:20:15 AM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWC-14</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 35.15 ft</b> <b>Total Depth: 43.11 ft</b> <b>Initial Depth to Water: 30.98 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 40.15 ft</b> <b>Estimated Total Volume Pumped: 13 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: 883553</b>
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## Test Notes:

Seven bottles: Full app.III and IV and Major Ions.

## Weather Conditions:

Sunny, 72 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/13/2023 9:20 AM	00:00	4.65 pH	21.34 °C	1,989.1 µS/cm	1.05 mg/L	13.30 NTU	213.1 mV	31.03 ft	200.00 ml/min
8/13/2023 9:25 AM	05:00	4.69 pH	21.57 °C	1,974.7 µS/cm	1.55 mg/L	14.20 NTU	198.8 mV	31.03 ft	200.00 ml/min
8/13/2023 9:30 AM	10:00	4.72 pH	21.78 °C	1,964.2 µS/cm	1.91 mg/L	6.84 NTU	196.1 mV	31.03 ft	200.00 ml/min
8/13/2023 9:35 AM	15:00	4.74 pH	21.95 °C	1,966.3 µS/cm	2.19 mg/L	8.21 NTU	192.9 mV	31.03 ft	200.00 ml/min
8/13/2023 9:40 AM	20:00	4.76 pH	22.05 °C	1,617.5 µS/cm	2.62 mg/L	6.39 NTU	187.5 mV	31.03 ft	200.00 ml/min
8/13/2023 9:45 AM	25:00	4.78 pH	22.09 °C	1,974.3 µS/cm	2.72 mg/L	4.90 NTU	259.8 mV	31.03 ft	200.00 ml/min
8/13/2023 9:50 AM	30:00	4.79 pH	22.21 °C	1,960.7 µS/cm	2.84 mg/L	3.35 NTU	186.6 mV	31.03 ft	200.00 ml/min
8/13/2023 9:55 AM	35:00	4.80 pH	22.17 °C	1,541.8 µS/cm	2.99 mg/L	4.30 NTU	183.6 mV	31.03 ft	200.00 ml/min
8/13/2023 10:00 AM	40:00	4.81 pH	22.27 °C	1,955.2 µS/cm	3.05 mg/L	4.22 NTU	251.8 mV	31.03 ft	200.00 ml/min
8/13/2023 10:05 AM	45:02	4.82 pH	22.41 °C	1,962.4 µS/cm	3.16 mg/L	2.24 NTU	194.1 mV	31.03 ft	200.00 ml/min
8/13/2023 10:06 AM	46:05	4.82 pH	22.44 °C	1,960.3 µS/cm	3.14 mg/L	2.24 NTU	172.7 mV	31.03 ft	200.00 ml/min
8/13/2023 10:10 AM	49:45	4.83 pH	22.53 °C	1,962.4 µS/cm	3.31 mg/L	2.31 NTU	187.9 mV	31.03 ft	200.00 ml/min
8/13/2023 10:15 AM	54:45	4.83 pH	22.48 °C	1,966.5 µS/cm	3.39 mg/L	3.16 NTU	248.2 mV	31.03 ft	200.00 ml/min

8/13/2023 10:20 AM	59:45	4.83 pH	22.53 °C	1,959.5 μS/cm	3.35 mg/L	3.09 NTU	249.1 mV	31.03 ft	200.00 ml/min
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## Samples

Sample ID:	Description:
HAM-HGWC-14	Grab



# Low-Flow Test Report:

Test Date / Time: 8/13/2023 12:10:20 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: HGWC-15</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 27.96 ft</b> <b>Total Depth: 38.30 ft</b> <b>Initial Depth to Water: 17.68 ft</b>	<b>Pump Type: Perk</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 32.96 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: 17.28 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Seven bottles: Full app.III and IV and Major Ions.

## Weather Conditions:

Sunny, 80 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/13/2023 12:10 PM	00:00	6.72 pH	22.00 °C	1,136.2 µS/cm	0.32 mg/L	0.48 NTU	98.4 mV	18.22 ft	200.00 ml/min
8/13/2023 12:15 PM	05:00	6.73 pH	21.92 °C	1,136.9 µS/cm	0.25 mg/L	1.86 NTU	72.7 mV	18.22 ft	200.00 ml/min
8/13/2023 12:20 PM	10:00	6.72 pH	21.64 °C	1,130.2 µS/cm	0.19 mg/L	0.46 NTU	92.8 mV	18.23 ft	200.00 ml/min
8/13/2023 12:25 PM	15:00	6.71 pH	21.15 °C	1,127.6 µS/cm	0.17 mg/L	0.92 NTU	89.9 mV	18.25 ft	200.00 ml/min
8/13/2023 12:30 PM	20:00	6.69 pH	20.84 °C	1,138.0 µS/cm	0.17 mg/L	0.67 NTU	65.9 mV	18.26 ft	200.00 ml/min
8/13/2023 12:35 PM	25:00	6.68 pH	20.73 °C	1,138.1 µS/cm	0.16 mg/L	1.25 NTU	83.6 mV	18.28 ft	200.00 ml/min
8/13/2023 12:40 PM	30:00	6.66 pH	20.72 °C	1,144.6 µS/cm	0.15 mg/L	0.73 NTU	80.3 mV	18.28 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWC-15	Grab
HAM-AP-2-FD-02	Grab

# Low-Flow Test Report:

Test Date / Time: 8/13/2023 10:42:36 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: HGWC-16</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 23.06 ft</b> <b>Total Depth: 33.45ft</b> <b>Initial Depth to Water: 14.50 ft</b>	<b>Pump Type: peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 28.06 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: 0.7 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Seven bottles: Full app.III and IV and Major Ions.

## Weather Conditions:

Sunny, 80 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/13/2023 10:42 AM	00:00	7.01 pH	23.11 °C	1,037.1 µS/cm	0.42 mg/L	8.47 NTU	-62.0 mV	15.10 ft	200.00 ml/min
8/13/2023 10:47 AM	05:00	7.07 pH	22.80 °C	1,041.1 µS/cm	0.46 mg/L	4.51 NTU	-60.5 mV	15.15 ft	200.00 ml/min
8/13/2023 10:52 AM	10:00	7.10 pH	23.02 °C	1,005.2 µS/cm	0.42 mg/L	4.80 NTU	-79.9 mV	15.20 ft	200.00 ml/min
8/13/2023 10:57 AM	15:00	7.11 pH	23.16 °C	1,024.3 µS/cm	0.45 mg/L	3.93 NTU	-63.4 mV	15.20 ft	200.00 ml/min
8/13/2023 11:02 AM	20:00	7.12 pH	23.20 °C	1,026.9 µS/cm	0.42 mg/L	3.50 NTU	-79.5 mV	15.20 ft	200.00 ml/min
8/13/2023 11:07 AM	25:00	7.12 pH	23.28 °C	1,021.3 µS/cm	0.40 mg/L	2.95 NTU	-63.3 mV	15.20 ft	200.00 ml/min
8/13/2023 11:12 AM	30:00	7.13 pH	23.20 °C	1,025.3 µS/cm	0.40 mg/L	3.56 NTU	-78.3 mV	15.20 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWC-16	Grab

# Low-Flow Test Report:

**Test Date / Time:** 8/13/2023 12:16:47 PM

**Project:** GP-Plant Hammond

**Operator Name:** Thomas Kessler

<b>Location Name:</b> HGWC-17 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 17.79 ft <b>Total Depth:</b> 27.82 ft <b>Initial Depth to Water:</b> 19.60 ft	<b>Pump Type:</b> bladder <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 22.79 ft <b>Estimated Total Volume Pumped:</b> 25 liter <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 200 ml/min	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 850724
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 90 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/13/2023 12:16 PM	00:00	6.65 pH	22.22 °C	1,167.1 µS/cm	1.02 mg/L	1,721.0 NTU	149.9 mV		200.00 ml/min
8/13/2023 12:21 PM	05:00	6.60 pH	21.68 °C	1,187.9 µS/cm	0.50 mg/L	1,154.0 NTU	107.2 mV		200.00 ml/min
8/13/2023 12:26 PM	10:00	6.57 pH	21.83 °C	1,211.6 µS/cm	0.62 mg/L	1,003.0 NTU	98.6 mV		200.00 ml/min
8/13/2023 12:31 PM	15:00	6.54 pH	21.66 °C	1,235.3 µS/cm	0.66 mg/L	1,135.0 NTU	95.0 mV		200.00 ml/min
8/13/2023 12:36 PM	20:00	6.53 pH	21.68 °C	1,248.3 µS/cm	0.63 mg/L	71.30 NTU	93.1 mV		200.00 ml/min
8/13/2023 12:41 PM	25:00	6.52 pH	21.87 °C	1,259.2 µS/cm	0.36 mg/L	65.10 NTU	90.7 mV		200.00 ml/min
8/13/2023 12:46 PM	30:00	6.51 pH	21.86 °C	1,261.6 µS/cm	0.33 mg/L	73.40 NTU	118.9 mV		200.00 ml/min
8/13/2023 12:51 PM	35:00	6.51 pH	21.89 °C	1,269.4 µS/cm	0.32 mg/L	50.30 NTU	118.6 mV		200.00 ml/min
8/13/2023 12:56 PM	40:00	6.50 pH	21.84 °C	1,277.5 µS/cm	0.32 mg/L	28.70 NTU	116.7 mV		200.00 ml/min
8/13/2023 1:01 PM	45:00	6.50 pH	21.73 °C	1,281.8 µS/cm	0.30 mg/L	25.10 NTU	116.3 mV		200.00 ml/min
8/13/2023 1:06 PM	50:00	6.49 pH	21.96 °C	1,287.4 µS/cm	0.29 mg/L	18.30 NTU	116.0 mV		200.00 ml/min
8/13/2023 1:11 PM	55:00	6.49 pH	22.09 °C	1,297.7 µS/cm	0.32 mg/L	15.70 NTU	115.7 mV		200.00 ml/min
8/13/2023 1:16 PM	01:00:00	6.48 pH	21.89 °C	1,306.5 µS/cm	0.29 mg/L	14.90 NTU	114.8 mV		200.00 ml/min
8/13/2023 1:21 PM	01:05:00	6.48 pH	21.79 °C	1,308.0 µS/cm	0.27 mg/L	11.63 NTU	114.2 mV		200.00 ml/min

8/13/2023 1:26 PM	01:10:00	6.48 pH	21.85 °C	1,308.9 µS/cm	0.28 mg/L	10.91 NTU	114.1 mV		200.00 ml/min
8/13/2023 1:31 PM	01:15:00	6.48 pH	21.75 °C	1,319.5 µS/cm	0.27 mg/L	9.35 NTU	114.0 mV		200.00 ml/min
8/13/2023 1:36 PM	01:20:00	6.47 pH	21.96 °C	1,323.5 µS/cm	0.26 mg/L	8.95 NTU	112.7 mV		200.00 ml/min
8/13/2023 1:41 PM	01:25:00	6.47 pH	21.85 °C	1,331.5 µS/cm	0.26 mg/L	8.19 NTU	83.7 mV		200.00 ml/min
8/13/2023 1:46 PM	01:30:00	6.47 pH	22.00 °C	1,328.5 µS/cm	0.22 mg/L	7.15 NTU	110.1 mV		200.00 ml/min
8/13/2023 1:51 PM	01:35:00	6.47 pH	21.93 °C	1,331.6 µS/cm	0.22 mg/L	6.99 NTU	111.1 mV		200.00 ml/min
8/13/2023 1:56 PM	01:40:00	6.47 pH	22.02 °C	1,341.7 µS/cm	0.22 mg/L	7.90 NTU	82.8 mV		200.00 ml/min
8/13/2023 2:01 PM	01:45:00	6.46 pH	22.03 °C	1,347.2 µS/cm	0.22 mg/L	5.73 NTU	110.1 mV		200.00 ml/min
8/13/2023 2:06 PM	01:50:00	6.47 pH	22.00 °C	1,345.2 µS/cm	0.22 mg/L	5.32 NTU	110.3 mV		200.00 ml/min
8/13/2023 2:11 PM	01:55:00	6.46 pH	21.95 °C	1,348.5 µS/cm	0.21 mg/L	3.98 NTU	110.4 mV		200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWC-17	Grab

# Low-Flow Test Report:

Test Date / Time: 8/13/2023 8:48:50 AM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: HGWC-18</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 17.71 ft</b> <b>Total Depth: 27.68 ft</b> <b>Initial Depth to Water: 19.29 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 22.71 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: 0.29 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 77 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	+/- 10	+/- 10	+/- 0.3	
8/13/2023 8:48 AM	00:00	4.71 pH	22.12 °C	1,944.3 µS/cm	2.37 mg/L	0.60 NTU	259.4 mV	19.46 ft	200.00 ml/min
8/13/2023 8:53 AM	05:00	4.72 pH	21.50 °C	1,921.9 µS/cm	2.14 mg/L	0.33 NTU	415.0 mV	19.50 ft	200.00 ml/min
8/13/2023 8:58 AM	10:00	4.74 pH	21.47 °C	1,890.0 µS/cm	1.97 mg/L	1.55 NTU	574.0 mV	19.55 ft	200.00 ml/min
8/13/2023 9:03 AM	15:00	4.75 pH	21.45 °C	1,887.0 µS/cm	1.84 mg/L	0.46 NTU	609.5 mV	19.57 ft	200.00 ml/min
8/13/2023 9:08 AM	20:00	4.75 pH	21.47 °C	1,880.9 µS/cm	1.78 mg/L	1.74 NTU	633.2 mV	19.58 ft	200.00 ml/min
8/13/2023 9:13 AM	25:00	4.75 pH	21.38 °C	1,886.7 µS/cm	1.74 mg/L	0.22 NTU	653.7 mV	19.58 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-HGWC-18	Grab

# Low-Flow Test Report:

Test Date / Time: 8/12/2023 1:17:22 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-21D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 41.88 ft</b> <b>Total Depth: 51.63 ft</b> <b>Initial Depth to Water: 18.63ft</b>	<b>Pump Type: bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 46.88 ft</b> <b>Estimated Total Volume Pumped: 32 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.37 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Cloudy, 80 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/12/2023 1:17 PM	00:00	7.17 pH	21.74 °C	1,036.7 µS/cm	0.58 mg/L	158.00 NTU	-153.3 mV	18.95 ft	200.00 ml/min
8/12/2023 1:22 PM	05:00	7.18 pH	20.98 °C	923.79 µS/cm	0.25 mg/L	101.00 NTU	-155.8 mV	18.95 ft	200.00 ml/min
8/12/2023 1:27 PM	10:00	7.19 pH	20.84 °C	887.97 µS/cm	0.14 mg/L	98.30 NTU	-149.4 mV	18.95 ft	200.00 ml/min
8/12/2023 1:32 PM	15:00	7.20 pH	20.79 °C	873.21 µS/cm	0.11 mg/L	124.00 NTU	-143.1 mV	18.95 ft	200.00 ml/min
8/12/2023 1:37 PM	20:00	7.20 pH	20.77 °C	866.13 µS/cm	0.11 mg/L	103.80 NTU	-137.5 mV	19.00 ft	200.00 ml/min
8/12/2023 1:42 PM	25:00	7.21 pH	20.75 °C	864.35 µS/cm	0.11 mg/L	82.90 NTU	-109.3 mV	19.00 ft	200.00 ml/min
8/12/2023 1:47 PM	30:00	7.21 pH	20.59 °C	861.63 µS/cm	0.12 mg/L	90.76 NTU	-127.9 mV	19.00 ft	200.00 ml/min
8/12/2023 1:52 PM	35:00	7.21 pH	20.59 °C	862.58 µS/cm	0.12 mg/L	55.80 NTU	-102.6 mV	19.00 ft	200.00 ml/min
8/12/2023 1:57 PM	40:00	7.21 pH	20.57 °C	864.98 µS/cm	0.12 mg/L	43.80 NTU	-122.0 mV	19.00 ft	200.00 ml/min
8/12/2023 2:02 PM	45:00	7.21 pH	20.52 °C	868.03 µS/cm	0.12 mg/L	40.50 NTU	-98.4 mV	19.00 ft	200.00 ml/min
8/12/2023 2:07 PM	50:00	7.20 pH	20.65 °C	875.51 µS/cm	0.12 mg/L	32.50 NTU	-118.6 mV	19.00 ft	200.00 ml/min
8/12/2023 2:12 PM	55:00	7.20 pH	20.54 °C	877.76 µS/cm	0.12 mg/L	29.80 NTU	-95.7 mV	19.00 ft	200.00 ml/min
8/12/2023 2:17 PM	01:00:00	7.20 pH	20.57 °C	882.65 µS/cm	0.12 mg/L	24.20 NTU	-94.7 mV	19.00 ft	200.00 ml/min

8/12/2023 2:22 PM	01:05:00	7.19 pH	20.48 °C	889.98 µS/cm	0.12 mg/L	23.40 NTU	-113.9 mV	19.00 ft	200.00 ml/min
8/12/2023 2:27 PM	01:10:00	7.20 pH	20.51 °C	896.19 µS/cm	0.12 mg/L	20.10 NTU	-93.5 mV	19.00 ft	200.00 ml/min
8/12/2023 2:32 PM	01:15:00	7.20 pH	20.48 °C	903.59 µS/cm	0.11 mg/L	19.70 NTU	-112.2 mV	19.00 ft	200.00 ml/min
8/12/2023 2:37 PM	01:20:00	7.19 pH	20.43 °C	906.11 µS/cm	0.12 mg/L	17.20 NTU	-111.5 mV	19.00 ft	200.00 ml/min
8/12/2023 2:42 PM	01:25:00	7.19 pH	20.51 °C	911.93 µS/cm	0.12 mg/L	16.10 NTU	-92.2 mV	19.00 ft	200.00 ml/min
8/12/2023 2:47 PM	01:30:00	7.19 pH	20.54 °C	919.50 µS/cm	0.11 mg/L	13.80 NTU	-110.5 mV	19.00 ft	200.00 ml/min
8/12/2023 2:52 PM	01:35:00	7.19 pH	20.56 °C	922.30 µS/cm	0.12 mg/L	12.70 NTU	-110.0 mV	19.00 ft	200.00 ml/min
8/12/2023 2:57 PM	01:40:00	7.19 pH	20.46 °C	928.63 µS/cm	0.11 mg/L	11.10 NTU	-91.3 mV	19.00 ft	200.00 ml/min
8/12/2023 3:02 PM	01:45:00	7.19 pH	20.49 °C	934.86 µS/cm	0.11 mg/L	12.00 NTU	-91.2 mV	19.00 ft	200.00 ml/min
8/12/2023 3:07 PM	01:50:00	7.18 pH	20.54 °C	941.47 µS/cm	0.12 mg/L	11.97 NTU	-108.3 mV	19.00 ft	200.00 ml/min
8/12/2023 3:12 PM	01:55:00	7.19 pH	20.46 °C	946.45 µS/cm	0.12 mg/L	11.43 NTU	-91.2 mV	19.00 ft	200.00 ml/min
8/12/2023 3:17 PM	02:00:00	7.18 pH	20.48 °C	951.70 µS/cm	0.11 mg/L	10.68 NTU	-107.9 mV	19.00 ft	200.00 ml/min
8/12/2023 3:22 PM	02:05:00	7.18 pH	20.43 °C	956.62 µS/cm	0.11 mg/L	10.51 NTU	-90.9 mV	19.00 ft	200.00 ml/min
8/12/2023 3:27 PM	02:10:00	7.18 pH	20.42 °C	961.46 µS/cm	0.11 mg/L	10.01 NTU	-107.0 mV	19.00 ft	200.00 ml/min
8/12/2023 3:32 PM	02:15:00	7.18 pH	20.66 °C	967.96 µS/cm	0.11 mg/L	10.38 NTU	-91.6 mV	19.00 ft	200.00 ml/min
8/12/2023 3:37 PM	02:20:00	7.18 pH	20.85 °C	968.50 µS/cm	0.11 mg/L	9.95 NTU	-107.4 mV	19.00 ft	200.00 ml/min
8/12/2023 3:42 PM	02:25:00	7.18 pH	20.63 °C	977.50 µS/cm	0.11 mg/L	7.70 NTU	-91.0 mV	19.00 ft	200.00 ml/min
8/12/2023 3:47 PM	02:30:00	7.18 pH	20.90 °C	980.05 µS/cm	0.11 mg/L	7.61 NTU	-106.8 mV	19.00 ft	200.00 ml/min
8/12/2023 3:52 PM	02:35:00	7.17 pH	20.83 °C	983.28 µS/cm	0.11 mg/L	6.84 NTU	-91.4 mV	19.00 ft	200.00 ml/min
8/12/2023 3:57 PM	02:40:00	7.17 pH	21.04 °C	986.75 µS/cm	0.11 mg/L	6.30 NTU	-106.7 mV	19.00 ft	200.00 ml/min
8/12/2023 4:02 PM	02:45:00	7.17 pH	20.92 °C	989.90 µS/cm	0.11 mg/L	4.65 NTU	-91.3 mV	19.00 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-21D	Grab

# Low-Flow Test Report:

Test Date / Time: 8/13/2023 3:17:26 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-22</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 28.98 ft</b> <b>Total Depth: 38.98 ft</b> <b>Initial Depth to Water: 14.40 ft</b>	<b>Pump Type: peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 33.98 ft</b> <b>Estimated Total Volume Pumped: 7 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 6.15 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 85 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/13/2023 3:17 PM	00:00	5.53 pH	20.28 °C	1,236.3 µS/cm	1.04 mg/L	2.05 NTU	197.8 mV	19.20 ft	200.00 ml/min
8/13/2023 3:18 PM	01:02	5.52 pH	20.25 °C	1,249.6 µS/cm	1.03 mg/L	2.05 NTU	279.7 mV	19.20 ft	200.00 ml/min
8/13/2023 3:23 PM	06:02	5.52 pH	19.96 °C	1,210.3 µS/cm	0.92 mg/L	3.01 NTU	343.4 mV	19.55 ft	200.00 ml/min
8/13/2023 3:28 PM	11:02	5.50 pH	22.09 °C	1,216.8 µS/cm	0.91 mg/L	1.60 NTU	441.8 mV	19.78 ft	200.00 ml/min
8/13/2023 3:33 PM	16:02	5.52 pH	22.36 °C	1,218.5 µS/cm	0.84 mg/L	1.62 NTU	285.6 mV	19.90 ft	200.00 ml/min
8/13/2023 3:38 PM	21:02	5.52 pH	22.29 °C	1,216.0 µS/cm	0.75 mg/L	1.83 NTU	377.9 mV	20.10 ft	200.00 ml/min
8/13/2023 3:43 PM	26:02	5.53 pH	22.38 °C	1,217.8 µS/cm	0.69 mg/L	1.53 NTU	264.9 mV	20.20 ft	200.00 ml/min
8/13/2023 3:48 PM	31:02	5.54 pH	22.26 °C	1,214.6 µS/cm	0.62 mg/L	1.21 NTU	344.4 mV	20.43 ft	200.00 ml/min
8/13/2023 3:53 PM	36:02	5.54 pH	22.29 °C	1,221.1 µS/cm	0.58 mg/L	0.91 NTU	237.3 mV	20.55 ft	200.00 ml/min
8/13/2023 3:58 PM	41:02	5.54 pH	22.27 °C	1,222.1 µS/cm	0.54 mg/L	1.29 NTU	229.7 mV	20.55 ft	200.00 ml/min
8/13/2023 4:00 PM	42:42	5.54 pH	22.26 °C	1,215.6 µS/cm	0.53 mg/L	1.29 NTU	122.1 mV	20.55 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-22	Grab.



# Low-Flow Test Report:

Test Date / Time: 8/13/2023 2:06:24 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: MW-23D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 52.24 ft</b> <b>Total Depth: 62.88 ft</b> <b>Initial Depth to Water: 17.04 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 57.24 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: 0.15 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 82 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/13/2023 2:06 PM	00:00	6.86 pH	22.83 °C	1,465.2 µS/cm	2.44 mg/L	0.31 NTU	-9.0 mV	17.11 ft	200.00 ml/min
8/13/2023 2:11 PM	05:00	6.85 pH	21.93 °C	1,480.0 µS/cm	0.44 mg/L	0.25 NTU	5.4 mV	17.17 ft	200.00 ml/min
8/13/2023 2:16 PM	10:00	6.84 pH	21.69 °C	1,478.0 µS/cm	0.33 mg/L	0.48 NTU	4.3 mV	17.19 ft	200.00 ml/min
8/13/2023 2:21 PM	15:00	6.83 pH	21.93 °C	1,478.4 µS/cm	0.29 mg/L	0.72 NTU	5.6 mV	17.19 ft	200.00 ml/min
8/13/2023 2:26 PM	20:00	6.82 pH	21.74 °C	1,477.2 µS/cm	0.27 mg/L	0.59 NTU	16.1 mV	17.19 ft	200.00 ml/min
8/13/2023 2:31 PM	25:00	6.82 pH	21.88 °C	1,481.9 µS/cm	0.27 mg/L	0.64 NTU	15.0 mV	17.19 ft	200.00 ml/min
8/13/2023 2:36 PM	30:00	6.82 pH	21.83 °C	1,477.0 µS/cm	0.26 mg/L	0.57 NTU	2.5 mV	17.19 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-23D	Grab

# Low-Flow Test Report:

Test Date / Time: 8/13/2023 8:53:33 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-33</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 27.72 ft</b> <b>Total Depth: 38.3 ft</b> <b>Initial Depth to Water: 28.00 ft</b>	<b>Pump Type: bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 32.72 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: 0.65 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Clear, 80 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/13/2023 8:53 AM	00:00	4.55 pH	19.59 °C	2,010.0 µS/cm	0.59 mg/L	9.19 NTU	258.9 mV	28.35 ft	200.00 ml/min
8/13/2023 8:58 AM	05:00	4.54 pH	19.50 °C	2,045.5 µS/cm	0.32 mg/L	8.44 NTU	239.4 mV	28.42 ft	200.00 ml/min
8/13/2023 9:03 AM	10:00	4.53 pH	19.46 °C	2,043.4 µS/cm	0.25 mg/L	4.95 NTU	299.0 mV	28.46 ft	200.00 ml/min
8/13/2023 9:08 AM	15:00	4.54 pH	19.45 °C	2,040.0 µS/cm	0.22 mg/L	4.76 NTU	291.4 mV	28.50 ft	200.00 ml/min
8/13/2023 9:13 AM	20:00	4.54 pH	19.46 °C	2,039.4 µS/cm	0.20 mg/L	4.65 NTU	284.4 mV	28.55 ft	200.00 ml/min
8/13/2023 9:18 AM	25:00	4.54 pH	19.51 °C	2,041.4 µS/cm	0.19 mg/L	3.76 NTU	212.4 mV	28.60 ft	200.00 ml/min
8/13/2023 9:23 AM	30:00	4.54 pH	19.45 °C	2,035.0 µS/cm	0.19 mg/L	2.31 NTU	270.6 mV	28.65 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-33	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/12/2023 4:15:47 PM

Project: GP-Plant Hammond

Operator Name: Connor Cain

<b>Location Name: MW-34D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 63.68 ft</b> <b>Total Depth: 74.08 ft</b> <b>Initial Depth to Water: 31.73 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 68.68 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: 0.15 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

**Weather Conditions:** Cloudy, 86 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/12/2023 4:15 PM	00:00	7.03 pH	24.06 °C	2,239.0 µS/cm	1.11 mg/L	15.80 NTU	45.5 mV	31.85 ft	200.00 ml/min
8/12/2023 4:20 PM	05:00	7.06 pH	23.29 °C	2,258.5 µS/cm	0.67 mg/L	9.42 NTU	38.3 mV	31.87 ft	200.00 ml/min
8/12/2023 4:25 PM	10:00	7.06 pH	22.95 °C	2,270.7 µS/cm	0.51 mg/L	6.46 NTU	36.4 mV	31.88 ft	200.00 ml/min
8/12/2023 4:30 PM	15:00	7.07 pH	22.66 °C	2,274.1 µS/cm	0.47 mg/L	4.94 NTU	36.3 mV	31.88 ft	200.00 ml/min
8/12/2023 4:35 PM	20:00	7.06 pH	22.42 °C	2,278.9 µS/cm	0.40 mg/L	3.60 NTU	35.6 mV	31.88 ft	200.00 ml/min
8/12/2023 4:40 PM	25:00	7.06 pH	22.47 °C	2,277.9 µS/cm	0.33 mg/L	4.39 NTU	33.5 mV	31.88 ft	200.00 ml/min
8/12/2023 4:45 PM	30:00	7.06 pH	22.49 °C	2,271.4 µS/cm	0.28 mg/L	4.13 NTU	31.9 mV	31.88 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-34D	Grab

# Low-Flow Test Report:

Test Date / Time: 8/12/2023 9:03:52 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-35</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.52 ft</b> <b>Total Depth: 24.32 ft</b> <b>Initial Depth to Water: 11.36 ft</b>	<b>Pump Type: bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.52 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.07 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 80 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/12/2023 9:03 AM	00:00	5.05 pH	21.37 °C	2,161.9 µS/cm	0.37 mg/L	5.85 NTU	164.9 mV	11.15 ft	100.00 ml/min
8/12/2023 9:08 AM	05:00	5.08 pH	21.02 °C	2,304.4 µS/cm	0.27 mg/L	6.32 NTU	152.7 mV	11.25 ft	100.00 ml/min
8/12/2023 9:13 AM	10:00	5.10 pH	20.88 °C	2,345.1 µS/cm	0.24 mg/L	6.01 NTU	188.6 mV	11.30 ft	100.00 ml/min
8/12/2023 9:18 AM	15:00	5.10 pH	20.66 °C	2,350.5 µS/cm	0.21 mg/L	4.76 NTU	183.4 mV	11.35 ft	100.00 ml/min
8/12/2023 9:23 AM	20:00	5.09 pH	20.65 °C	2,338.8 µS/cm	0.19 mg/L	5.12 NTU	180.0 mV	11.40 ft	100.00 ml/min
8/12/2023 9:28 AM	25:00	5.07 pH	20.59 °C	2,347.1 µS/cm	0.18 mg/L	5.29 NTU	177.3 mV	11.43 ft	100.00 ml/min
8/12/2023 9:33 AM	30:00	5.05 pH	20.57 °C	2,339.0 µS/cm	0.21 mg/L	4.93 NTU	174.8 mV	11.43 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-35	Grab

# Low-Flow Test Report:

Test Date / Time: 8/13/2023 10:10:53 AM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: MW-37D</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 66.63 ft</b> <b>Total Depth: 77.64 ft</b> <b>Initial Depth to Water: 18.38 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 71.63 ft</b> <b>Estimated Total Volume Pumped: 26.5 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 26.77 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 78 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
8/13/2023 10:10 AM	00:00	7.42 pH	20.13 °C	412.70 µS/cm	0.08 mg/L	1.24 NTU	1.1 mV	22.44 ft	250.00 ml/min
8/13/2023 10:15 AM	05:00	7.50 pH	20.04 °C	404.01 µS/cm	0.06 mg/L	0.91 NTU	423.2 mV	24.20 ft	250.00 ml/min
8/13/2023 10:20 AM	10:00	7.53 pH	19.95 °C	397.54 µS/cm	0.06 mg/L	1.21 NTU	563.6 mV	25.66 ft	250.00 ml/min
8/13/2023 10:25 AM	15:00	7.55 pH	19.93 °C	396.47 µS/cm	0.06 mg/L	0.75 NTU	585.4 mV	27.39 ft	250.00 ml/min
8/13/2023 10:30 AM	20:00	7.57 pH	19.95 °C	396.02 µS/cm	0.07 mg/L	1.37 NTU	600.5 mV	28.86 ft	250.00 ml/min
8/13/2023 10:35 AM	25:00	7.58 pH	19.88 °C	395.08 µS/cm	0.08 mg/L	1.74 NTU	612.5 mV	30.17 ft	250.00 ml/min
8/13/2023 10:40 AM	30:00	7.59 pH	19.93 °C	394.54 µS/cm	0.08 mg/L	0.20 NTU	619.5 mV	31.65 ft	250.00 ml/min
8/13/2023 10:45 AM	35:00	7.60 pH	19.91 °C	394.62 µS/cm	0.08 mg/L	0.48 NTU	627.3 mV	32.99 ft	250.00 ml/min
8/13/2023 10:50 AM	40:00	7.60 pH	19.95 °C	393.77 µS/cm	0.08 mg/L	2.71 NTU	633.7 mV	34.22 ft	250.00 ml/min
8/13/2023 10:55 AM	45:00	7.60 pH	19.94 °C	393.22 µS/cm	0.08 mg/L	3.38 NTU	635.9 mV	35.54 ft	250.00 ml/min
8/13/2023 11:00 AM	50:00	7.60 pH	19.95 °C	392.73 µS/cm	0.09 mg/L	2.12 NTU	632.1 mV	36.74 ft	250.00 ml/min
8/13/2023 11:05 AM	55:00	7.61 pH	19.95 °C	393.56 µS/cm	0.08 mg/L	0.99 NTU	538.6 mV	37.92 ft	250.00 ml/min
8/13/2023 11:10 AM	01:00:00	7.62 pH	19.96 °C	391.42 µS/cm	0.08 mg/L	1.87 NTU	540.1 mV	39.04 ft	250.00 ml/min

8/13/2023 11:15 AM	01:05:00	7.61 pH	19.95 °C	395.94 µS/cm	0.08 mg/L	0.75 NTU	620.6 mV	40.17 ft	250.00 ml/min
8/13/2023 11:20 AM	01:10:00	7.62 pH	19.91 °C	396.34 µS/cm	0.09 mg/L	2.29 NTU	536.1 mV	41.23 ft	250.00 ml/min
8/13/2023 11:25 AM	01:15:00	7.62 pH	19.95 °C	396.15 µS/cm	0.08 mg/L	2.08 NTU	529.3 mV	42.37 ft	250.00 ml/min
8/13/2023 11:30 AM	01:20:00	7.63 pH	19.95 °C	396.25 µS/cm	0.08 mg/L	0.80 NTU	527.2 mV	43.28 ft	250.00 ml/min
8/13/2023 11:35 AM	01:25:00	7.63 pH	20.04 °C	396.44 µS/cm	0.08 mg/L	0.64 NTU	607.1 mV	44.33 ft	250.00 ml/min
8/13/2023 11:40 AM	01:30:00	7.62 pH	20.00 °C	395.67 µS/cm	0.08 mg/L	0.46 NTU	609.1 mV	45.15 ft	250.00 ml/min
8/13/2023 11:45 AM	01:35:00	7.60 pH	21.69 °C	399.26 µS/cm	0.10 mg/L	0.33 NTU	616.3 mV	45.30 ft	100.00 ml/min
8/13/2023 11:50 AM	01:40:00	7.60 pH	22.09 °C	393.34 µS/cm	0.12 mg/L	0.62 NTU	547.5 mV	45.21 ft	100.00 ml/min
8/13/2023 11:55 AM	01:45:00	7.61 pH	22.06 °C	394.53 µS/cm	0.13 mg/L	0.26 NTU	463.8 mV	45.15 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-37D	Grab

# Low-Flow Test Report:

Test Date / Time: 8/12/2023 10:39:15 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-51</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 18.90 ft</b> <b>Total Depth: 28.85 ft</b> <b>Initial Depth to Water: 10.50 ft</b>	<b>Pump Type: bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 23.9 ft</b> <b>Estimated Total Volume Pumped: 5.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.4 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Seven bottles: Full app. III and IV and Major Ions.

## Weather Conditions:

Sunny, 85 degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/12/2023 10:39 AM	00:00	6.66 pH	22.70 °C	2,374.2 µS/cm	0.33 mg/L	9.10 NTU	2.1 mV	10.90 ft	100.00 ml/min
8/12/2023 10:44 AM	05:00	6.68 pH	22.89 °C	2,354.1 µS/cm	0.28 mg/L	6.39 NTU	-8.3 mV	10.90 ft	100.00 ml/min
8/12/2023 10:49 AM	10:00	6.69 pH	22.31 °C	2,371.4 µS/cm	0.22 mg/L	6.38 NTU	-5.5 mV	10.90 ft	100.00 ml/min
8/12/2023 10:54 AM	15:00	6.69 pH	22.04 °C	2,376.4 µS/cm	0.21 mg/L	5.83 NTU	-3.6 mV	10.90 ft	100.00 ml/min
8/12/2023 10:59 AM	20:00	6.67 pH	22.04 °C	2,367.5 µS/cm	0.20 mg/L	7.78 NTU	-0.4 mV	10.90 ft	100.00 ml/min
8/12/2023 11:04 AM	25:00	6.66 pH	21.77 °C	2,356.0 µS/cm	0.20 mg/L	7.82 NTU	3.4 mV	10.90 ft	100.00 ml/min
8/12/2023 11:09 AM	30:00	6.64 pH	21.82 °C	2,350.3 µS/cm	0.20 mg/L	5.32 NTU	6.4 mV	10.90 ft	100.00 ml/min
8/12/2023 11:14 AM	35:00	6.62 pH	21.86 °C	2,340.9 µS/cm	0.19 mg/L	6.52 NTU	19.7 mV	10.90 ft	100.00 ml/min
8/12/2023 11:19 AM	40:00	6.60 pH	21.91 °C	2,351.8 µS/cm	0.19 mg/L	4.24 NTU	10.3 mV	10.90 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-51	Grab

# CALIBRATION REPORTS



January 2023

EQUIPMENT CALIBRATION LOG

Field Technician Anthony S.

Date 1/23/2023

Time (start) 1540

Time (finish) 1600

smarTroll SN 883533

Turbidity Meter Type LaMotte 2020we

SN 7007-1416

Weather Conditions 45°F, Partly cloudy

Facility and Unit Hammond

Project No. GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	13.95	4490	3729.1	4490	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)	11/2023	14.13	4.00	3.95	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check			<del>4.00</del>			+/- 0.1 SU	Yes No	
pH (7)	2216893 11/2023	14.09	7.00	7.34	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			<del>7.00</del>			+/- 0.1 SU	Yes No	
pH (10)	21320202 12/2023	14.40	10.00	11.09	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check			<del>10.00</del>			+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	14.22	228	246.4	228.0	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	105.08	100.0	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.00	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	0.44	0.71	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	11.07	10.06	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: C. CRAIN

Date: 1/23/23

Time (start): 1455

Time (finish): 1520

smarTroll SN: 966090

Turbidity Meter Type: LaMotte 2020we

SN: 7009

Weather Conditions: Sunny 50°F

Facility and Unit: Hammond

Project No: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	15.74	4490	4294	4490	+/- 5 %	<input checked="" type="checkbox"/> Yes No	
pH (4)			4.00	4.06	4.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (4) check			4.00			+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
pH (7)	2216893 11/23	16.55	7.00	7.37	7.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (7) check					7.00			+/- 0.1 SU
pH (10)	212320202 12/23	16.96	10.00	10.99	10	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (10) check					10.00			+/- 0.1 SU
ORP (mV)	21390144 11/23	16.72	228	243	228	+/- 20mV	<input checked="" type="checkbox"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	101.05	100	+/- 6 % saturation	<input checked="" type="checkbox"/> Yes No	
Turbidity 0 NTU			0	0.31	0.25	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 1 NTU			1.00	0.85	1.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 10 NTU			10.00	9.56	10.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler Date: 1/23/23 Time (start): 1545 Time (finish): 1835  
 smarTroll SN: 850724 Turbidity Meter Type: LaMotte 2020we SN: 5896-3715  
 Weather Conditions: partly cloudy, 50° Facility and Unit: Plant Hammond Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	17.04	4490	4307.1	4490	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)	11/23		4.00	4.07	4.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	2216543 11/23 ↓	16.55 ↓	4.00	6.97 ↓	7.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (7)			7.00			+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check	<del>_____</del>		7.00			+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No	<del>_____</del>
pH (10)	21320200 12/23	16.20	10.00	9.65	10.0	+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check	<del>_____</del>		10.00			+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No	<del>_____</del>
ORP (mV)	21390144 11/23	16.43	228	241.1	228	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	99.8	100	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	0.82	1.0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	9.44	10.1	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician Anthony S. Date 1/24/2023 Time (start) 755 Time (finish) 815  
 smarTroll SN 883533 Turbidity Meter Type LaMotte 2020we SN: 7007-1416  
 Weather Conditions Clear, 25°F Facility and Unit Plant Hammond Project No. GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	-0.14	4490	4315.5	4490	+/- 5 %	Yes No	
pH (4)	11/2023	-0.11	4.00	4.74	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	22250153 11/2023	19.36	4.00	3.37	4.00	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/2023	0.41	7.00	7.31	7.00	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check	2216893 11/2023	11.01	7.00	6.93	7.06	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/2023	1.01	10.00	10.21	10.00	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check	21320202 12/2023	10.55	10.00	10.07	10.14	+/- 0.1 SU	Yes No	
ORP (mV)	21340144 11/2023	1.11	228	248.0	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	94.50	100.0	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.00	—	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	0.45	0.59	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	11.79	9.99	+/- 0.5 NTU	Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: C. CAIN Date: 1/24/23 Time (start): 0716 Time (finish): 0735  
 SmartTroll SN: 966040 Turbidity Meter Type: LaMotte 2020we SN: 7009  
 Weather Conditions: Cloudy 28F Facility and Unit: Plant Hammond Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	6.33	4490	<del>3900</del> 3900	4490	+/- 5 %	<input checked="" type="checkbox"/> No	
pH (4)			4.00	<del>3.92</del> 3.92	4.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
Mid-Day pH (4) check	↓	/	4.00	<del>3.92</del> 3.96	<del>4.0</del> 4.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
pH (7)	2216893 11/23	7.42	7.00	7.05	7.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
Mid-Day pH (7) check			↓	/	7.00	7.06	7.0	+/- 0.1 SU
pH (10)	212320202 12/23	7.69	10.00	10.19	10.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
Mid-Day pH (10) check			↓	/	10.00	9.97	10.0	+/- 0.1 SU
ORP (mV)	21390144 11/23	7.59	228	242.8	228	+/- 20mV	<input checked="" type="checkbox"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	100.62	100	+/- 6 % saturation	<input checked="" type="checkbox"/> No	
Turbidity 0 NTU			0	0.35	0.0	+/- 0.5 NTU	<input checked="" type="checkbox"/> No	
Turbidity 1 NTU			1.00	0.72	1.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> No	
Turbidity 10 NTU			10.00	10.83	10.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kessler Date: 1/24/2025 Time (start): 0700 Time (finish): 0730  
 smarTroll SN: 850724 Turbidity Meter Type: LaMotte 2020we SN: 5896-3715  
 Weather Conditions: Sunny, 27°F Facility and Unit: Plant Hammond Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22750153	7.55	4490	4166.0	4490	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)	11173		4.00	3.91	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	2216893	9.28	4.00	4.01	<del>4.00</del>	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (7)	2216893 11173	9.26	7.00	7.00	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			7.00	6.98	<del>7.00</del>	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (10)	2180002 11173	9.94	10.00	10.13	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check			10.00	10.00	<del>10.00</del>	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
ORP (mV)	213901441 11173	10.09	228	240.4	228	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	100.44	100	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.11	0.08	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	1.07	1.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	10.34	9.98	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: A. Sawast Date: 1/27/2023 Time (start): 755 Time (finish): 830  
 smarTroll SN: 883533 Turbidity Meter Type: LaMotte 2020we SN: 7007-1416  
 Weather Conditions: Sunny, 30°F Facility and Unit: Plant Hammond Project No: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/2023	1.91	4490	4484.4	4490.0	+/- 5%	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)		3.33	4.00	4.04	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check			4.00			+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	unable to perform mid-day pH check while purging well
pH (7)	2216893 11/2023	3.19	7.00	7.08	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (10)	21320202 12/2023	3.58	10.00	<del>4.04</del>	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	10.15 = initial reading
Mid-Day pH (10) check			10.00			+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
ORP (mV)	21396144 11/2023	3.75	228	233.2	228.0	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	93.64	100.0	+/- 6% saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.03	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	<del>0.40</del> 1.00	<del>0.42</del>	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	unable to calibrate with original standard New 1 NTU standard? 1.00 NTU
Turbidity 10 NTU			10.00	12.07	10.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	



EQUIPMENT CALIBRATION LOG

Field Technician C. CRAIN

Date 1/27/23

Time (start): 0745

Time (finish) 0815

smarTroll SN 966 040

Turbidity Meter Type LaMotte 2020we

SN 7009

Weather Conditions Spring 31

Facility and Unit Plant Hammond

Project No GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	7.22	4490	4421	4490	+/- 5%	<input checked="" type="checkbox"/> No	
pH (4)			4.00	3.98	4.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
Mid-Day pH (4) check	↓	/	4.00	4.01	4.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
pH (7)	2216843 11/23	7.56	7.00	7.05	7.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
Mid-Day pH (7) check			↓	/	7.00	7.06	7.0	+/- 0.1 SU
pH (10)	212320202 12/23	7.81	10.00	10.04	10.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
Mid-Day pH (10) check			↓	/	10.00	10.04	10.0	+/- 0.1 SU
ORP (mV)	21390144	7.65	228	232.7	228	+/- 20mV	<input checked="" type="checkbox"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	99.42	100	+/- 6% saturation	<input checked="" type="checkbox"/> No	
Turbidity 0 NTU			0	0.00	0.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> No	
Turbidity 1 NTU			1.00	1.08	1.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> No	
Turbidity 10 NTU			10.00	9.81	10.0	+/- 0.5 NTU	<input checked="" type="checkbox"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician A. Swast Date 1/30/2023 Time (start): 730 Time (finish) 750  
 smarTroll SN 883577 Turbidity Meter Type: LaMotte 2020we SN 7007-1416  
 Weather Conditions Cloudy, 45°F Facility and Unit Plant Hammond Project No. GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/2023	13.17	4490	4225.0	4490	+/- 5%	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)		12.86	4.00	4.06	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check			4.00			+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (7)	2216893 11/2023	12.42	7.00	7.06	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (10)	21320202 12/2023	12.36	10.00	10.09	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
ORP (mV)	21390144 11/2023	12.39	228	212.5	228.0	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	106.82	100.0	+/- 6% saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.00	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	1.04	0.98	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	9.34	10.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician C. CAM

Date 1/30/23

Time (start): 0715

Time (finish): 0800

smarTroll SN 966040

Turbidity Meter Type LaMotte 2020we

SN 7609

Weather Conditions Sunny 50F

Facility and Unit Plant Hammond

Project No GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23 ↓	14.74	4490	4435	4496	+/- 5%	<input checked="" type="checkbox"/> Yes No	
pH (4)			4.00	4.05	4.00	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (4) check		✓	4.00	3.99	4.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
pH (7)	2216893 11/23 ↓	✓	7.00	6.99	7.00	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (7) check			7.00	7.04	7.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
pH (10)	212320202 12/23 ↓	13.09	10.00	10.03	10.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (10) check			10.00	9.92	10.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
ORP (mV)	21390144 11/23	12.80	228	219	228	+/- 20mV	<input checked="" type="checkbox"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	100.14	100	+/- 6% saturation	<input checked="" type="checkbox"/> Yes No	
Turbidity 0 NTU			0	0.00	0.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 1 NTU			1.00	1.18	1.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 10 NTU			10.00	9.86	10.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician Thomas Messer Date 11/30/2023 Time (start): 0725 Time (finish): 0745  
 smarTroll SN 845724 Turbidity Meter Type LaMotte 2020we SN 5496-3715  
 Weather Conditions Cloudy, So. Facility and Unit Plant Hammond Project No. GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22260153 11/23	13.40	4490	4581	4490	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)	11/23		4.00	3.98	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	—————	—————	4.00	3.96	—————	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (7)	22164093 11/23	12.56	7.00	7.20	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check	—————	—————	7.00	7.03	—————	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (10)	2130202 12/23	11.93	10.00	10.18	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check	—————	—————	10.00	10.07	—————	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
ORP (mV)	21390144 11/23	11.47	228	229.4	228	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	99.1	100	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.50	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	0.84	0.99	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	11.05	10.0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician A. Swast Date 2/1/2023 Time (start) 800 Time (finish) 820  
 smarTroll SN: 883533 Turbidity Meter Type LaMote 2020we SN: 7007-1416  
 Weather Conditions Cloudy, 45°F Facility and Unit: Plant Hammond Project No. GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/2023	9.62	4490	4236.0	4490.0	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)		9.73	4.00	3.95	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check			4.00			+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No	
pH (7)	2216893 11/2023	9.98	7.00	7.03	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No	
pH (10)	21320202 12/2023	10.17	10.00	10.15	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No	
ORP (mV)	21390144 11/2023	10.20	228	233.6	228.0	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	99.54	100.0	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.15	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	1.08	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	8.68	9.72	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: C. CAIN

Date: 2/1/23

Time (start): 0800

Time (finish): 0830

smarTroll SN: 966040

Turbidity Meter Type: LaMotte 2020we

SN: 7009

Weather Conditions: Cloudy 46F

Facility and Unit: Plant Hammond

Project No: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	13.95	4490	4457.4	4490	+/- 5%	<input checked="" type="checkbox"/> Yes No	
pH (4)	↓	/	4.00	4.02	4.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (4) check	↓	/	4.00	3.99	/	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
pH (7)	2216893 11/23	14.66	7.00	7.05	7.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (7) check	↓	/	7.00	7.02	/	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
pH (10)	212320202 12/23	14.97	10.00	10.10	10.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (10) check	↓	/	10.00	9.97	/	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
ORP (mV)	21390144 11/23	15.06	228	230.5	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	98.12	100	+/- 6% saturation	<input checked="" type="checkbox"/> Yes No	
Turbidity 0 NTU			0	0.12	0	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 1 NTU			1.00	1.24	1.0	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 10 NTU			10.00	10.35	10.0	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician Annus Hussain Date 2/1/2023 Time (start): 0755 Time (finish): 0810  
 smarTroll SN: 850729 Turbidity Meter Type LaMotte 2020we SN 5896-3715  
 Weather Conditions cloudy, 46° Facility and Unit Plant Hammond Project No. GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250453 11/23	11.62	4490	4621.9	4490	+/- 5 %	Yes No	
pH (4)			4.00	3.93	4.0	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check			4.00	3.9	4.00	+/- 0.1 SU	Yes No	
pH (7)	2216393 11/23	12.69	7.00	7.03	7.0	+/- 0.1 SU	Yes No	
Mid-Day pH (7) check			7.00	7.01		+/- 0.1 SU	Yes No	
pH (10)	21370702 12/23	13.12	10.00	10.11	10.0	+/- 0.1 SU	Yes No	
Mid-Day pH (10) check			10.00	10.03		+/- 0.1 SU	Yes No	
ORP (mV)	21740194 11/23	13.22	228	224.8	228	+/- 20mV	Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	99.17	100	+/- 6 % saturation	Yes No	
Turbidity 0 NTU			0	0.52	0.00	+/- 0.5 NTU	Yes No	
Turbidity 1 NTU			1.00	1.02	1.02	+/- 0.5 NTU	Yes No	
Turbidity 10 NTU			10.00	10.00	10.00	+/- 0.5 NTU	Yes No	

August 2023



EQUIPMENT CALIBRATION LOG

Field Technician: C. CHAIN

Date: 8/8/23

Time (start): 0844

Time (finish): 0904

smarTroll SN: 883553

Turbidity Meter Type: LeMott 20207

SN: 4121-2623

Weather Conditions: Sunny 72

Facility and Unit: Plant Hammond

Project No.: GH/6591

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	24.00	4490 <del>4.0</del> cc	4445.9 <del>4.25</del>	4490 <del>4.0</del> cc	+/- 5 %	<input checked="" type="checkbox"/> Yes No	
pH (4)			4.0	4.25 <del>4.25</del>	4.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (4) check			4.0	3.99		+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	25.16	7.0	7.18	7.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (7) check			7.0	7.02		+/- 0.1 SU	Yes No	
pH (10)	2210130 8/23	25.28	10.0	10.48	10.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (10) check			10.	10.0		+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	25.33	228	219.9	228	+/- 20mV	<input checked="" type="checkbox"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	97.99	100	+/- 6 % saturation	<input checked="" type="checkbox"/> Yes No	
Turbidity 0 NTU			0	0.05	0.04	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 1 NTU			1	0.99	0.99	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 10 NTU			10	10.54	10.0	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Hester Date: 8/8/23 Time (start): 0843 Time (finish): 0857  
 smarTroll SN: 8507241 Turbidity Meter Type: Lanette 2020 SN: 1475-4011  
 Weather Conditions: Clear, 75° Facility and Unit: Hammond Project No.: GWC5861

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22750153	24.22	4490	4351.6	4440	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)	11/23		4	4.07	4.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	↓		4.03	---	---	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (7)	2216558 11/23	24.74	7.0	7.02	7.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check	↓		6.99	---	---	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (10)	21370282 12/23	24.82	10	10.23	10.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check	↓		10.07	---	---	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
ORP (mV)	22700085 8/23	24.85	278	275.4	278	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	100.40	100	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	1.25	0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1	3.25	0.97	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10	9.73	9.47	+/- 0.5 NTU	<input type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: Elisabeth McDonnell

Date: 08/08/23

Time (start): 840

Time (finish): 910

smarTroll SN: 989630

Turbidity Meter Type: LamoHe 2020t

SN: 4109-2623

Weather Conditions: sunny 85

Facility and Unit: Plant hammont

Project No.: 6W6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	25.50	4,990	4,550	4510	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)			9.00	4.13	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	↓					<del>+/- 0.1 SU</del>	<del><input checked="" type="radio"/> Yes <input type="radio"/> No</del>	
pH (7)	2216893 4/23	26.65	7.0	7.81	7.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check	↓					<del>+/- 0.1 SU</del>	<del><input checked="" type="radio"/> Yes <input type="radio"/> No</del>	
pH (10)	22320202 12/23		10.0	9.82	10.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check	↓					<del>+/- 0.1 SU</del>	<del><input checked="" type="radio"/> Yes <input type="radio"/> No</del>	
ORP (mV)	21390147 11/23	25.56	228	228.2	228.1	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100%	102.95%	100%	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0.0	0.51	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.0	1.45	1.06	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.0	13.3	10.4	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: J. Kessler

Date: 8/12/23

Time (start): 0720

Time (finish): 0750

smarTroll SN: 850724

Turbidity Meter Type: Lametta 2020 we

SN: 19754011

Weather Conditions: Sunny, 75°

Facility and Unit: Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	<u>2280153</u> <u>11/23</u>	<u>27.39</u>	<u>4140</u>	<u>4150.73</u>	<u>4140</u>	<u>+/- 5 %</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)			<u>4.00</u>	<u>4.01</u>	<u>4.00</u>	<u>+/- 0.1 SU</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check				<u>4.09</u>		<u>+/- 0.1 SU</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (7)	<u>2216813</u> <u>11/23</u>	<u>24.27</u>	<u>7.00</u>	<u>6.95</u>	<u>7.00</u>	<u>+/- 0.1 SU</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			<u>7.00</u>			<u>+/- 0.1 SU</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (10)	<u>21320202</u> <u>12/23</u>	<u>25.26</u>	<u>10.00</u>	<u>9.91</u>	<u>10.00</u>	<u>+/- 0.1 SU</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check				<u>9.92</u>		<u>+/- 0.1 SU</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
ORP (mV)	<u>2270085</u> <u>8/23</u>	<u>25.31</u>	<u>228</u>	<u>222.2</u>	<u>228</u>	<u>+/- 20mV</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			<u>100</u>	<u>98.9</u>	<u>100</u>	<u>+/- 6 % saturation</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			<u>0</u>	<u>0.93</u>	<u>0</u>	<u>+/- 0.5 NTU</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			<u>1</u>	<u>1.32</u>	<u>0.97</u>	<u>+/- 0.5 NTU</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			<u>10</u>	<u>7.30</u>	<u>9.97</u>	<u>+/- 0.5 NTU</u>	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: C. CAIN Date: 8/12/23 Time (start): 0740 Time (finish): 0815  
 smarTroll SN: 883553 Turbidity Meter Type: 2020T SN: 4121-2623  
 Weather Conditions: Sunny 75 Facility and Unit: Plant Hammond Project No.: 61W6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	24.97	4490	4593.2	4490	+/- 5 %	<input checked="" type="checkbox"/> No	
pH (4)			4.0	3.96	4.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
Mid-Day pH (4) check			4.0	4.0		+/- 0.1 SU	<input checked="" type="checkbox"/> No	
pH (7)	2216493 11/23	25.75	7.0	6.96	7.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
Mid-Day pH (7) check				7.0	7.0		+/- 0.1 SU	<input checked="" type="checkbox"/> No
pH (10)	22110130 8/23	25.92	10.0	9.91	10.0	+/- 0.1 SU	<input checked="" type="checkbox"/> No	
Mid-Day pH (10) check				10.0	10.02		+/- 0.1 SU	<input checked="" type="checkbox"/> No
ORP (mV)	2390144 11/23	25.97	228	225.4	228	+/- 20mV	<input checked="" type="checkbox"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	96.25	100	+/- 6 % saturation	<input checked="" type="checkbox"/> No	
Turbidity 0 NTU			0	0	0	+/- 0.5 NTU	<input checked="" type="checkbox"/> No	
Turbidity 1 NTU			1	0.79	0.96	+/- 0.5 NTU	<input checked="" type="checkbox"/> No	
Turbidity 10 NTU			10			+/- 0.5 NTU	Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: A. Szurast

Date: 8-12-2023

Time (start): 730

Time (finish): 750

smarTroll SN: 883530

Turbidity Meter Type: LaMotte 2020f

SN: 4139-2623

Weather Conditions: Sunny, 75° F

Facility and Unit: Plant Hammond

Project No.: G-W6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/2023	25.30	4490.0	4501.3	4490.0	+/- 5%	<input checked="" type="radio"/> Yes No	
pH (4)		25.90	4.00	4.71	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	<del>_____</del>					+/- 0.1 SU	Yes No	
pH (7)	2216893 11/2023	26.15	7.00	7.43	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	<del>_____</del>					+/- 0.1 SU	Yes No	
pH (10)	21320262 12/2023	26.29	10.00	10.17	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	<del>_____</del>					+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	26.31	228.0	226.2	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100.0	100.04	100.0	+/- 6% saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0.0	0.00	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.0	1.28	1.10	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.0	8.95	10.2	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: C. CAIN

Date: 8/13/23

Time (start): 0800

Time (finish): 0820

smarTroll SN: 843553

Turbidity Meter Type: 2020T

SN: 4121-2623

Weather Conditions: Sunny 70

Facility and Unit: Plant Hammond

Project No.: G126581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	23.64	<del>4490</del> 4479.6	4479.6	4490	+/- 5 %	<input checked="" type="checkbox"/> Yes No	
pH (4)			4.0	4.07	4.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (4) check			4.0	4.0		+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
pH (7)	2216893 11/23	24.55	7.0	7.01	7.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (7) check			7.0	7.02		+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
pH (10)	22110130 8/23	24.62	10.0	10.00	10.00	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (10) check			10.0	9.99		+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
ORP (mV)	21390144	25.02	228	226.8	228	+/- 20mV	<input checked="" type="checkbox"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	94.10	100	+/- 6 % saturation	<input checked="" type="checkbox"/> Yes No	
Turbidity 0 NTU			0	0.32	0	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 1 NTU			1	0.85	1	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 10 NTU			10	9.32		+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Hessler

Date: 8/13/2023

Time (start): 0750

Time (finish): 0830

smarTroll SN: 850724

Turbidity Meter Type: LaMotte 2020we

SN: 12754011

Weather Conditions: Cloudy/Sunny 75°

Facility and Unit: Plant Hammond

Project No.: GWSSJ

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	7225153	24.69	4490	4479.0	4490	+/- 5%	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)	11123		4.0	4.04	4.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	<del>_____</del>		<del>_____</del>	3.99	<del>_____</del>	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (7)	2216913 11/23	25.00	7.0	6.91	7.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check	<del>_____</del>		<del>_____</del>	7.05	<del>_____</del>	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (10)	2137802 12/23	25.17	10	9.91	10.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check	<del>_____</del>		<del>_____</del>	10.00	<del>_____</del>	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
ORP (mV)	2220085 8/23	24.41	228	234.2	228	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	97.2	100	+/- 6% saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	6.66	0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1	0.55	0.85	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10	9.82	9.92	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	



EQUIPMENT CALIBRATION LOG

Field Technician: A. Szwest

Date: 8-13-2023

Time (start): 750

Time (finish): 815

smarTroll SN: 889530

Turbidity Meter Type: LaMotte 2020t

SN: 4139-2623

Weather Conditions: Sunny, 75°F

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/2023	24.61	4490.0	4520.1	4490.0	+/- 5%	<input checked="" type="radio"/> Yes No	
pH (4)		24.90	4.00	4.00	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check						+/- 0.1 SU	Yes No	
pH (7)	2216893 11/2023	25.20	7.00	7.00	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check						+/- 0.1 SU	Yes No	
pH (10)	21320202 12/2023	25.33	10.00	9.98	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check						+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	25.38	228.0	228.1	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100.0	100.78	100.0	+/- 6% saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0.00	0.07	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.34	0.92	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.0	11.0	9.87	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

# APPENDIX D

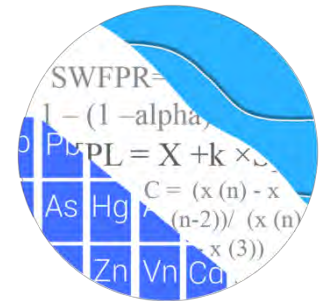
## Statistical Analysis Reports

January 2023

## GROUNDWATER STATS CONSULTING

August 31, 2023

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



Re: Plant Hammond Ash Pond 2 (AP-2)  
Statistical Analysis – January/February 2023 Sample Event

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the January/February 2023 Semi-Annual Groundwater Detection and Assessment Monitoring Statistical summary of groundwater data for Georgia Power Company's Plant Hammond AP-2. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the Coal Combustion Residuals (CCR) program in 2016 for all wells except those noted below, and at least 8 samples were collected at all wells. Sampling began in 2019 for assessment wells MW-21D, MW-22, and MW-23D; and in 2020 for upgradient wells HGWA-42D, HGWA-43D, HGWA-44D, assessment well MW-37D, and piezometers MW-33, MW-34D, and MW-35; and in 2021 for piezometer MW-51.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient well:** HGWA-1, HGWA-2, HGWA-3, HGWA-4, HGWA-5, HGWA-6, HGWA-42D, HGWA-43D, and HGWA-44D
- **Downgradient wells:** HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- **Assessment wells:** MW-21D, MW-22, MW-23D, and MW-37D

- **Piezometers:** MW-33, MW-34D, MW-35, and MW-51

Assessment wells and piezometers are included on time series and box plots for all parameters. When a minimum of 4 samples is available, these wells and piezometers are evaluated using confidence intervals for the Appendix IV constituents.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager for Groundwater Stats Consulting. The statistical analysis was performed according to the groundwater data screening that was performed in April 2018 by GSC and approved by Dr. Cameron, PhD Statistician with MacStat Consulting and primary author of the USEPA Unified Guidance.

The CCR program consists of the constituents listed below. The terms “parameters” and “constituents” are used interchangeably.

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of well/constituent pairs containing 100% non-detects follows this letter.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. In the case of lithium, historical reporting limits vary among the wells. Therefore, the reporting limit of 0.03 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. When values in background are flagged as outliers, the measurements may be seen in a lighter font and as a disconnected symbol on the graphs. No values were flagged as outliers (Figure C).

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

### **Statistical Methods – Appendix III Parameters**

Appendix III parameters are evaluated using Interwell Prediction Limits combined with 1-of-2 resamples for all constituents: boron, calcium, chloride, fluoride, pH, sulfate, and TDS.

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, an earlier portion of data may require deselection prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs. When this step is required, a summary of any adjusted records will be provided.

### **Statistical Evaluation of Appendix III Parameters – January/February 2023**

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed for potential outliers during this analysis. When values in background are flagged as outliers, the measurements may be seen in a lighter font and as a disconnected symbol on the graphs. No values have been flagged as outliers (Figure C).

#### Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed for Appendix III parameters using all historical upgradient well data through February 2023 (Figure D). Downgradient measurements were compared to these interwell background limits. Interwell prediction limits use all available upgradient well data to establish a background limit for an individual constituent. The January/February 2023 sample from each downgradient well is compared to the background limit to determine whether any initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirm the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. If no resample is collected, the initial exceedance is automatically confirmed.

A summary table of these findings is provided along with the prediction limits. When the January/February 2023 compliance data from downgradient wells were compared to

interwell prediction limits, exceedances were noted for the following well/constituent pairs:

- Boron: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- Calcium: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- Chloride: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- Sulfate: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- TDS: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18

### Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen’s Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient well data are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of variability in groundwater unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

#### Increasing trends:

- Boron: HGWA-2 (upgradient) and HGWC-16
- Calcium: HGWA-3 (upgradient) and HGWC-16
- Chloride: HGWA-44D (upgradient) and HGWC-16
- Sulfate: HGWA-2 (upgradient)
- TDS: HGWC-16 and HGWC-17

#### Decreasing trends:

- Boron: HGWC-14
- Calcium: HGWA-4 (upgradient)
- Chloride: HGWA-3 (upgradient), HGWA-4 (upgradient), HGWC-14, HGWC-15, and HGWC-18
- Sulfate: HGWC-43D (upgradient)
- TDS: HGWA-4 (upgradient), HGWC-14, and HGWC-15

### **Statistical Methods – Appendix IV Parameters**

Appendix IV parameters are evaluated by statistically comparing the mean or median of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (MCL or CCR rule-specified limits)



or site-specific limits that are based on upgradient background groundwater quality. Site-specific background limits are determined using tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. Confidence intervals are provided for Appendix IV well/constituent pairs with detections and with current reported data. The methods are described below.

### **Statistical Evaluation of Appendix IV Parameters – January/February 2023**

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 that contain 100% non-detects do not require analysis. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis. No values were flagged (Figure C).

#### Interwell Upper Tolerance Limits

Site specific background limits were calculated as upper one-sided tolerance limits (UTLs) on pooled upgradient interwell data through February 2023 for each of the Appendix IV constituents (Figure F). When varying detection limits were present in upgradient wells, all non-detects were substituted with the most recent reporting limit. As mentioned above, a reporting limit of 0.03 mg/L was substituted across all wells for lithium. Parametric tolerance limits were 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 to GWPS, confidence intervals were constructed for the Appendix IV constituents in each downgradient well and assessment wells with 4 or more samples through February 2023 (Figure H).

The Sanitas software was used to calculate the tolerance limits and the confidence intervals, either parametric or nonparametric, depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

For some well/constituent pairs, the parametric lower confidence limit resulted in a negative number. Therefore, nonparametric confidence intervals were constructed for these well/constituent pairs and may be found at the end of Figure H. This is a more conservative approach in that the lower confidence limit reflects the low measurements in the data set for a given well rather than a negative number.

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 the confidence interval results, along with graphical comparison against GWPS follow this letter. Exceedances were noted for the following well/constituent pairs:

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

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure I). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient trends, it is an indication of variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing trends:

- None

Decreasing trends:

- Cobalt: HGWA-4 (upgradient) and HGWC-18

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Hammond AP-2. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Tristan Clark  
Groundwater Analyst



Andrew Collins  
Project Manager

# 100% Non-Detects: Appendix IV Downgradient, Assessment, and Piezometers

Analysis Run 5/22/2023 3:57 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Antimony (mg/L)

HGWC-16, HGWC-17, MW-21D, MW-23D, MW-51

Beryllium (mg/L)

HGWC-15, HGWC-16, MW-21D, MW-23D, MW-36D

Cadmium (mg/L)

HGWC-16, MW-21D, MW-36D, MW-37D

Chromium (mg/L)

MW-51

Cobalt (mg/L)

MW-36D

Lead (mg/L)

MW-51

Lithium (mg/L)

HGWC-14

Mercury (mg/L)

HGWC-14, HGWC-15, HGWC-16, HGWC-17, MW-21D, MW-33, MW-34D, MW-37D

Molybdenum (mg/L)

HGWC-14, HGWC-16, HGWC-17, HGWC-18, MW-33, MW-34D, MW-35, MW-36D, MW-51

Selenium (mg/L)

MW-21D, MW-23D, MW-36D, MW-37D

Thallium (mg/L)

HGWC-16, MW-21D, MW-22, MW-23D, MW-36D, MW-37D, MW-51

# Interwell Prediction Limits - Significant Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 5/12/2023, 1:14 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Obsrv.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-14	0.44	n/a	2/1/2023	7.7	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.44	n/a	2/1/2023	2	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.44	n/a	2/1/2023	2.8	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.44	n/a	1/30/2023	6.8	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.44	n/a	2/1/2023	5.9	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	2/1/2023	464	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	2/1/2023	174	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	2/1/2023	216	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	1/30/2023	286	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	2/1/2023	288	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	2/1/2023	108	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	2/1/2023	85	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	2/1/2023	112	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	1/30/2023	154	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	2/1/2023	92.7	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	86.9	n/a	2/1/2023	1060	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	86.9	n/a	2/1/2023	341	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	86.9	n/a	2/1/2023	257	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	86.9	n/a	1/30/2023	451	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	86.9	n/a	2/1/2023	776	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	2/1/2023	1950	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	2/1/2023	892	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	2/1/2023	1030	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	1/30/2023	1320	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	2/1/2023	1430	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2

# Interwell Prediction Limits - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 5/12/2023, 1:14 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-14	0.44	n/a	2/1/2023	7.7	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.44	n/a	2/1/2023	2	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.44	n/a	2/1/2023	2.8	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.44	n/a	1/30/2023	6.8	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.44	n/a	2/1/2023	5.9	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	2/1/2023	464	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	2/1/2023	174	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	2/1/2023	216	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	1/30/2023	286	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	2/1/2023	288	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	2/1/2023	108	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	2/1/2023	85	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	2/1/2023	112	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	1/30/2023	154	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	2/1/2023	92.7	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-14	8.25	4.57	2/1/2023	4.93	No	174	n/a	n/a	0	n/a	n/a	0.0001308	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-15	8.25	4.57	2/1/2023	6.22	No	174	n/a	n/a	0	n/a	n/a	0.0001308	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-16	8.25	4.57	2/1/2023	7.15	No	174	n/a	n/a	0	n/a	n/a	0.0001308	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-17	8.25	4.57	1/30/2023	6.44	No	174	n/a	n/a	0	n/a	n/a	0.0001308	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-18	8.25	4.57	2/1/2023	4.66	No	174	n/a	n/a	0	n/a	n/a	0.0001308	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-14	1.3	n/a	2/1/2023	0.094J	No	174	n/a	n/a	31.03	n/a	n/a	0.00006541	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-15	1.3	n/a	2/1/2023	0.086J	No	174	n/a	n/a	31.03	n/a	n/a	0.00006541	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-16	1.3	n/a	2/1/2023	0.053J	No	174	n/a	n/a	31.03	n/a	n/a	0.00006541	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-17	1.3	n/a	1/30/2023	0.097J	No	174	n/a	n/a	31.03	n/a	n/a	0.00006541	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-18	1.3	n/a	2/1/2023	0.21	No	174	n/a	n/a	31.03	n/a	n/a	0.00006541	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	86.9	n/a	2/1/2023	1060	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	86.9	n/a	2/1/2023	341	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	86.9	n/a	2/1/2023	257	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	86.9	n/a	1/30/2023	451	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	86.9	n/a	2/1/2023	776	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	2/1/2023	1950	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	2/1/2023	892	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	2/1/2023	1030	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	1/30/2023	1320	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	2/1/2023	1430	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2

# Appendix III Trend Test - Prediction Limit Exceedances - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/12/2023, 1:20 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-2 (bg)	0.002417	122	81	Yes	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-14	-1.327	-96	-81	Yes	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-16	0.2302	130	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	2.246	106	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-4 (bg)	-8.577	-103	-81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-16	12.23	150	81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-3 (bg)	-0.1264	-88	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-4 (bg)	-0.4126	-149	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-44D (bg)	8.893	28	25	Yes	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-14	-76.22	-127	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-15	-23.23	-122	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-16	12.44	172	81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-18	-35.39	-120	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	1.847	118	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-2.015	-26	-25	Yes	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-4 (bg)	-25.27	-113	-81	Yes	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-14	-209.1	-132	-81	Yes	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-15	-55.89	-95	-81	Yes	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-16	53.83	154	81	Yes	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-17	57.88	121	81	Yes	20	5	n/a	n/a	0.01	NP

# Appendix III Trend Test - Prediction Limit Exceedances - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 5/12/2023, 1:20 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.000535	-35	-81	No	20	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>0.002417</b>	<b>122</b>	<b>81</b>	<b>Yes</b>	<b>20</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)	0.0003333	19	81	No	20	20	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-4 (bg)	0	-1	-81	No	20	5	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-42D (bg)	-0.001407	-2	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-43D (bg)	-0.009889	-24	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-44D (bg)	0.06482	20	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-5 (bg)	0.0004577	38	81	No	20	20	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-6 (bg)	-0.0005014	-49	-81	No	20	5	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-14</b>	<b>-1.327</b>	<b>-96</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-15	0.01406	14	81	No	20	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-16</b>	<b>0.2302</b>	<b>130</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-17	0.171	42	81	No	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-18	-0.242	-54	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.181	64	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	0.8789	66	81	No	20	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>2.246</b>	<b>106</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-8.577</b>	<b>-103</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWA-42D (bg)	0.1137	2	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-43D (bg)	-3.051	-16	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-7.217	-22	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-5 (bg)	0.07208	5	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-6 (bg)	0.4785	53	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-14	-9.752	-50	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-15	0.4138	4	81	No	20	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWC-16</b>	<b>12.23</b>	<b>150</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWC-17	14.13	76	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-18	4.792	29	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	0.5676	55	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-2 (bg)	-0.02813	-10	-81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>-0.1264</b>	<b>-88</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-0.4126</b>	<b>-149</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	HGWA-42D (bg)	-0.04356	-1	-25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-43D (bg)	0	-2	-25	No	9	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWA-44D (bg)</b>	<b>8.893</b>	<b>28</b>	<b>25</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	HGWA-5 (bg)	-0.06171	-55	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-6 (bg)	-0.06887	-72	-81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWC-14</b>	<b>-76.22</b>	<b>-127</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWC-15</b>	<b>-23.23</b>	<b>-122</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWC-16</b>	<b>12.44</b>	<b>172</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	HGWC-17	8.913	72	81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWC-18</b>	<b>-35.39</b>	<b>-120</b>	<b>-81</b>	<b>Yes</b>	<b>20</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)	0.7253	21	81	No	20	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>1.847</b>	<b>118</b>	<b>81</b>	<b>Yes</b>	<b>20</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)	0.4639	28	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-4 (bg)	-0.1234	-28	-81	No	20	15	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-42D (bg)	0.1593	7	25	No	9	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-43D (bg)</b>	<b>-2.015</b>	<b>-26</b>	<b>-25</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWA-44D (bg)	3.569	14	25	No	9	11.11	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-5 (bg)	-0.2023	-36	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-6 (bg)	-0.1893	-43	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-14	-12.73	-18	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-15	-15.03	-65	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-16	2.285	55	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-17	1.633	7	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-18	8.948	36	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	1.455	8	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	2.559	17	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	1.02	19	81	No	20	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-25.27</b>	<b>-113</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids (mg/L)	HGWA-42D (bg)	-2.891	-2	-25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	-6.294	-12	-25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	39.45	22	25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-5 (bg)	-1.947	-18	-81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-6 (bg)	-1.109	-29	-81	No	20	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-14</b>	<b>-209.1</b>	<b>-132</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-15</b>	<b>-55.89</b>	<b>-95</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-16</b>	<b>53.83</b>	<b>154</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>



# Appendix III Trend Test - Prediction Limit Exceedances - All Results Page 2

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/12/2023, 1:20 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/L)	HGWC-17	57.88	121	81	Yes	20	5	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-18	-34.41	-64	-81	No	20	0	n/a	n/a	0.01	NP

# Upper Tolerance Limit Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/16/2023, 2:09 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bq.N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	135	82.22	n/a	0.0009833	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	168	80.95	n/a	0.000181	NP Inter(NDs)
Barium (mg/L)	n/a	0.46	n/a	n/a	n/a	168	0	n/a	0.000181	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	156	82.69	n/a	0.0003349	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	168	92.26	n/a	0.000181	NP Inter(NDs)
Chromium (mg/L)	n/a	0.019	n/a	n/a	n/a	156	85.26	n/a	0.0003349	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.038	n/a	n/a	n/a	168	69.64	n/a	0.000181	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	4.36	n/a	n/a	n/a	167	0	n/a	0.0001905	NP Inter(n>table)
Fluoride (mg/L)	n/a	1.3	n/a	n/a	n/a	174	31.03	n/a	NaN	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	156	75	n/a	0.0003349	NP Inter(NDs)
Lithium (mg/L)	n/a	0.064	n/a	n/a	n/a	166	17.47	n/a	0.0002005	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	112	92.86	n/a	0.003199	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	154	83.77	n/a	0.0003711	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	168	98.21	n/a	0.000181	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	168	98.81	n/a	0.000181	NP Inter(NDs)

<b>PLANT HAMMOND AP-2 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		0.46	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.0019	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		1.3	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.064	0.064
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

*\*GWPS = Groundwater Protection Standard*

# Confidence Intervals - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/22/2023, 4:01 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	HGWC-18	0.1843	0.1565	0.038	Yes	23	0.1704	0.02661	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-33	0.05671	0.04409	0.038	Yes	10	0.0504	0.007074	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-35	0.09573	0.08302	0.038	Yes	8	0.08938	0.005999	0	None	No	0.01	Param.

# Confidence Intervals - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 5/22/2023, 4:01 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-14	0.003	0.001	0.006	No	17	0.002572	0.0009613	82.35	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-15	0.003	0.0021	0.006	No	17	0.002806	0.0004423	82.35	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-18	0.003	0.0008	0.006	No	17	0.002871	0.0005336	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-22	0.003	0.0016	0.006	No	8	0.002825	0.000495	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-33	0.003	0.00046	0.006	No	6	0.002577	0.001037	83.33	None	No	0.0155	NP (NDs)
Antimony (mg/L)	MW-34D	0.003	0.0018	0.006	No	4	0.0027	0.0006	75	None	No	0.0625	NP (NDs)
Antimony (mg/L)	MW-35	0.003	0.00041	0.006	No	6	0.002552	0.00105	66.67	None	No	0.0155	NP (NDs)
Antimony (mg/L)	MW-37D	0.003	0.00079	0.006	No	6	0.002632	0.0009022	83.33	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	HGWC-14	0.007215	0.004338	0.01	No	23	0.006003	0.003023	13.04	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	HGWC-15	0.005	0.0008	0.01	No	23	0.004406	0.001571	86.96	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-16	0.005	0.0012	0.01	No	23	0.004257	0.001668	82.61	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-17	0.005	0.0017	0.01	No	23	0.003864	0.001801	69.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-18	0.006689	0.004793	0.01	No	23	0.005741	0.001813	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-21D	0.005	0.001	0.01	No	13	0.003884	0.00184	69.23	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-22	0.005	0.00045	0.01	No	12	0.004621	0.001313	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-23D	0.005	0.001	0.01	No	12	0.004318	0.001592	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-33	0.009086	0.003603	0.01	No	9	0.006344	0.00284	11.11	None	No	0.01	Param.
Arsenic (mg/L)	MW-34D	0.005798	0.001268	0.01	No	6	0.003533	0.001649	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-35	0.025	0.0043	0.01	No	8	0.01043	0.009037	25	None	No	0.004	NP (normality)
Arsenic (mg/L)	MW-37D	0.005	0.00095	0.01	No	8	0.003794	0.00171	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-51	0.0046	0.002	0.01	No	4	0.00375	0.001185	0	None	No	0.0625	NP (selected)
Barium (mg/L)	HGWC-14	0.022	0.018	2	No	23	0.02474	0.02198	4.348	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-15	0.02674	0.018	2	No	23	0.02237	0.008352	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-16	0.1113	0.1006	2	No	23	0.1059	0.01019	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-17	0.02637	0.02358	2	No	23	0.02497	0.002661	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-18	0.0336	0.028	2	No	23	0.03231	0.01539	4.348	None	No	0.01	NP (normality)
Barium (mg/L)	MW-21D	0.06613	0.04033	2	No	13	0.05323	0.01735	0	None	No	0.01	Param.
Barium (mg/L)	MW-22	0.03037	0.01546	2	No	12	0.02292	0.009501	0	None	No	0.01	Param.
Barium (mg/L)	MW-23D	0.06578	0.05089	2	No	12	0.05833	0.00949	0	None	No	0.01	Param.
Barium (mg/L)	MW-33	0.02701	0.0201	2	No	9	0.02356	0.003575	0	None	No	0.01	Param.
Barium (mg/L)	MW-34D	0.04598	0.03502	2	No	6	0.0405	0.003987	0	None	No	0.01	Param.
Barium (mg/L)	MW-35	0.02969	0.02206	2	No	8	0.02588	0.003603	0	None	No	0.01	Param.
Barium (mg/L)	MW-37D	0.1578	0.108	2	No	8	0.1325	0.02605	0	None	ln(x)	0.01	Param.
Barium (mg/L)	MW-51	0.05247	0.01703	2	No	4	0.03475	0.007805	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-14	0.00058	0.00043	0.004	No	21	0.0005657	0.0003206	9.524	None	No	0.01	NP (normality)
Beryllium (mg/L)	HGWC-17	0.0005	0.000067	0.004	No	21	0.0004158	0.0001779	80.95	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-18	0.003365	0.002719	0.004	No	21	0.003042	0.0005857	4.762	None	No	0.01	Param.
Beryllium (mg/L)	MW-22	0.0005	0.000062	0.004	No	12	0.0002851	0.0002247	50	None	No	0.01	NP (normality)
Beryllium (mg/L)	MW-33	0.00109	0.0007052	0.004	No	9	0.00088	0.0002771	0	None	x^2	0.01	Param.
Beryllium (mg/L)	MW-34D	0.0005	0.000065	0.004	No	6	0.0003692	0.0002045	66.67	None	No	0.0155	NP (NDs)
Beryllium (mg/L)	MW-35	0.0006894	0.0004081	0.004	No	8	0.0005488	0.0001327	0	None	No	0.01	Param.
Beryllium (mg/L)	MW-37D	0.0005	0.00012	0.004	No	8	0.0004525	0.0001344	87.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	MW-51	0.00042	0.00011	0.004	No	4	0.0002725	0.0001269	0	None	No	0.0625	NP (selected)
Cadmium (mg/L)	HGWC-14	0.0005	0.00012	0.005	No	23	0.0003203	0.0001938	52.17	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-15	0.00216	0.001418	0.005	No	23	0.001789	0.0007095	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-17	0.0005	0.00007	0.005	No	23	0.0004813	0.00008966	95.65	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-18	0.0024	0.0016	0.005	No	23	0.002329	0.001747	4.348	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-22	0.0021	0.001547	0.005	No	12	0.001747	0.0005224	0	None	x^3	0.01	Param.
Cadmium (mg/L)	MW-23D	0.0025	0.00012	0.005	No	12	0.001234	0.001128	41.67	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-33	0.00125	0.00013	0.005	No	9	0.0002967	0.0003585	11.11	None	No	0.002	NP (normality)
Cadmium (mg/L)	MW-34D	0.0007197	0.0002366	0.005	No	6	0.001138	0.001066	33.33	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	MW-35	0.001833	0.0009249	0.005	No	8	0.001379	0.0004282	0	None	No	0.01	Param.
Cadmium (mg/L)	MW-51	0.0016	0.00024	0.005	No	4	0.0008075	0.0006043	0	None	No	0.0625	NP (selected)
Chromium (mg/L)	HGWC-14	0.025	0.00066	0.1	No	21	0.02267	0.007357	90.48	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-15	0.025	0.0012	0.1	No	21	0.02153	0.008713	85.71	None	No	0.01	NP (NDs)

# Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/22/2023, 4:01 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	HGWC-16	0.025	0.0021	0.1	No	21	0.02158	0.008585	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-17	0.005	0.0018	0.1	No	21	0.00444	0.001421	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-18	0.025	0.00063	0.1	No	21	0.0215	0.008781	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-21D	0.005	0.00074	0.1	No	13	0.004332	0.001632	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-22	0.005	0.00075	0.1	No	12	0.004262	0.001724	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-23D	0.025	0.00086	0.1	No	12	0.02097	0.009402	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-33	0.005	0.00069	0.1	No	9	0.004521	0.001437	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	MW-34D	0.0059	0.005	0.1	No	6	0.00515	0.0003674	83.33	None	No	0.0155	NP (NDs)
Chromium (mg/L)	MW-35	0.025	0.00079	0.1	No	8	0.01895	0.0112	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-37D	0.005	0.0014	0.1	No	8	0.004525	0.001265	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	HGWC-14	0.033	0.025	0.038	No	23	0.03281	0.02061	4.348	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-15	0.0425	0.02433	0.038	No	23	0.03342	0.01737	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-16	0.005	0.00037	0.038	No	23	0.004593	0.001347	91.3	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-17	0.01571	0.01282	0.038	No	23	0.01427	0.00276	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>HGWC-18</b>	<b>0.1843</b>	<b>0.1565</b>	<b>0.038</b>	<b>Yes</b>	<b>23</b>	<b>0.1704</b>	<b>0.02661</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-21D	0.005	0.00034	0.038	No	13	0.004642	0.001292	92.31	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-22	0.03621	0.02329	0.038	No	12	0.02975	0.008237	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-23D	0.001137	0.0009167	0.038	No	12	0.001027	0.0001402	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>MW-33</b>	<b>0.05671</b>	<b>0.04409</b>	<b>0.038</b>	<b>Yes</b>	<b>10</b>	<b>0.0504</b>	<b>0.007074</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-34D	0.01049	0.004877	0.038	No	6	0.007683	0.002043	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>MW-35</b>	<b>0.09573</b>	<b>0.08302</b>	<b>0.038</b>	<b>Yes</b>	<b>8</b>	<b>0.08938</b>	<b>0.005999</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-37D	0.005	0.00048	0.038	No	8	0.003997	0.001876	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-51	0.03747	0.01703	0.038	No	4	0.02725	0.0045	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-14	1.561	1.096	5	No	23	1.329	0.4443	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-15	0.8756	0.4627	5	No	23	0.6692	0.3947	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-16	0.9267	0.5097	5	No	23	0.7182	0.3987	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-17	0.9865	0.6461	5	No	23	0.8163	0.3254	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-18	2.152	1.575	5	No	23	1.864	0.5525	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-21D	1.019	0.4388	5	No	13	0.7489	0.4402	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-22	1.06	0.3998	5	No	12	0.7298	0.4206	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-23D	1.031	0.5436	5	No	12	0.7872	0.3104	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-33	2.321	1.061	5	No	9	1.691	0.6528	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-34D	1.291	0.2594	5	No	6	0.7753	0.3756	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-35	2.706	0.832	5	No	8	1.739	0.9594	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-37D	1.349	0.1355	5	No	8	0.7421	0.5723	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-51	1.418	0.2041	5	No	4	0.811	0.2673	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-14	0.1721	0.07713	4	No	24	0.1688	0.1523	20.83	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-15	0.12	0.09	4	No	24	0.1373	0.1149	41.67	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-16	0.1407	0.04851	4	No	24	0.1481	0.1161	50	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	HGWC-17	0.1743	0.06167	4	No	24	0.2164	0.206	29.17	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	HGWC-18	0.6071	0.3854	4	No	24	0.4963	0.2173	4.167	None	No	0.01	Param.
Fluoride (mg/L)	MW-21D	0.1	0.056	4	No	13	0.09277	0.01769	76.92	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-22	0.13	0.064	4	No	12	0.1114	0.05592	66.67	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-23D	0.14	0.074	4	No	12	0.1028	0.0259	66.67	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-33	0.2751	0.1183	4	No	10	0.1967	0.08785	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-34D	0.09254	0.05506	4	No	6	0.07817	0.01734	16.67	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	MW-35	0.09433	0.05142	4	No	8	0.07288	0.02024	12.5	None	No	0.01	Param.
Fluoride (mg/L)	MW-37D	0.09216	0.05384	4	No	8	0.073	0.01808	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-51	0.18	0.072	4	No	4	0.11	0.04956	0	None	No	0.0625	NP (selected)
Lead (mg/L)	HGWC-14	0.001674	0.001233	0.015	No	21	0.001453	0.0003992	9.524	None	No	0.01	Param.
Lead (mg/L)	HGWC-15	0.001	0.001	0.015	No	21	0.0008298	0.0003605	76.19	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-16	0.001	0.0001	0.015	No	21	0.0006201	0.0004505	57.14	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-17	0.001	0.000089	0.015	No	21	0.0006574	0.0004481	61.9	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-18	0.001401	0.001045	0.015	No	21	0.001223	0.0003233	9.524	None	No	0.01	Param.
Lead (mg/L)	MW-21D	0.001	0.000048	0.015	No	13	0.000756	0.0004098	69.23	None	No	0.01	NP (NDs)

# Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/22/2023, 4:01 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	MW-22	0.001	0.000094	0.015	No	12	0.0007692	0.0004179	75	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-23D	0.001	0.00016	0.015	No	12	0.0008509	0.000349	83.33	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-33	0.001674	0.001032	0.015	No	9	0.001511	0.00031	22.22	Kaplan-Meier	x*5	0.01	Param.
Lead (mg/L)	MW-34D	0.001	0.00087	0.015	No	6	0.0009783	0.00005307	83.33	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	MW-35	0.001	0.00016	0.015	No	8	0.000795	0.0003134	50	None	No	0.004	NP (normality)
Lead (mg/L)	MW-37D	0.0017	0.000082	0.015	No	8	0.0008965	0.0004809	62.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	HGWC-15	0.03	0.0021	0.064	No	23	0.01411	0.01324	26.09	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-16	0.0042	0.0029	0.064	No	22	0.004023	0.002541	4.545	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-17	0.03	0.0012	0.064	No	22	0.01427	0.01469	45.45	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-18	0.01424	0.01197	0.064	No	22	0.0131	0.002122	0	None	No	0.01	Param.
Lithium (mg/L)	MW-21D	0.02469	0.02085	0.064	No	13	0.02277	0.002587	0	None	No	0.01	Param.
Lithium (mg/L)	MW-22	0.0015	0.0011	0.064	No	12	0.001275	0.0002598	0	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-23D	0.002562	0.002088	0.064	No	12	0.002325	0.0003019	0	None	No	0.01	Param.
Lithium (mg/L)	MW-33	0.015	0.00086	0.064	No	8	0.002775	0.004941	12.5	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-34D	0.002492	0.0005877	0.064	No	5	0.00154	0.0005683	0	None	No	0.01	Param.
Lithium (mg/L)	MW-35	0.015	0.0034	0.064	No	8	0.005362	0.00392	12.5	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-37D	0.03763	0.02466	0.064	No	7	0.03114	0.00546	0	None	No	0.01	Param.
Lithium (mg/L)	MW-51	0.002658	0.0003917	0.064	No	4	0.001525	0.0004992	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-18	0.0002	0.00006	0.002	No	14	0.0001536	0.00006559	64.29	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-22	0.0002	0.00016	0.002	No	6	0.0001933	0.00001633	83.33	None	No	0.0155	NP (NDs)
Mercury (mg/L)	MW-23D	0.0002	0.00017	0.002	No	6	0.000195	0.00001225	83.33	None	No	0.0155	NP (NDs)
Mercury (mg/L)	MW-35	0.00084	0.00014	0.002	No	4	0.000405	0.000336	25	None	No	0.0625	NP (selected)
Molybdenum (mg/L)	HGWC-15	0.01	0.0007	0.1	No	21	0.009557	0.002029	95.24	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-21D	0.03062	0.01772	0.1	No	13	0.02446	0.009288	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-22	0.01	0.00013	0.1	No	12	0.009177	0.002849	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-23D	0.004031	0.002602	0.1	No	12	0.003317	0.0009104	8.333	None	No	0.01	Param.
Molybdenum (mg/L)	MW-37D	0.0208	0.00566	0.1	No	7	0.01323	0.006372	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-14	0.01191	0.006327	0.05	No	23	0.009118	0.005336	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-15	0.005	0.0041	0.05	No	23	0.00444	0.00139	82.61	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-16	0.005	0.000089	0.05	No	23	0.004786	0.001024	95.65	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-17	0.005	0.0023	0.05	No	23	0.004513	0.001329	86.96	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-18	0.03429	0.0152	0.05	No	23	0.02713	0.02106	4.348	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	MW-22	0.005	0.002	0.05	No	12	0.00475	0.000866	91.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-33	0.02526	0.007766	0.05	No	9	0.01653	0.01103	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	MW-34D	0.005	0.0016	0.05	No	6	0.004017	0.00155	66.67	None	No	0.0155	NP (NDs)
Selenium (mg/L)	MW-35	0.02273	0.006433	0.05	No	8	0.01431	0.009754	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	MW-51	0.004735	0.0008646	0.05	No	4	0.00335	0.001392	25	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	HGWC-14	0.000306	0.00027	0.002	No	23	0.000299	0.00004904	0	None	No	0.01	NP (normality)
Thallium (mg/L)	HGWC-15	0.001	0.00022	0.002	No	23	0.0009661	0.0001626	95.65	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-17	0.001	0.00013	0.002	No	23	0.0006978	0.000424	65.22	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-18	0.001	0.00016	0.002	No	23	0.0005665	0.0004248	47.83	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-33	0.0025	0.00021	0.002	No	9	0.0005311	0.0007402	11.11	None	No	0.002	NP (normality)
Thallium (mg/L)	MW-34D	0.001	0.00015	0.002	No	6	0.0008583	0.000347	83.33	None	No	0.0155	NP (NDs)
Thallium (mg/L)	MW-35	0.001	0.00013	0.002	No	8	0.0008913	0.0003076	87.5	None	No	0.004	NP (NDs)

# Appendix IV Trend Test - Confidence Interval Exceedances - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/15/2023, 2:49 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	HGWA-4 (bg)	-0.00006016	-118	-98	Yes	23	65.22	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWC-18	-0.008561	-117	-98	Yes	23	0	n/a	n/a	0.01	NP



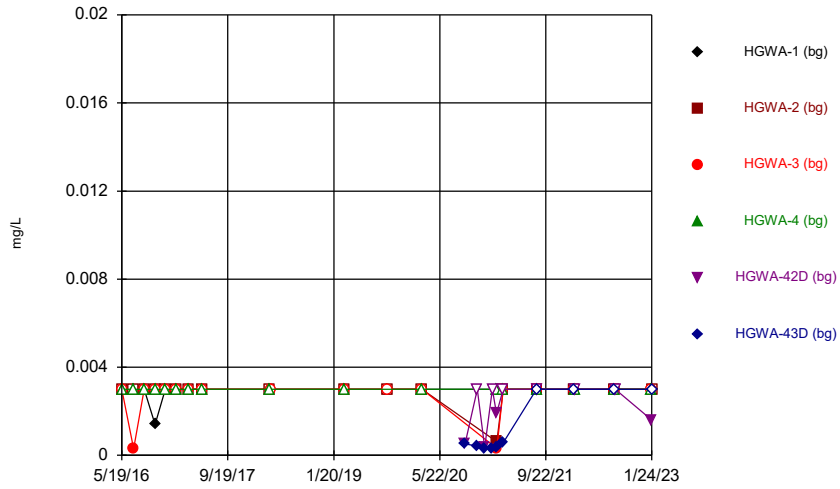
# Appendix IV Trend Test - Confidence Interval Exceedances - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/15/2023, 2:49 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	HGWA-1 (bg)	0	1	98	No	23	91.3	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-2 (bg)	-0.0004127	-41	-98	No	23	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-3 (bg)	0	0	98	No	23	100	n/a	n/a	0.01	NP
<b>Cobalt (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-0.00006016</b>	<b>-118</b>	<b>-98</b>	<b>Yes</b>	<b>23</b>	<b>65.22</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Cobalt (mg/L)	HGWA-42D (bg)	0	5	30	No	10	90	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-43D (bg)	0	0	30	No	10	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-44D (bg)	0	0	30	No	10	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-5 (bg)	0	-9	-98	No	23	26.09	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-6 (bg)	0	0	98	No	23	100	n/a	n/a	0.01	NP
<b>Cobalt (mg/L)</b>	<b>HGWC-18</b>	<b>-0.008561</b>	<b>-117</b>	<b>-98</b>	<b>Yes</b>	<b>23</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Cobalt (mg/L)	MW-33	-0.003989	-19	-30	No	10	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	MW-35	-0.001591	-6	-21	No	8	0	n/a	n/a	0.01	NP

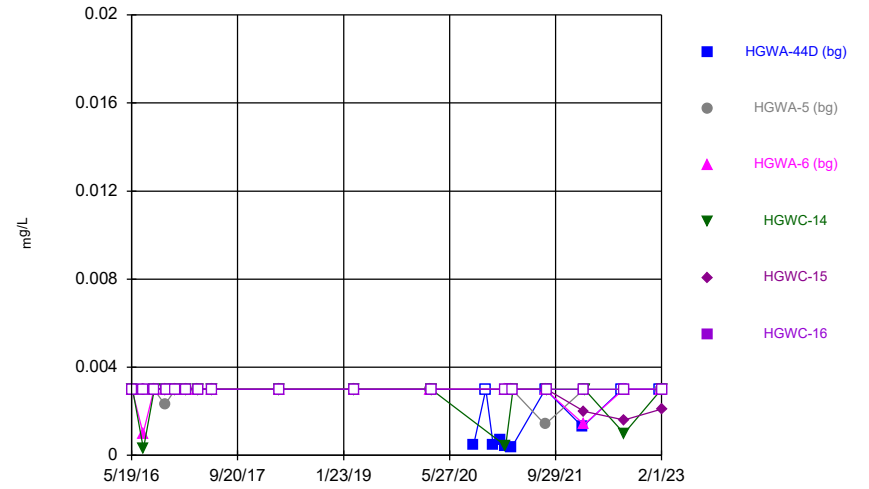
FIGURE A.

Time Series



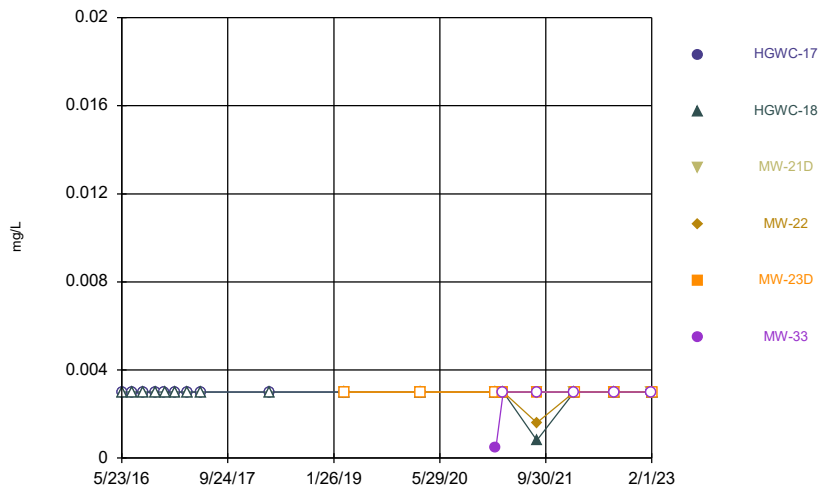
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



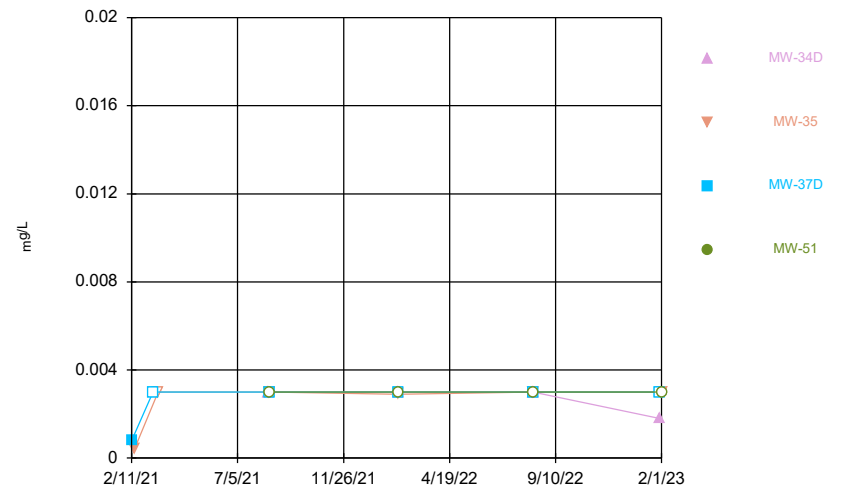
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



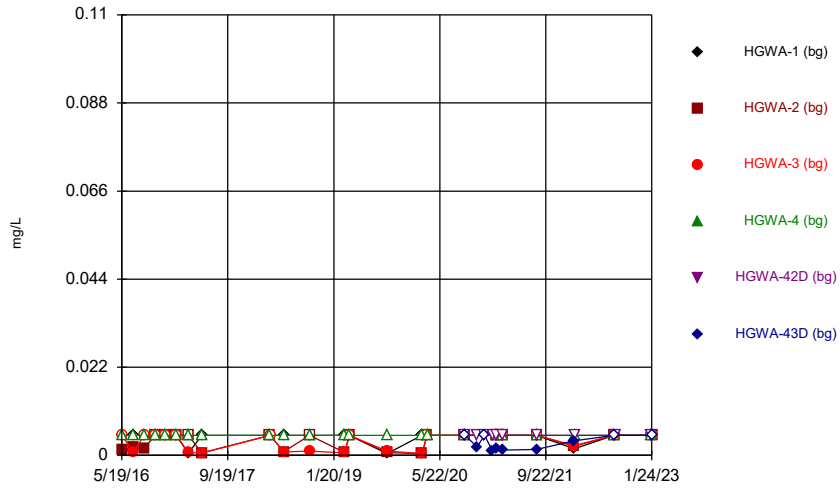
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



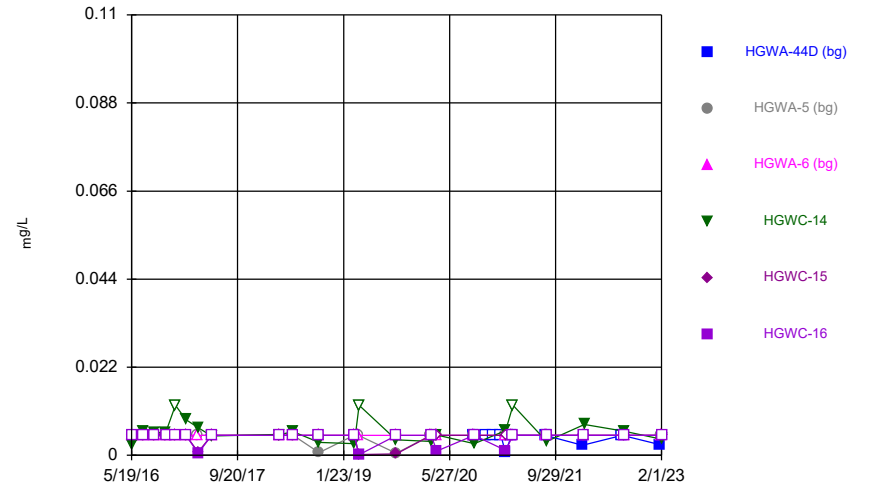
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



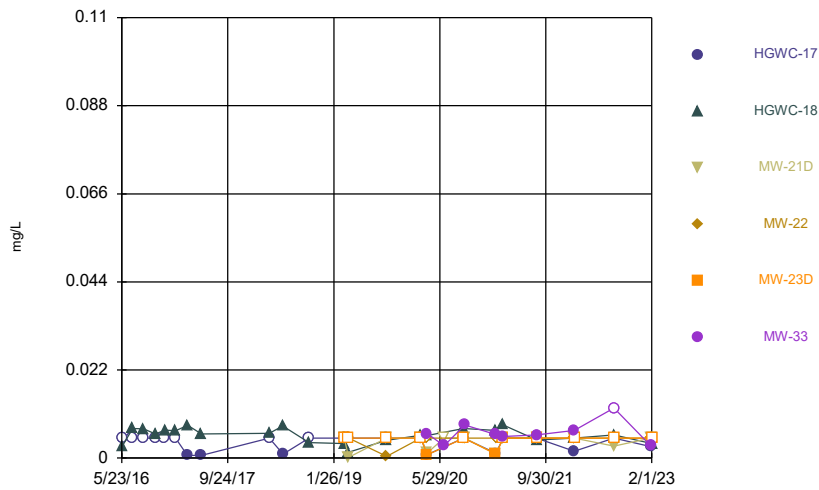
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



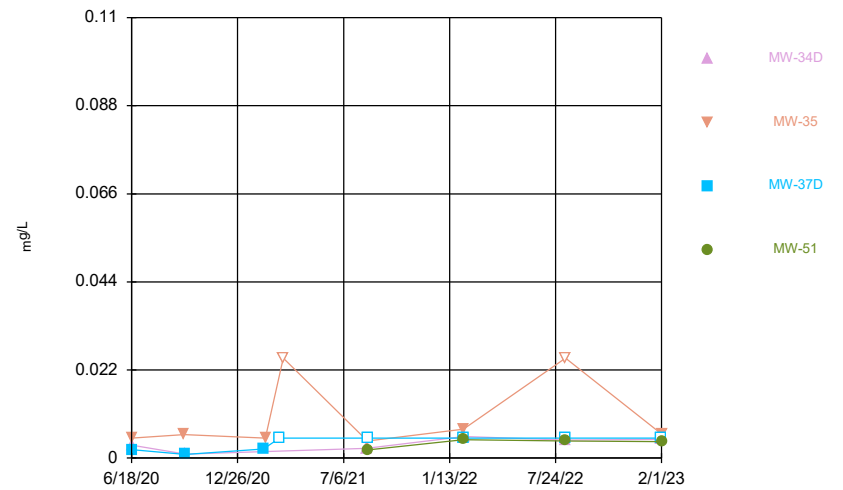
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



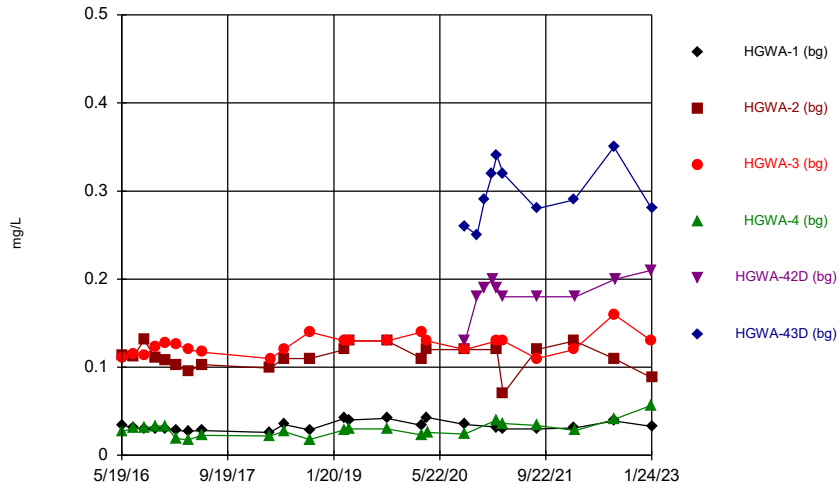
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



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 Plant Hammond Client: Southern Company Data: Hammond AP-2

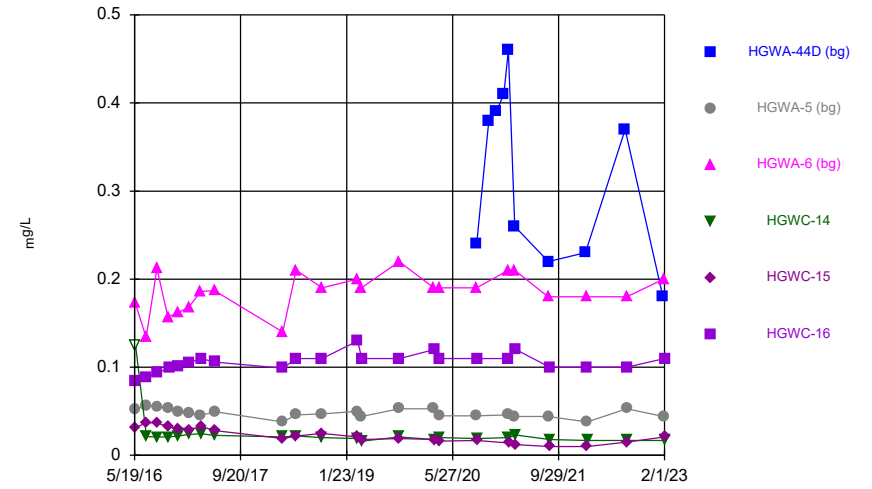
Time Series



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Plant Hammond Client: Southern Company Data: Hammond AP-2

Hollow symbols indicate censored values.

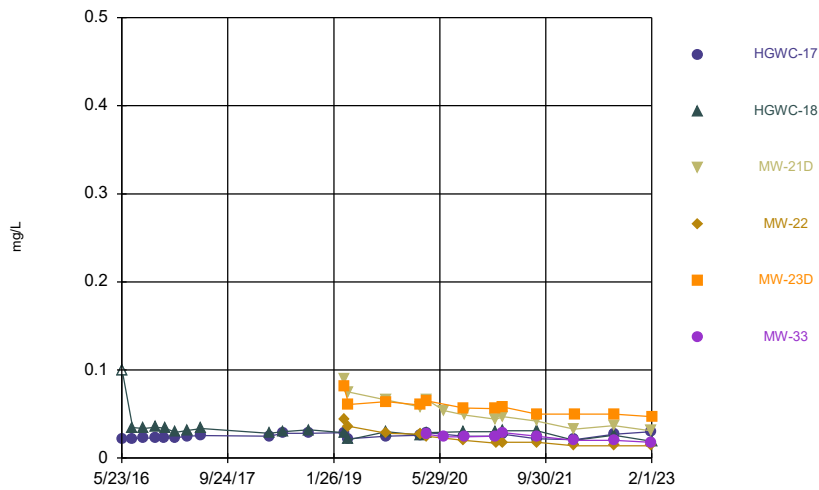
Time Series



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Plant Hammond Client: Southern Company Data: Hammond AP-2

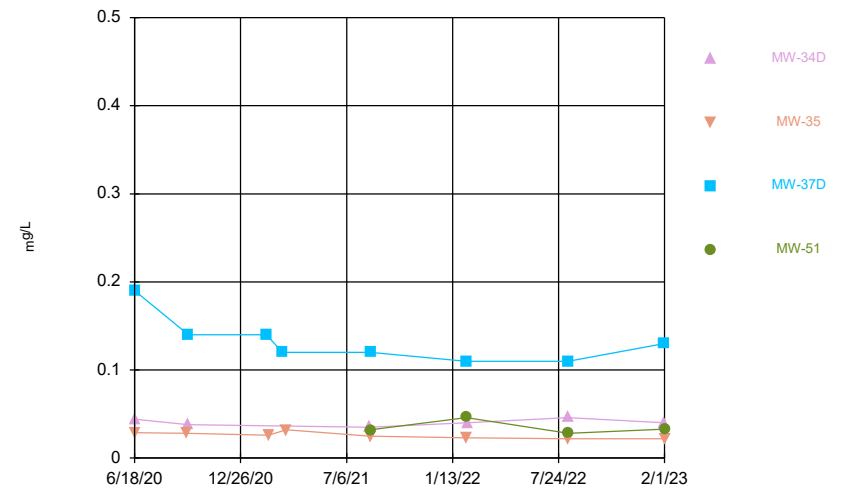
Hollow symbols indicate censored values.

Time Series



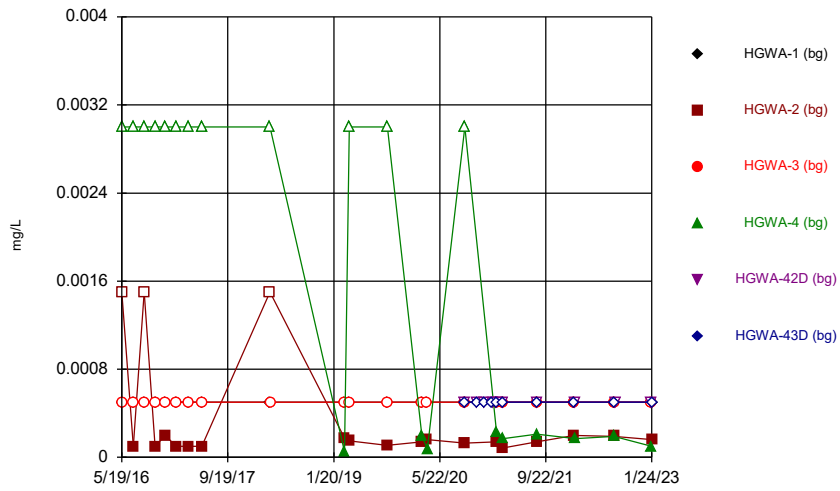
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



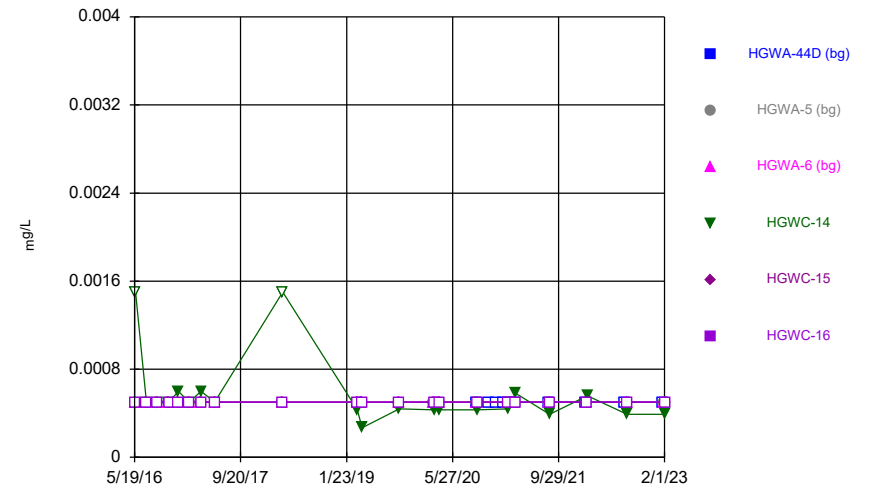
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Time Series



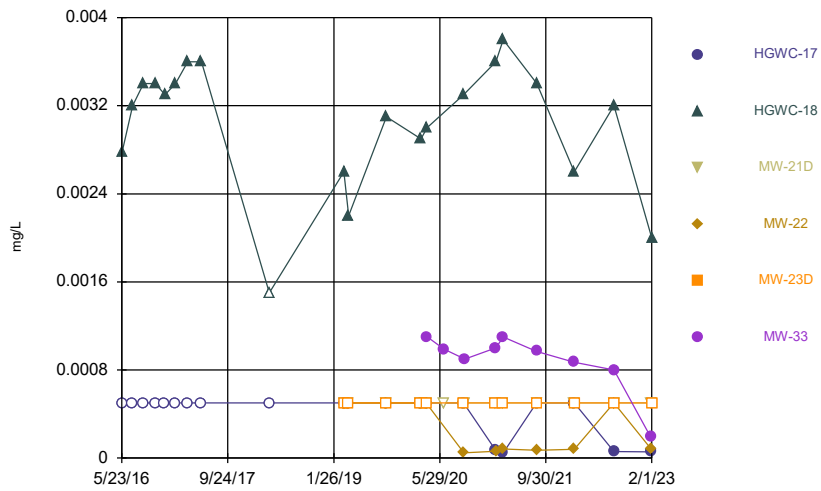
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Time Series



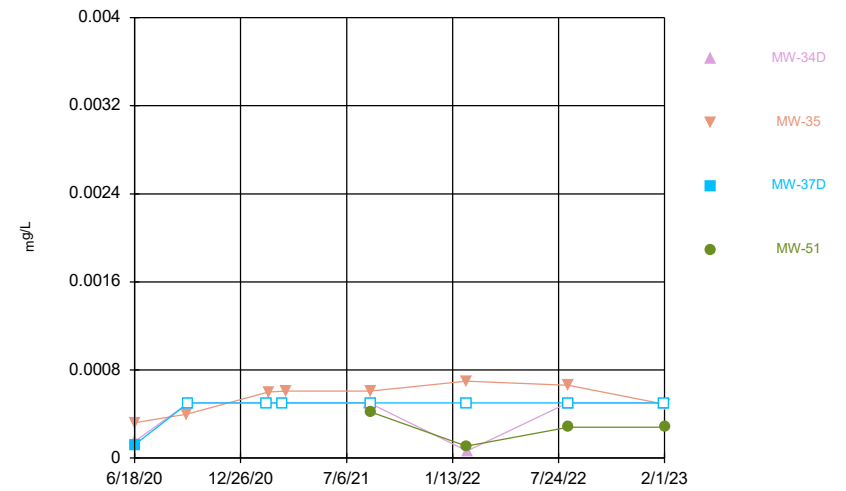
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Time Series



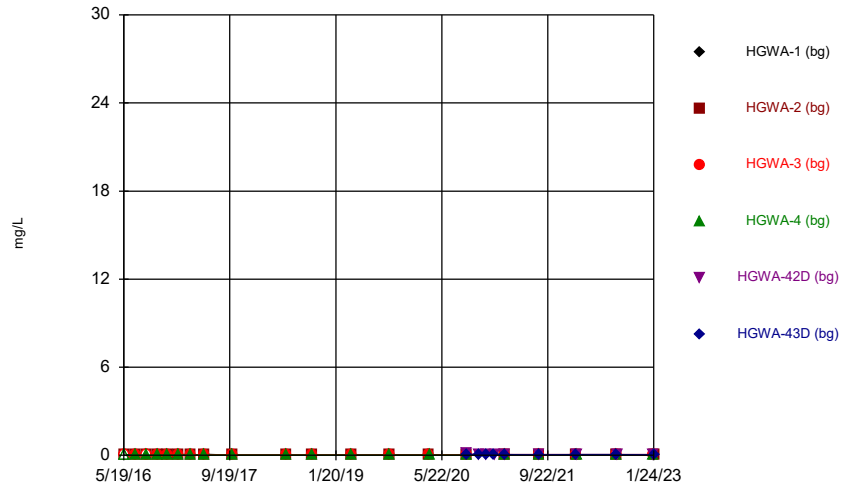
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Time Series



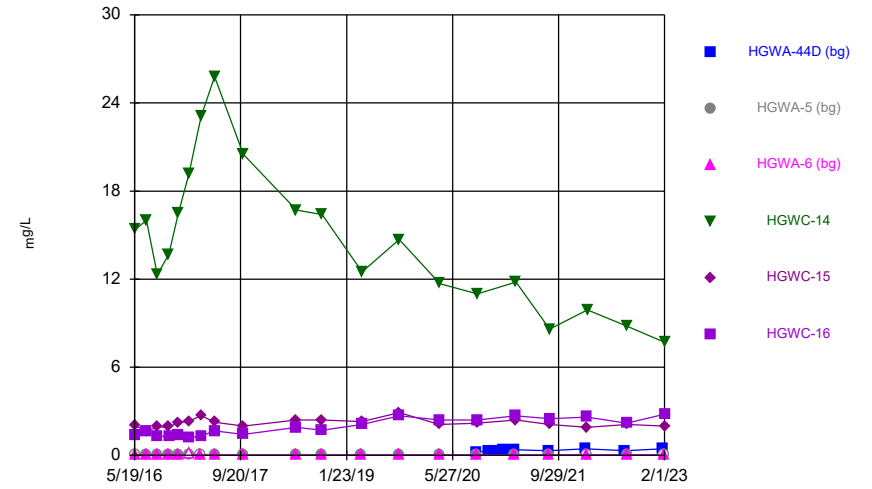
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



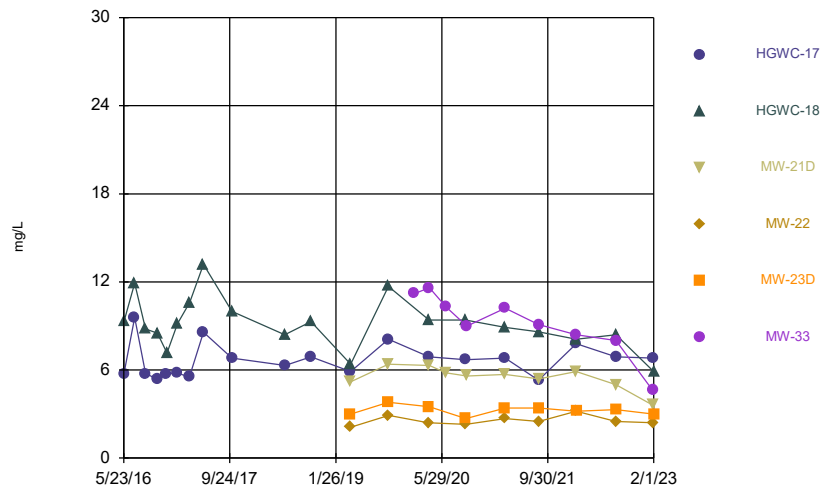
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Time Series



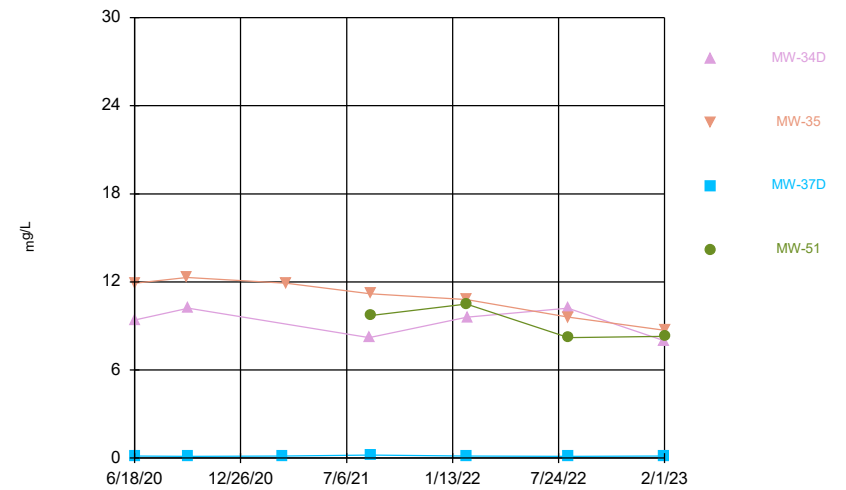
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Time Series



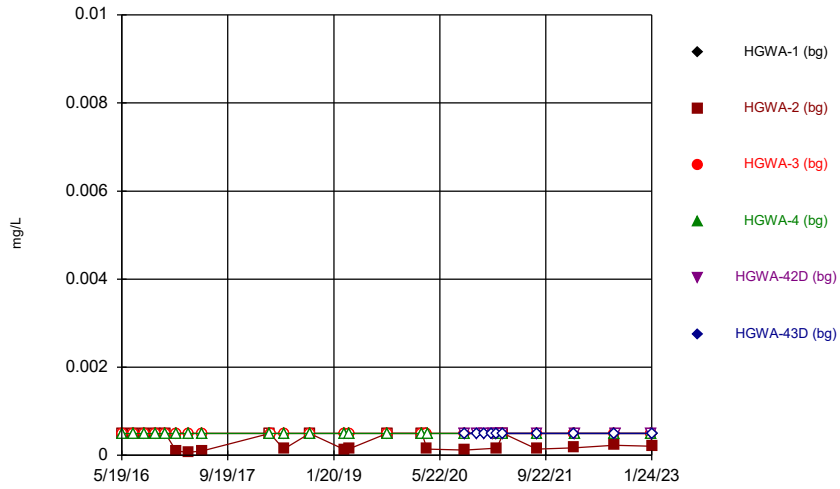
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Time Series



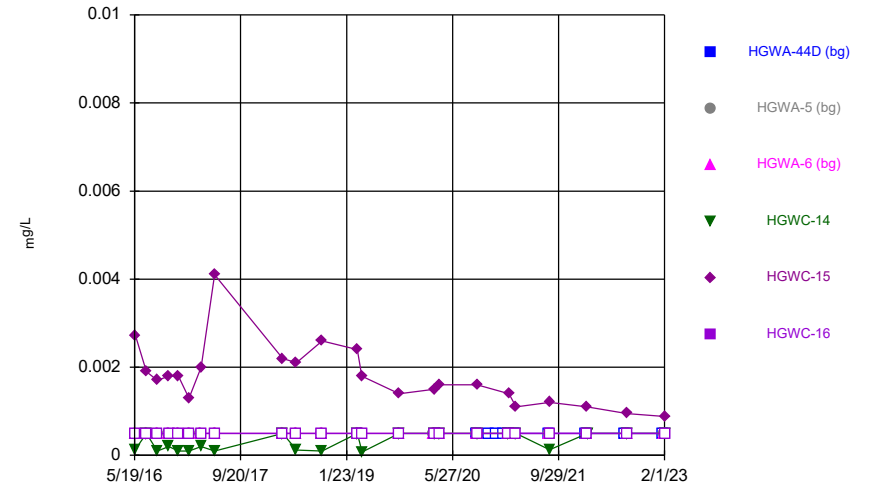
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Time Series



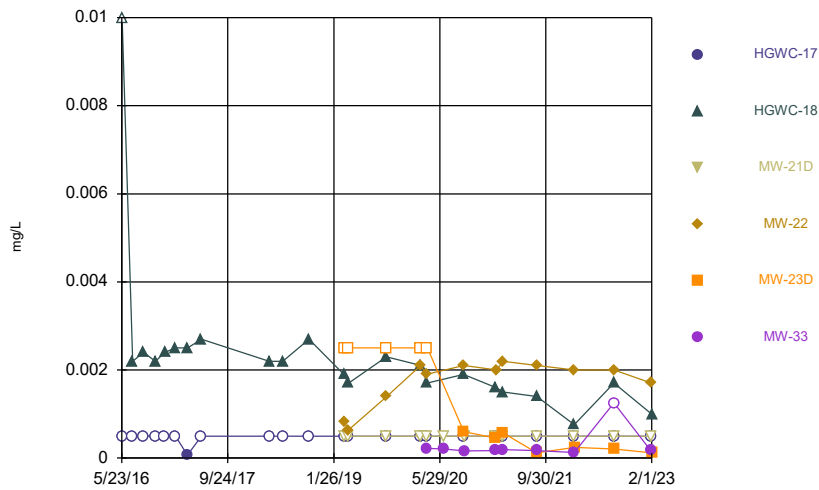
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Time Series



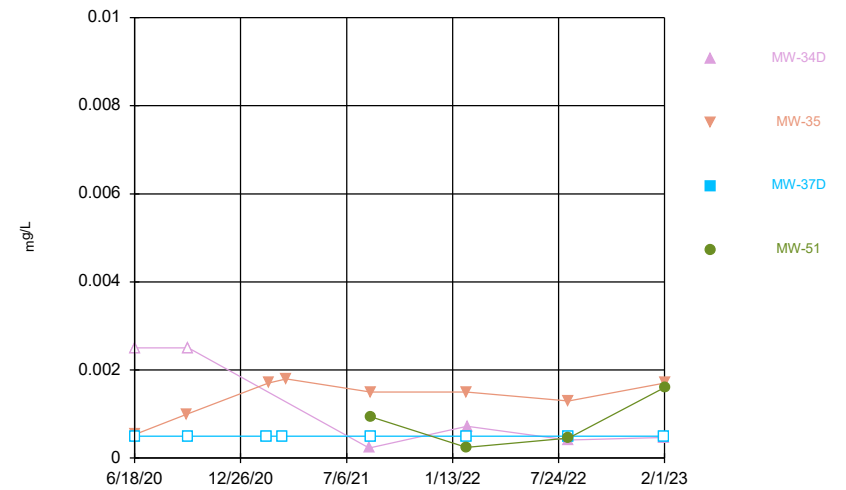
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Time Series



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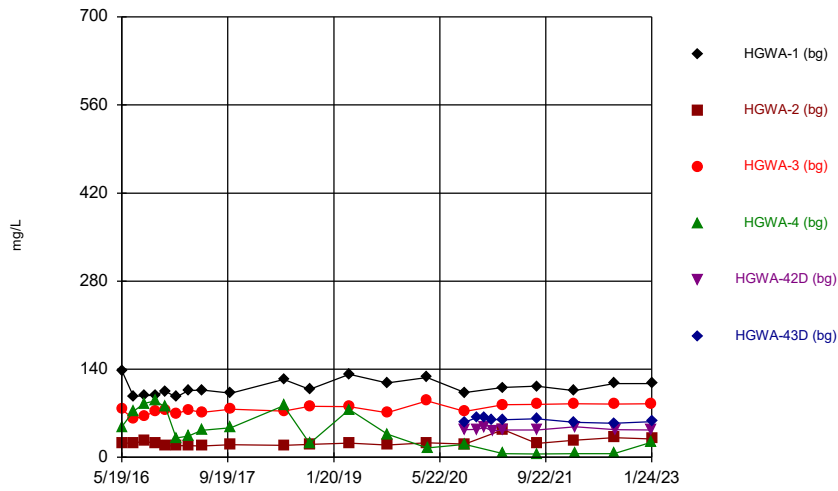
Time Series



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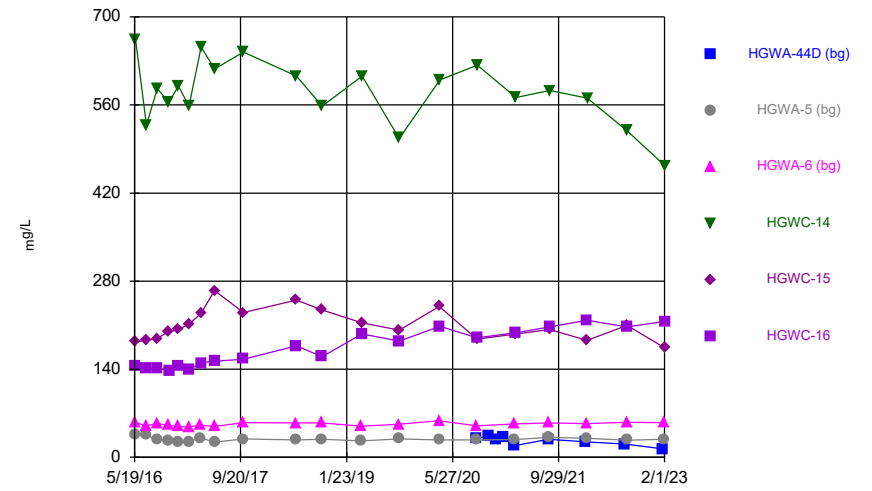


### Time Series



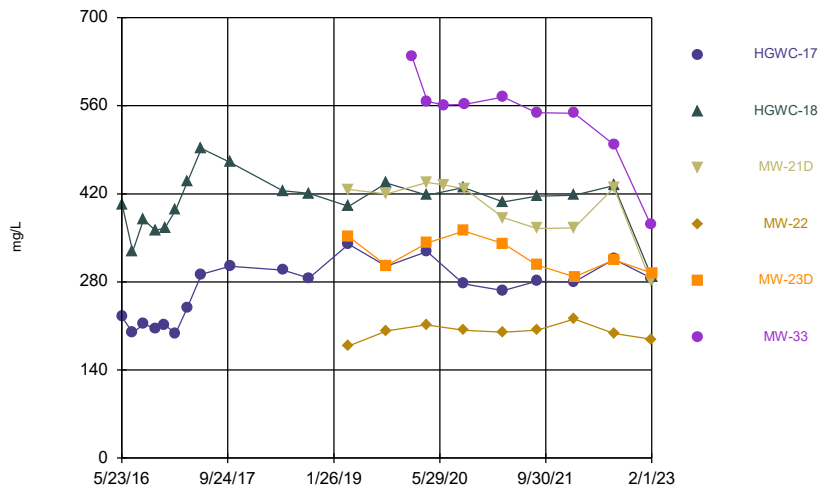
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### Time Series



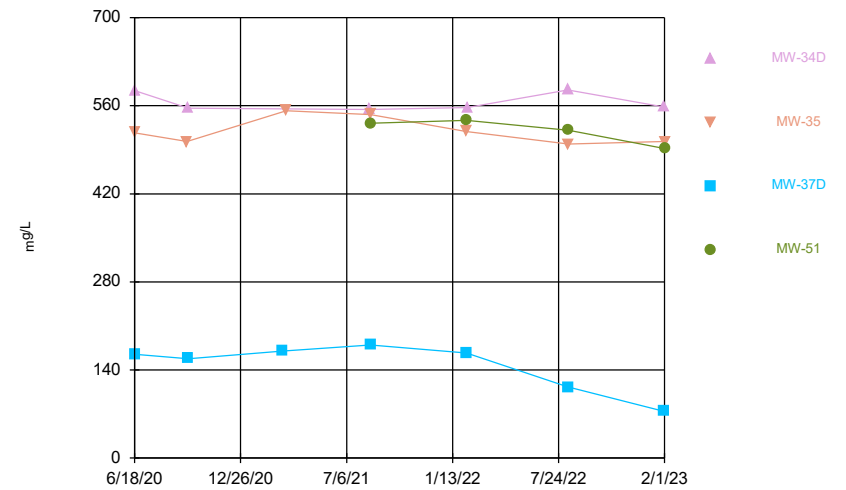
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### Time Series



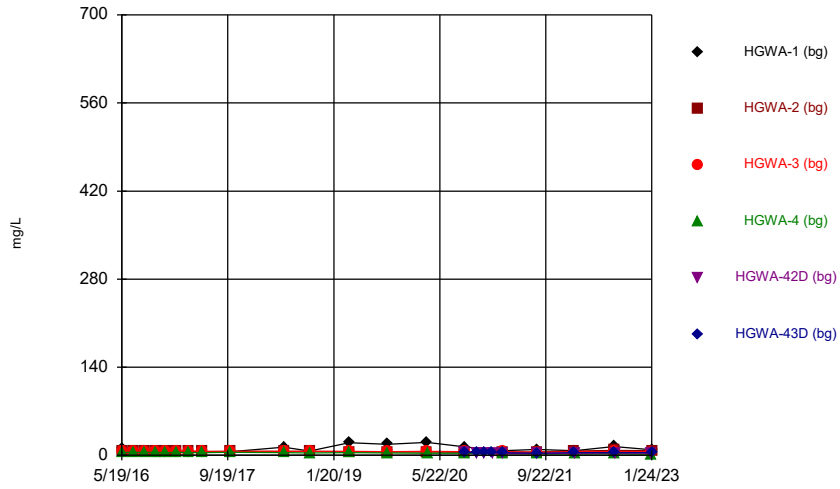
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### Time Series



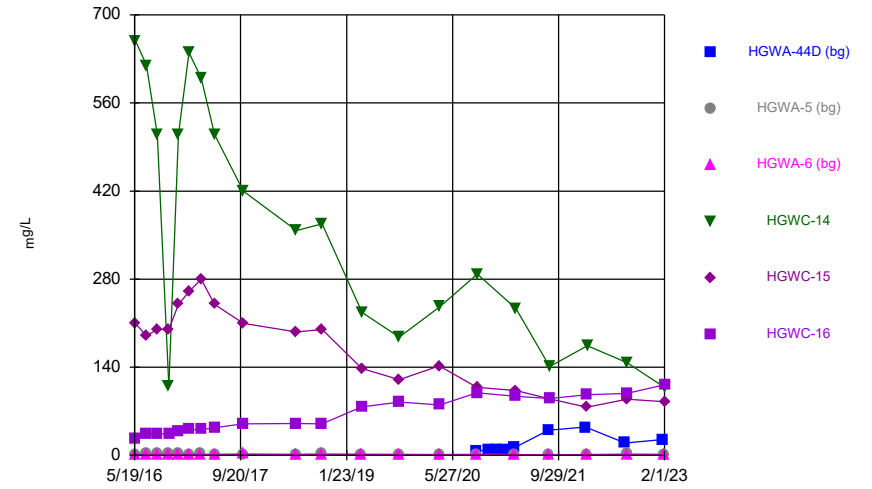
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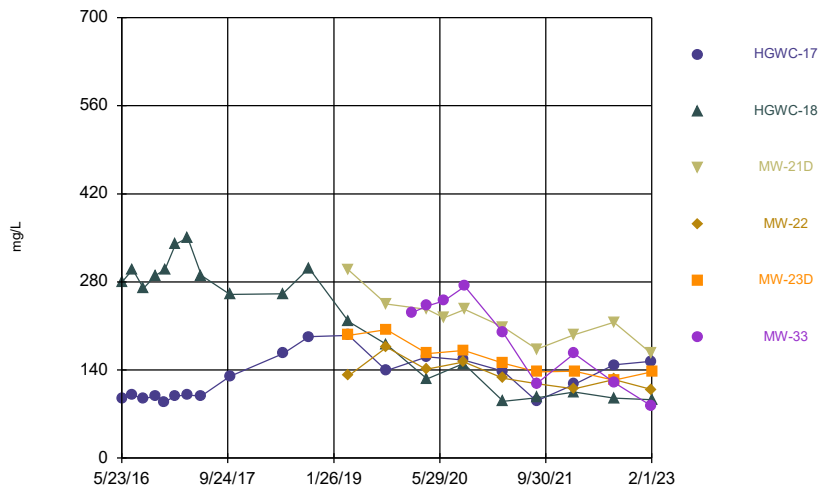
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



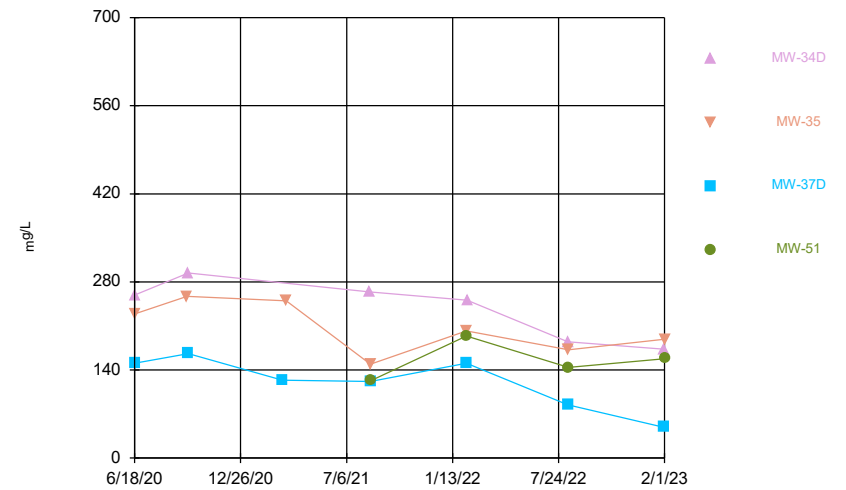
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



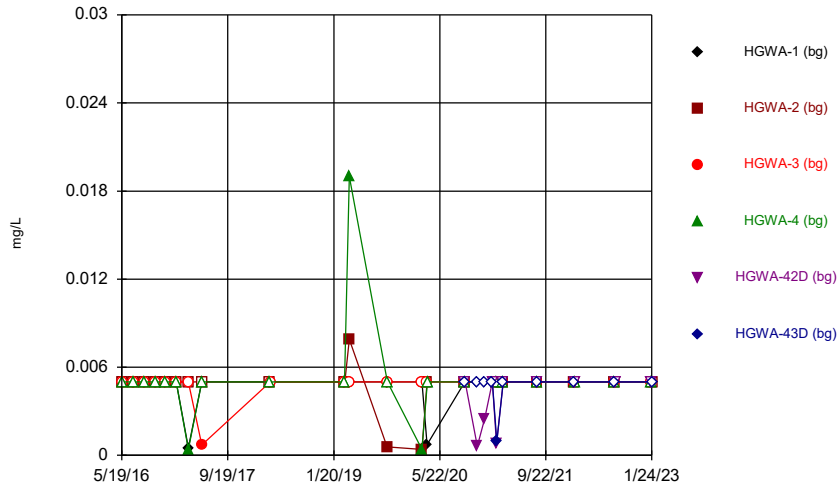
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### Time Series



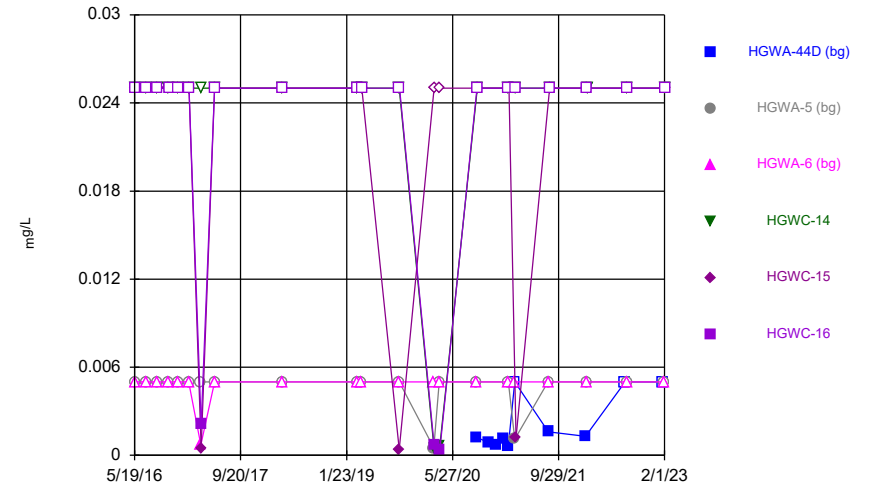
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Time Series



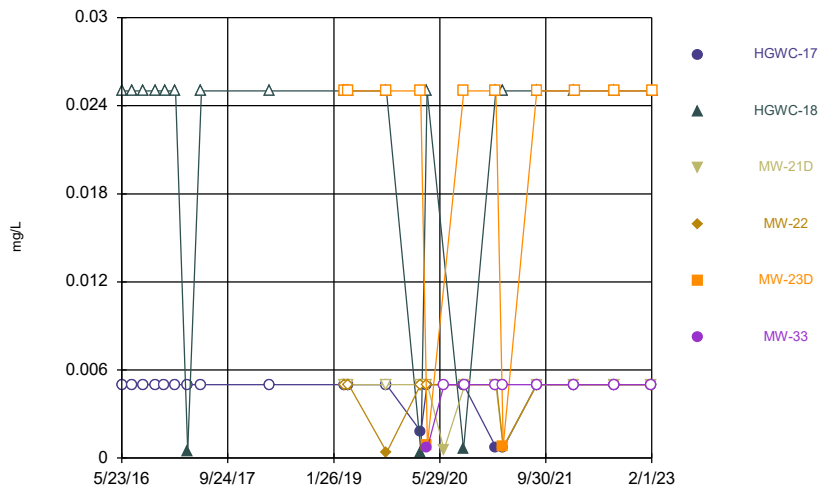
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



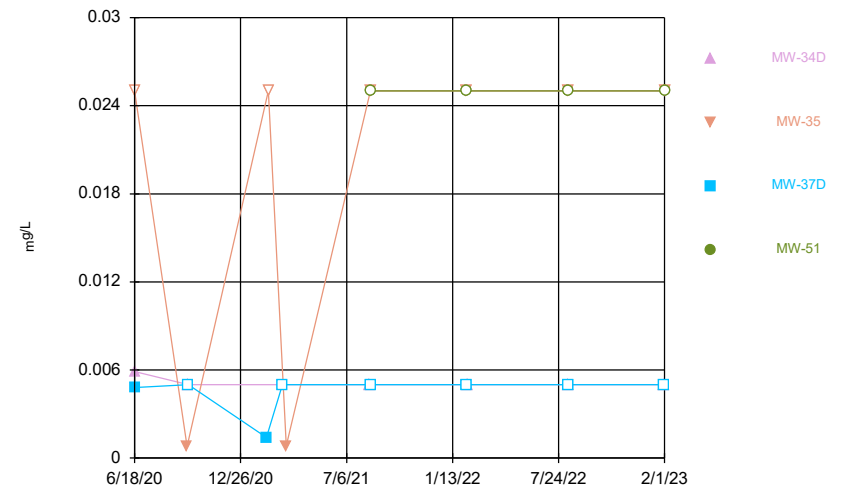
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



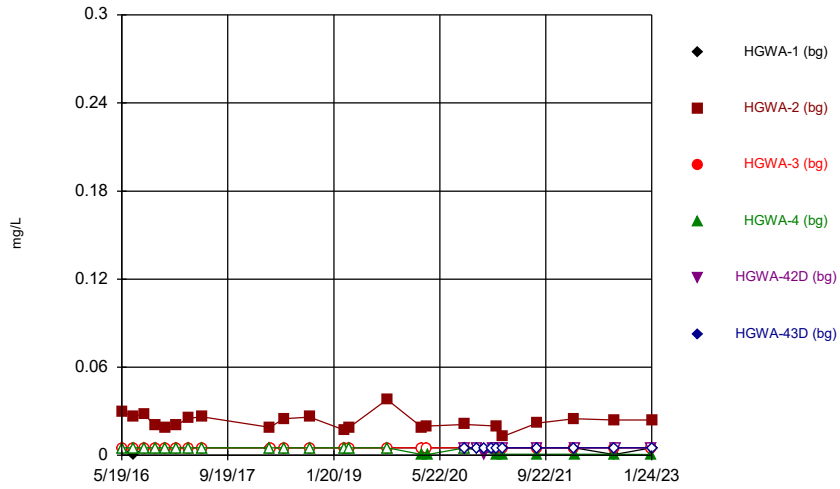
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



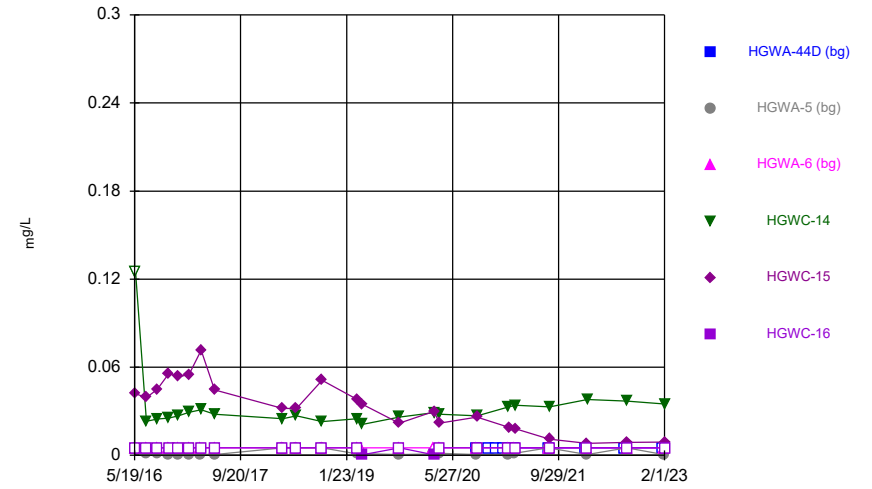
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



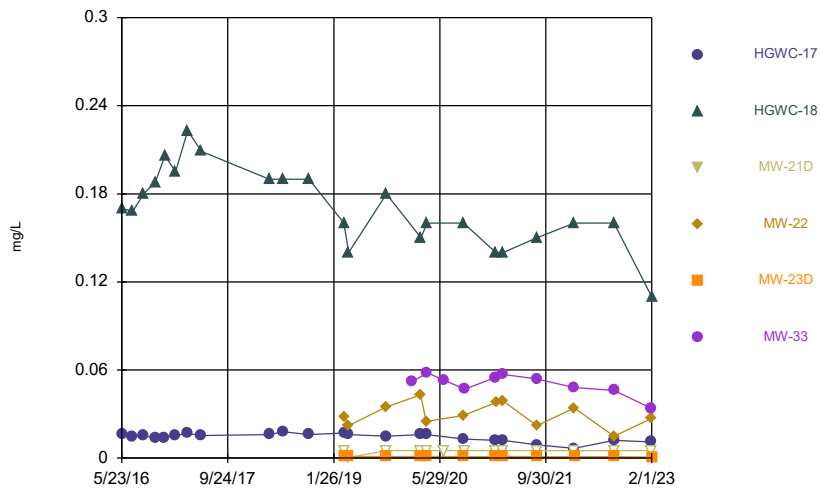
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



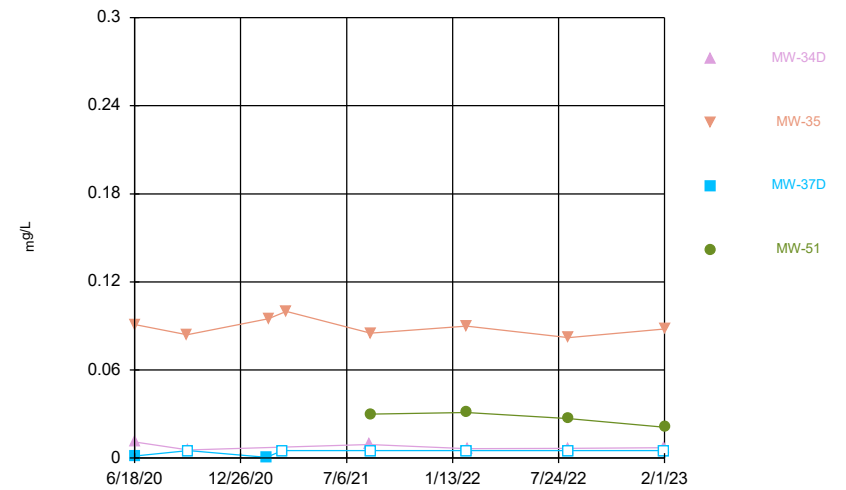
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Time Series



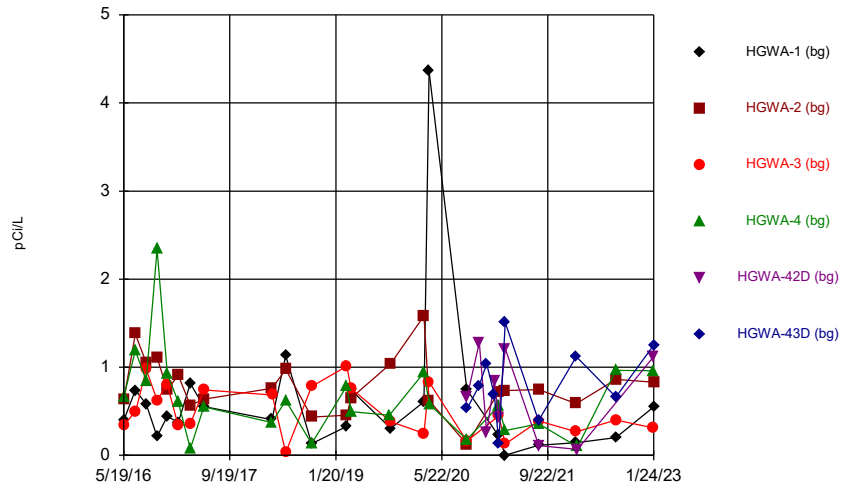
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Time Series



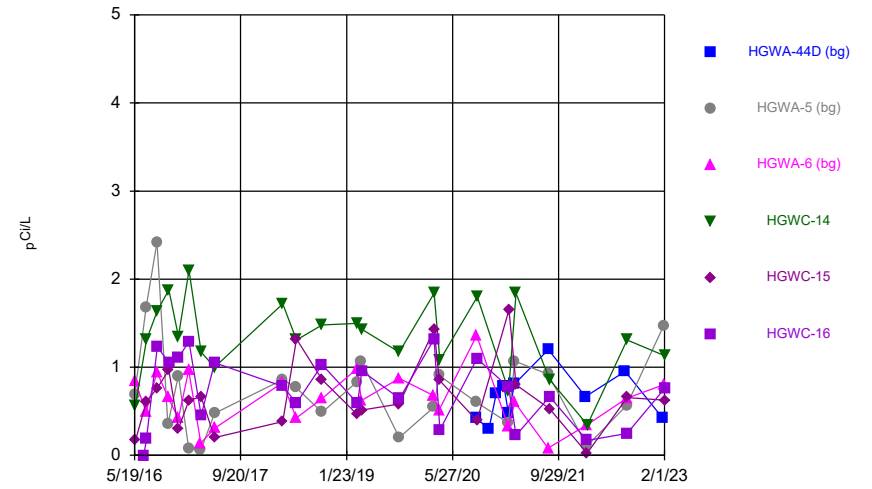
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### Time Series



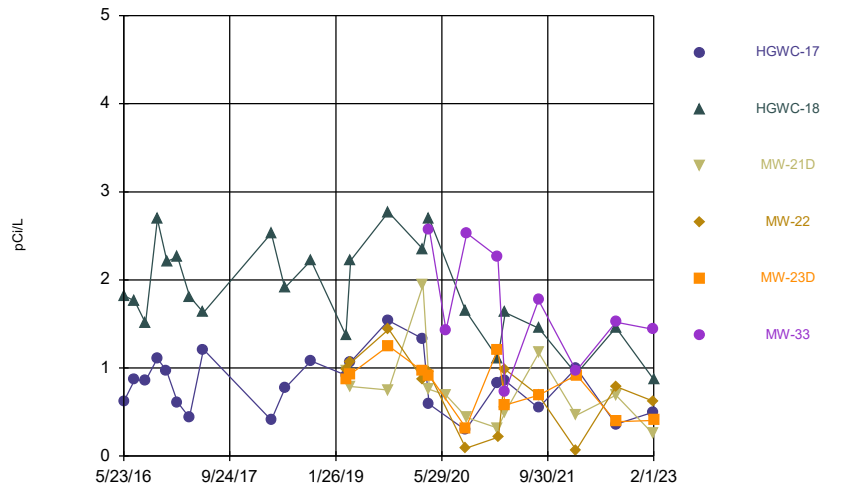
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



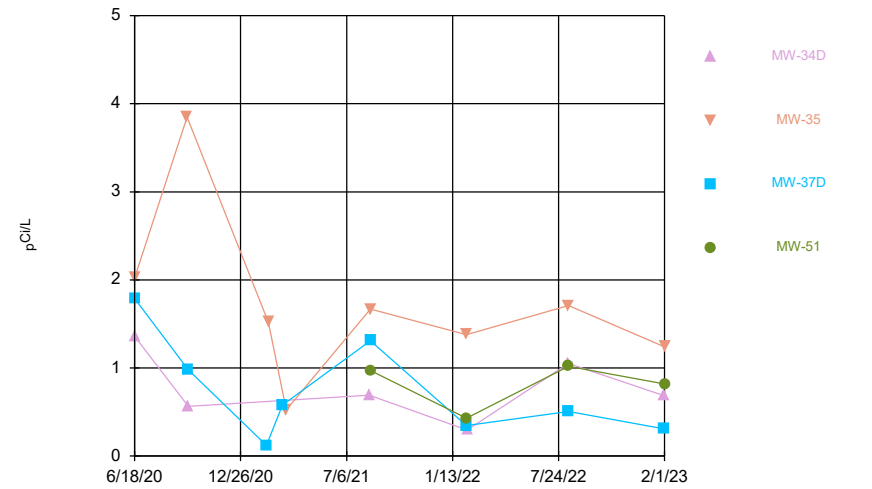
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### Time Series



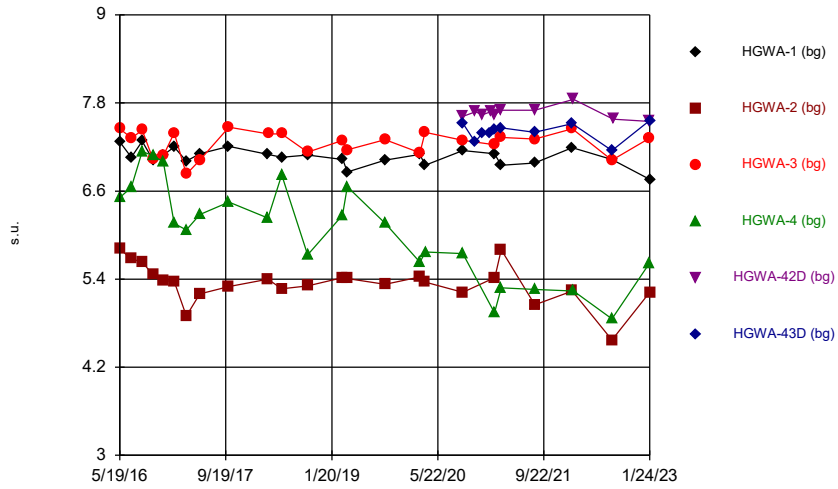
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### Time Series



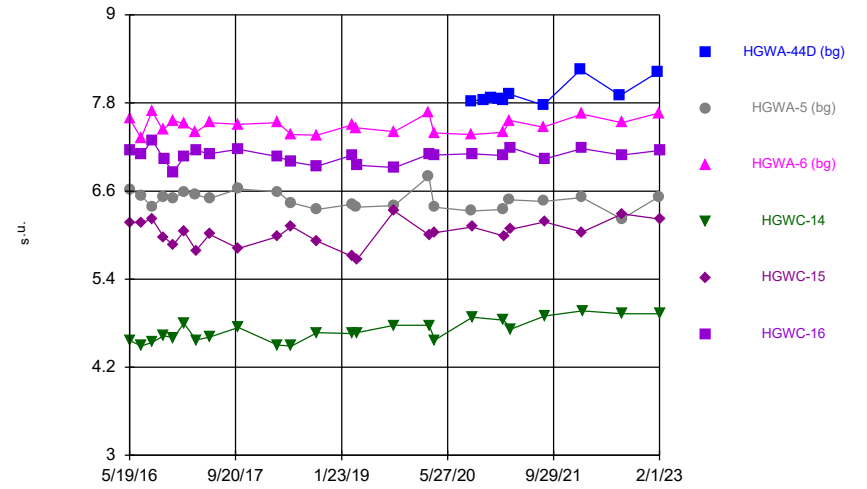
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### Time Series



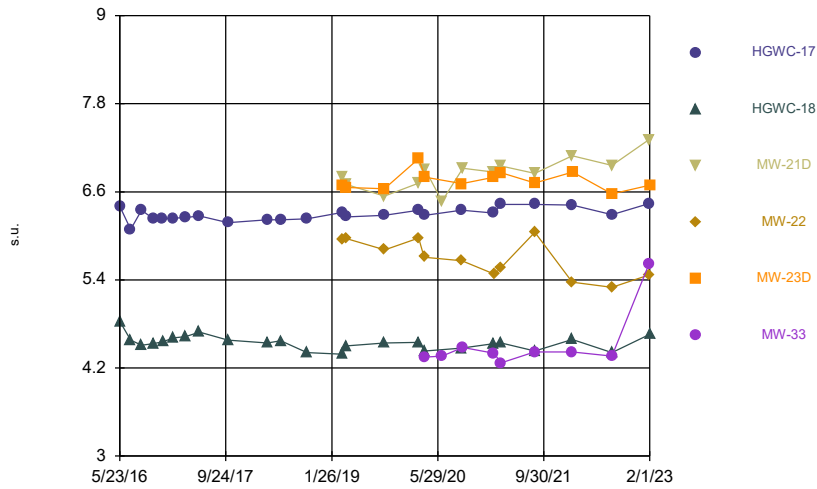
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### Time Series



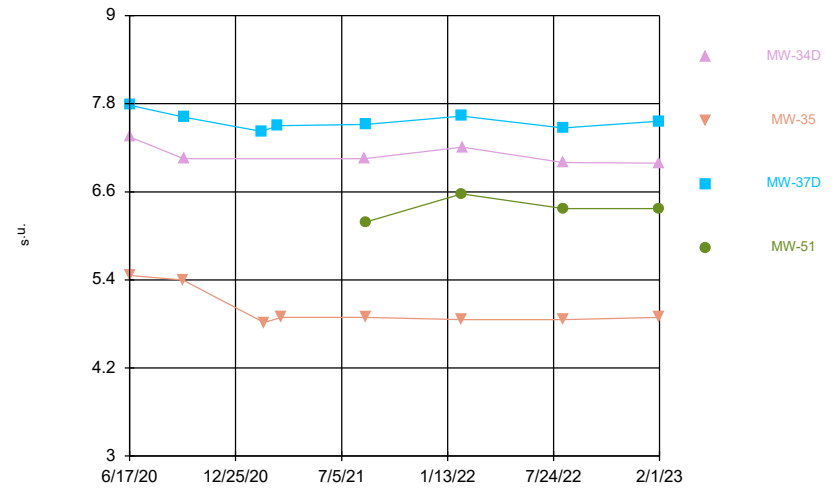
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### Time Series



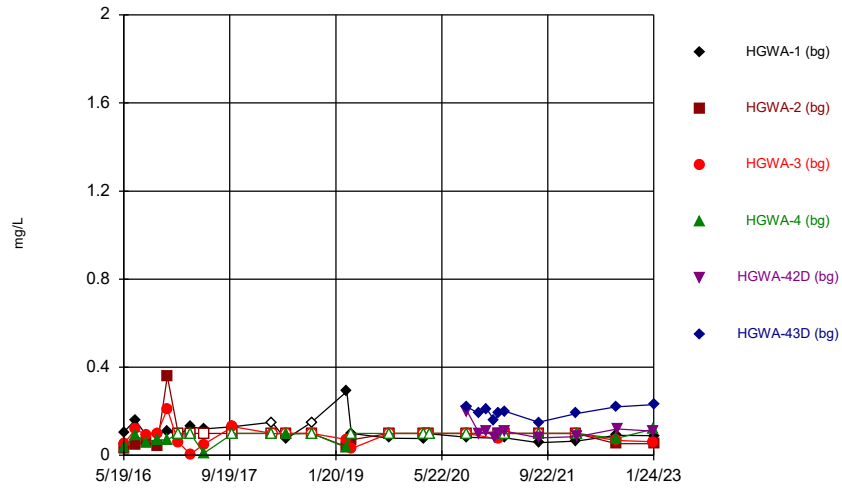
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### Time Series



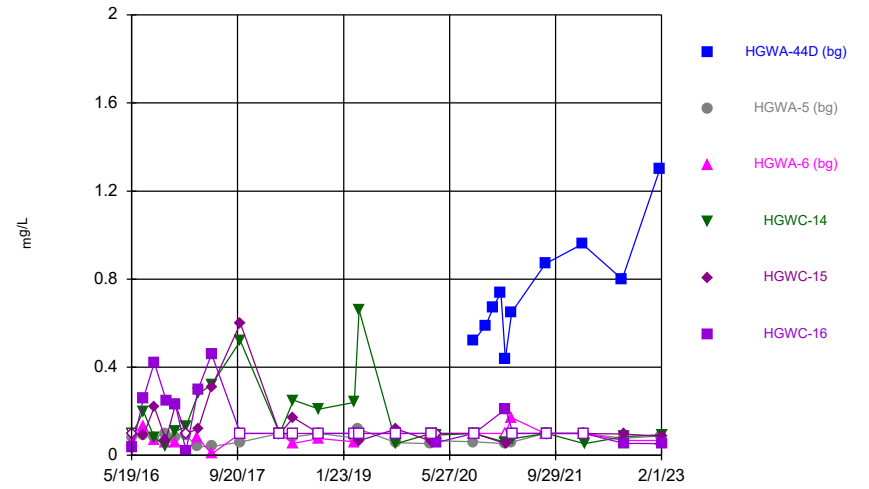
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



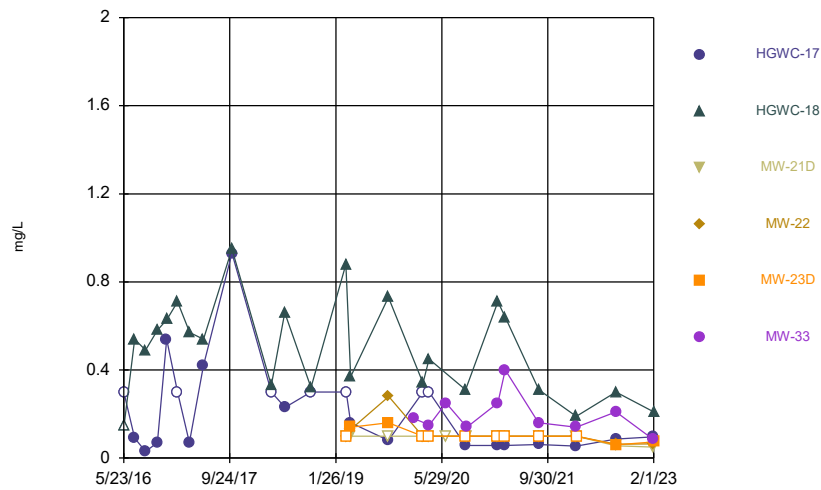
Constituent: Fluoride Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



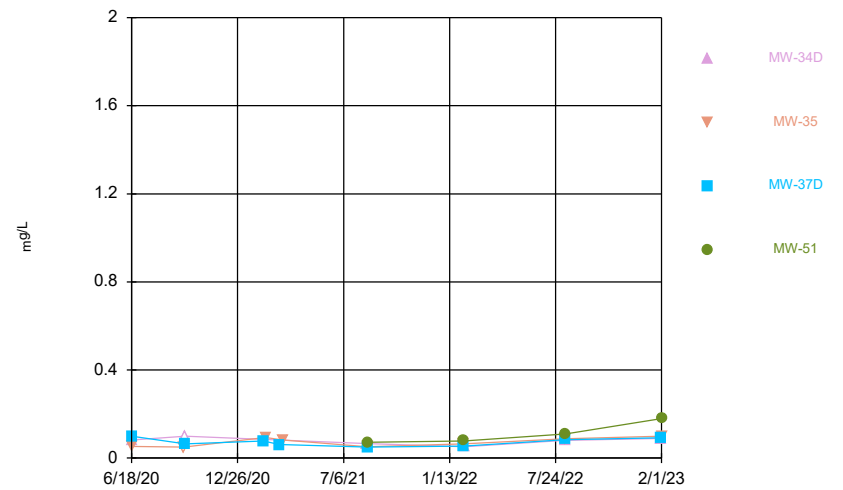
Constituent: Fluoride Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



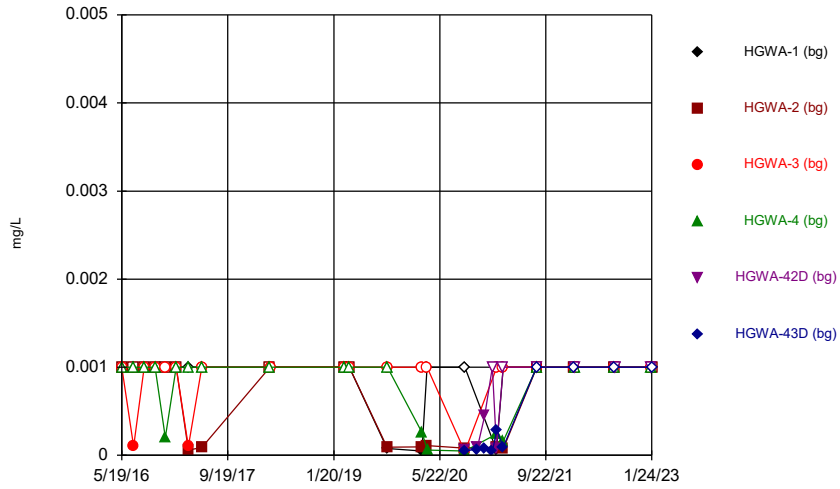
Constituent: Fluoride Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



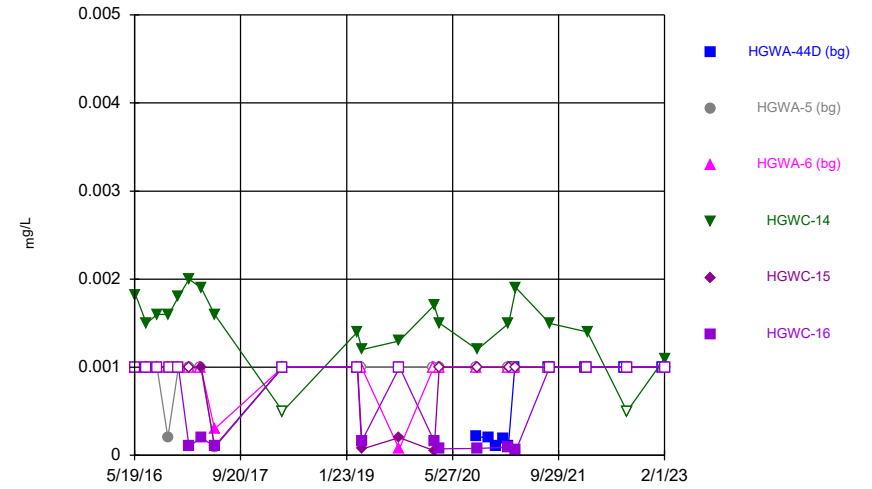
Constituent: Fluoride Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



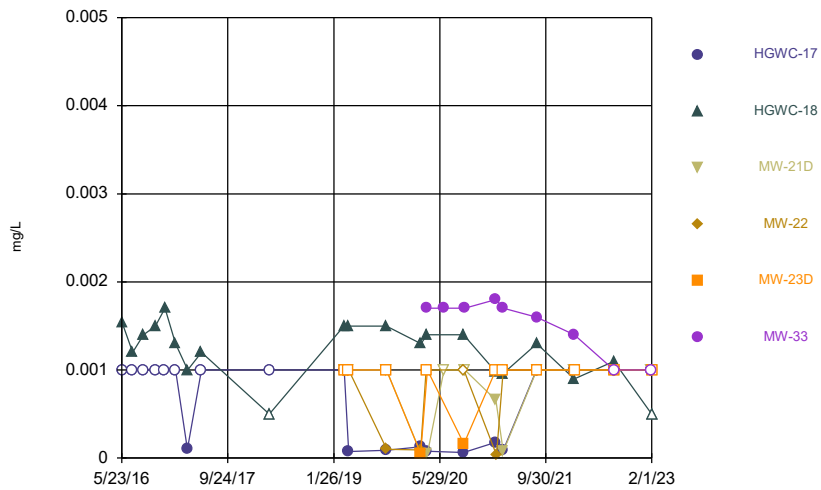
Constituent: Lead Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



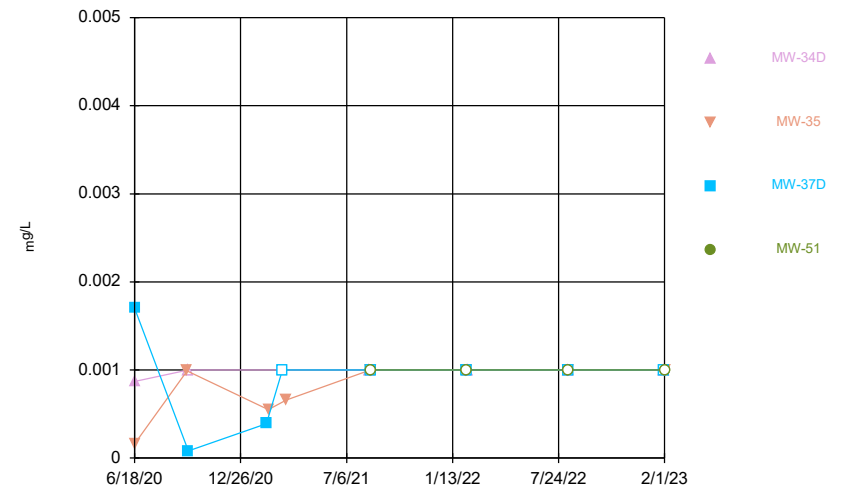
Constituent: Lead Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



Constituent: Lead Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

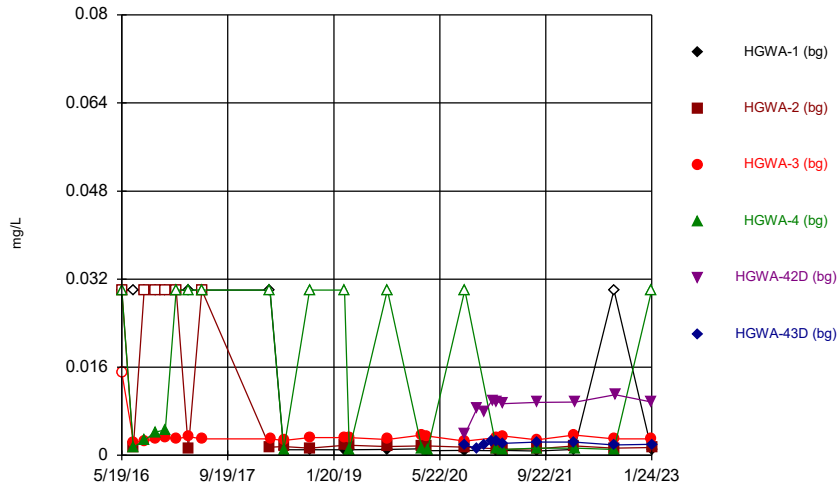
Time Series



Constituent: Lead Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

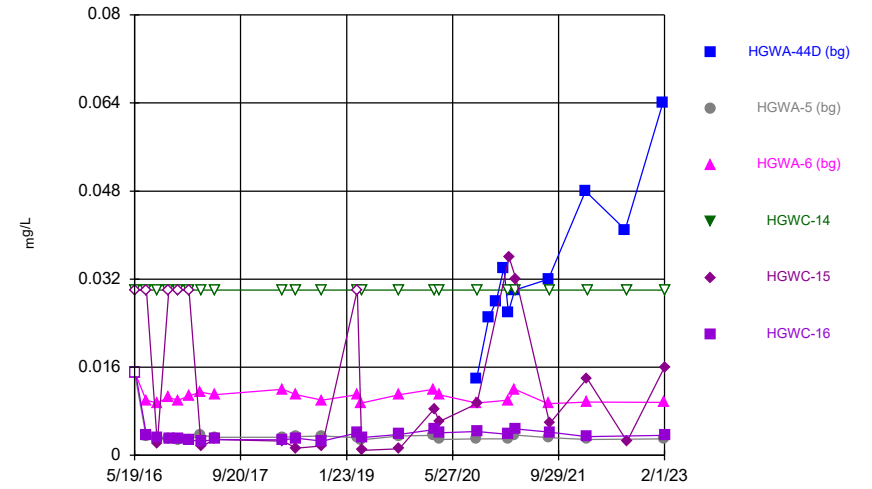


Time Series



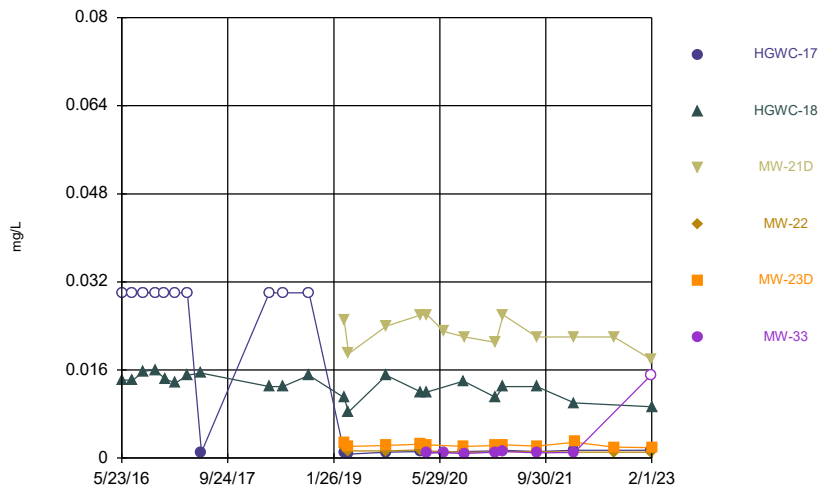
Constituent: Lithium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



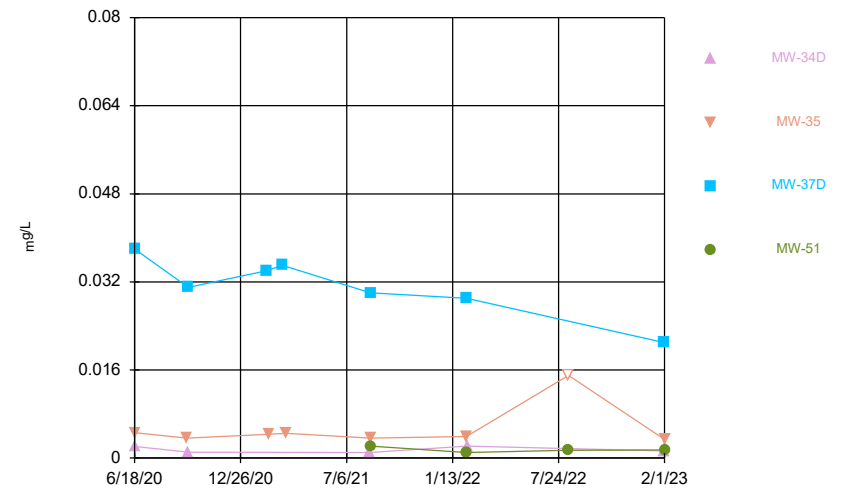
Constituent: Lithium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



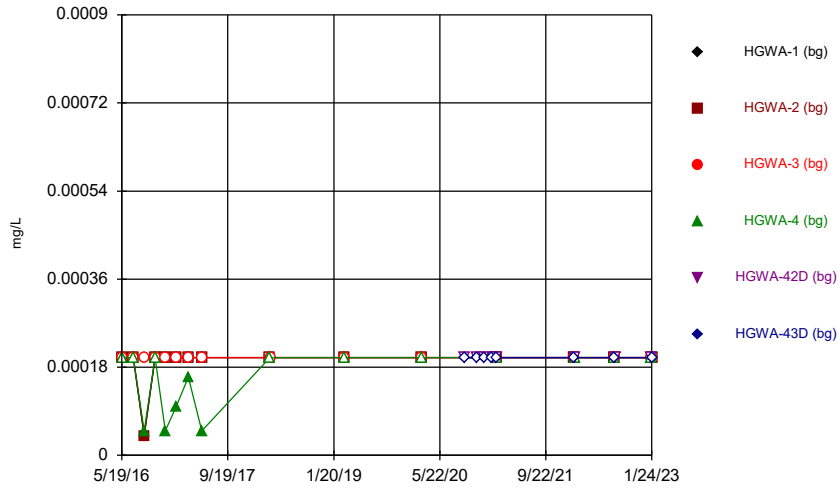
Constituent: Lithium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



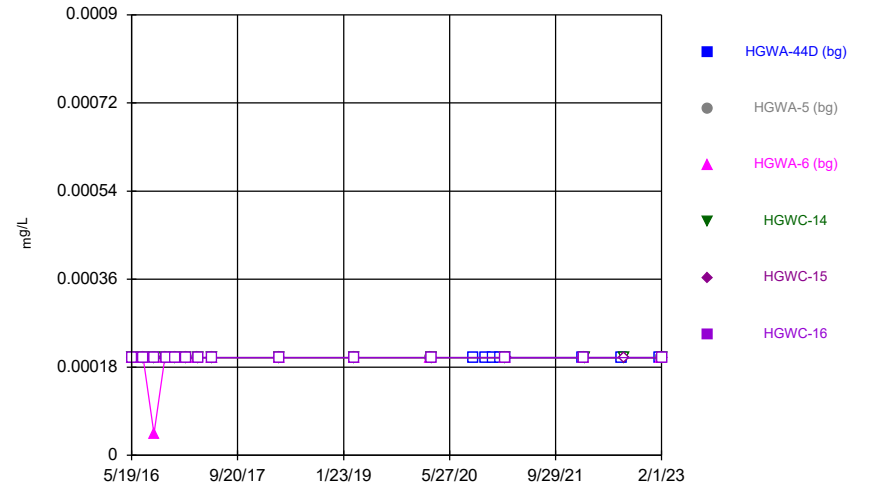
Constituent: Lithium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



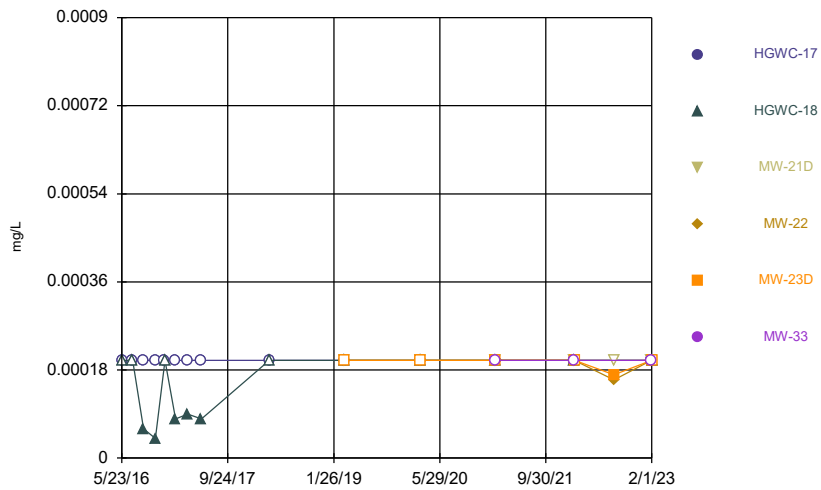
Constituent: Mercury Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



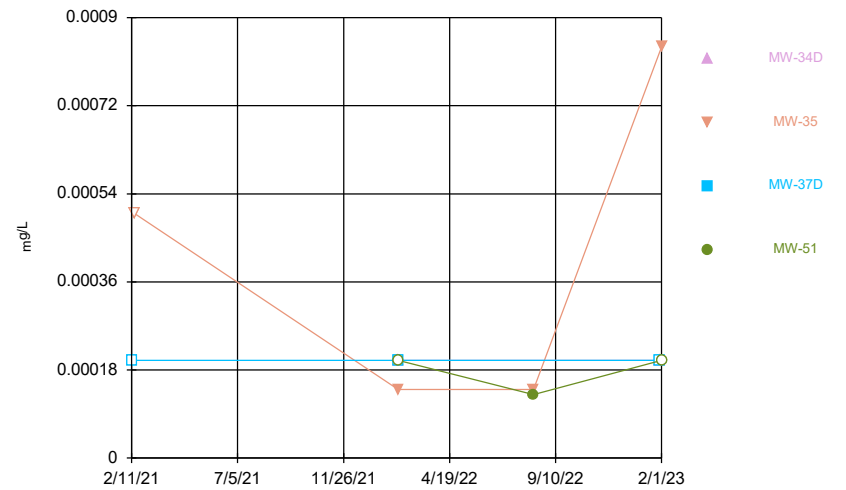
Constituent: Mercury Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



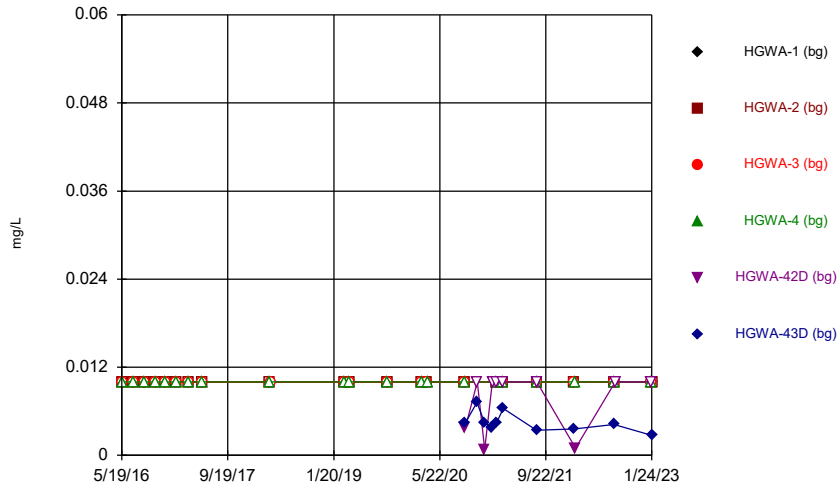
Constituent: Mercury Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



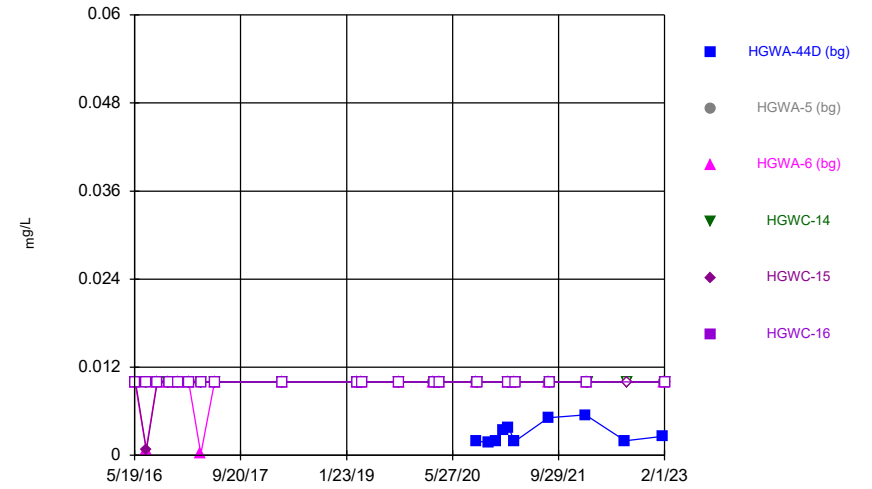
Constituent: Mercury Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



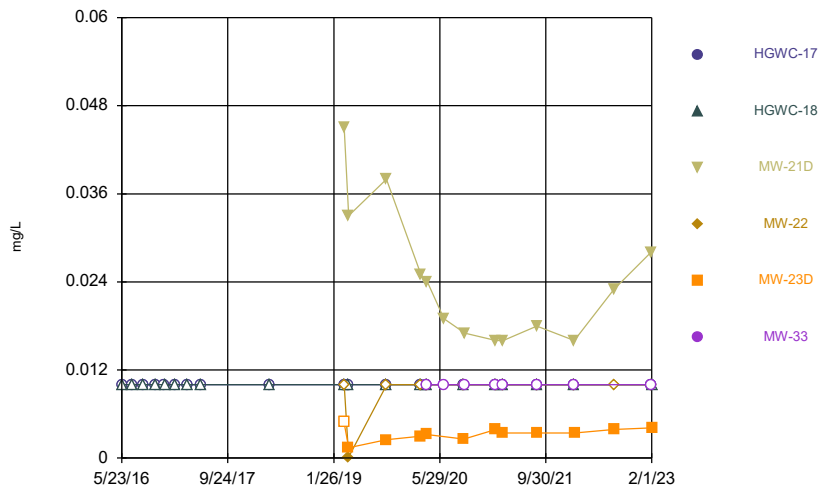
Constituent: Molybdenum Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



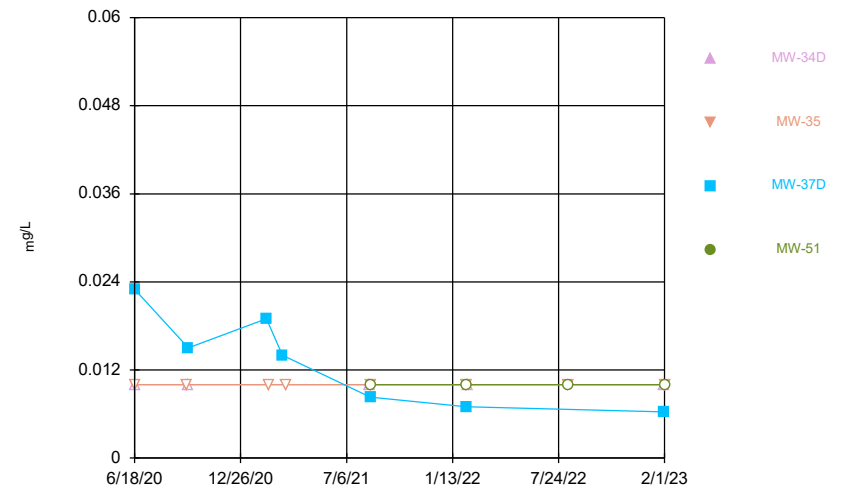
Constituent: Molybdenum Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



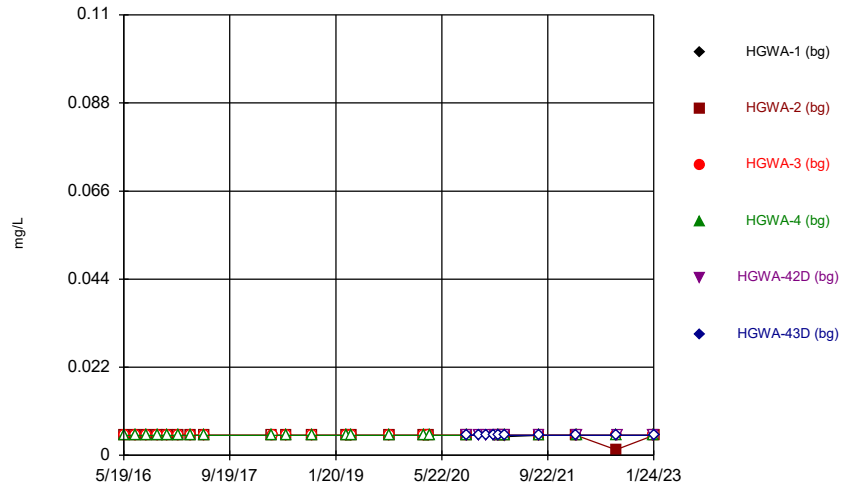
Constituent: Molybdenum Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



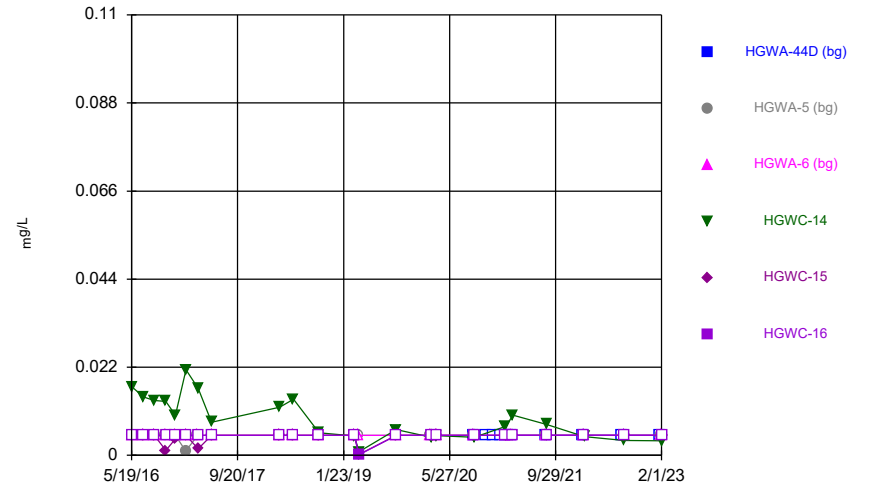
Constituent: Molybdenum Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



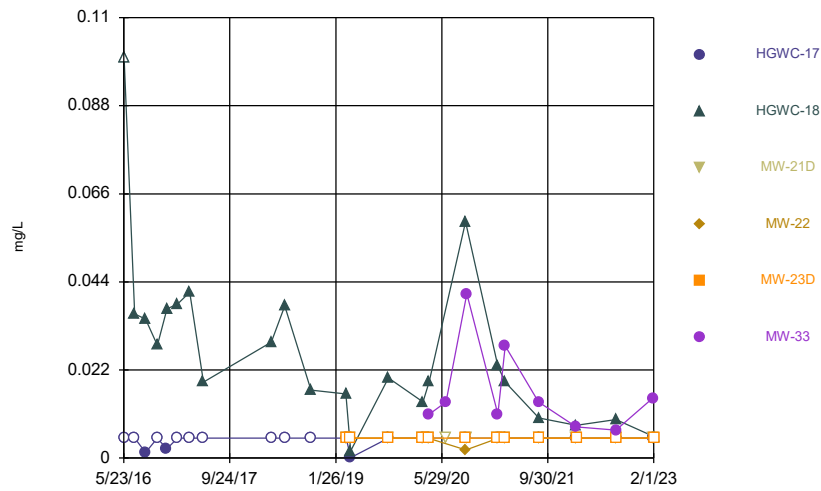
Constituent: Selenium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



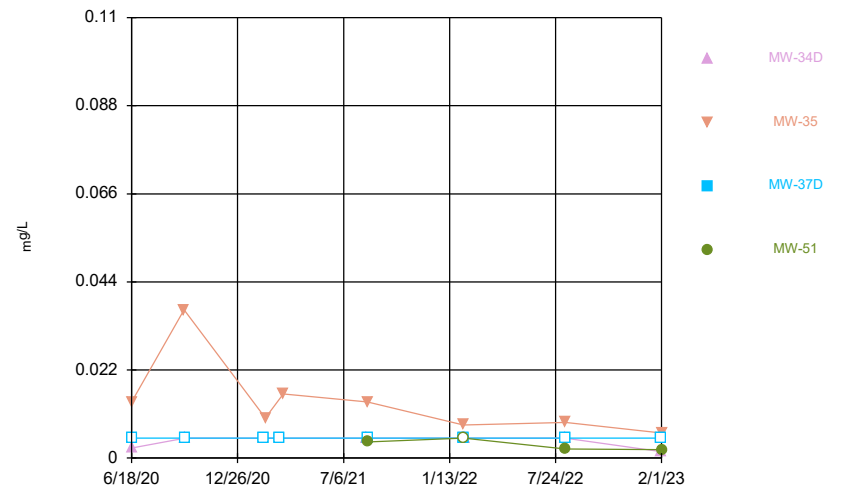
Constituent: Selenium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



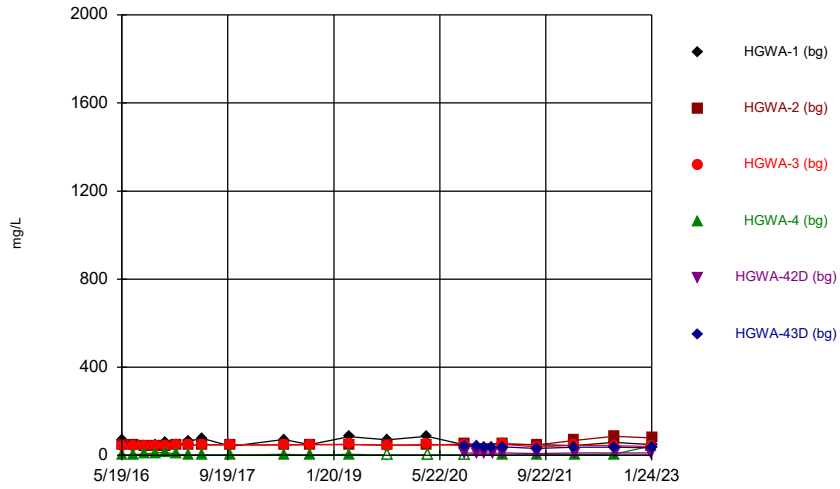
Constituent: Selenium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



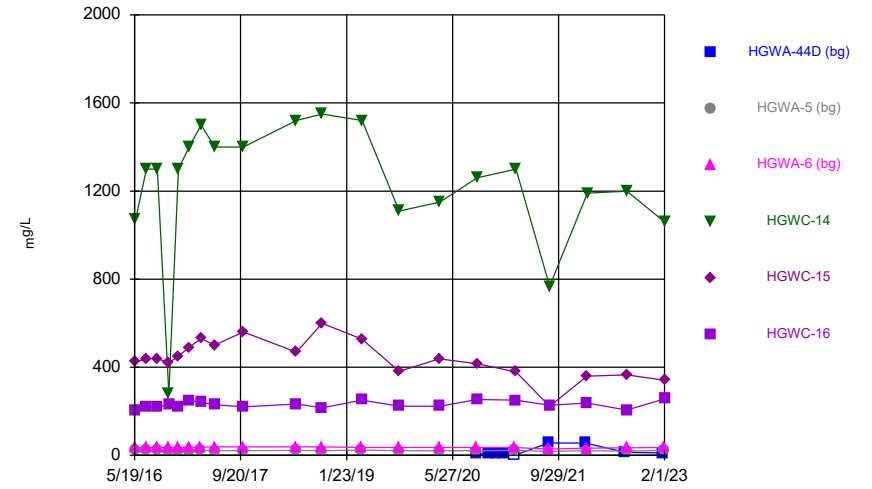
Constituent: Selenium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



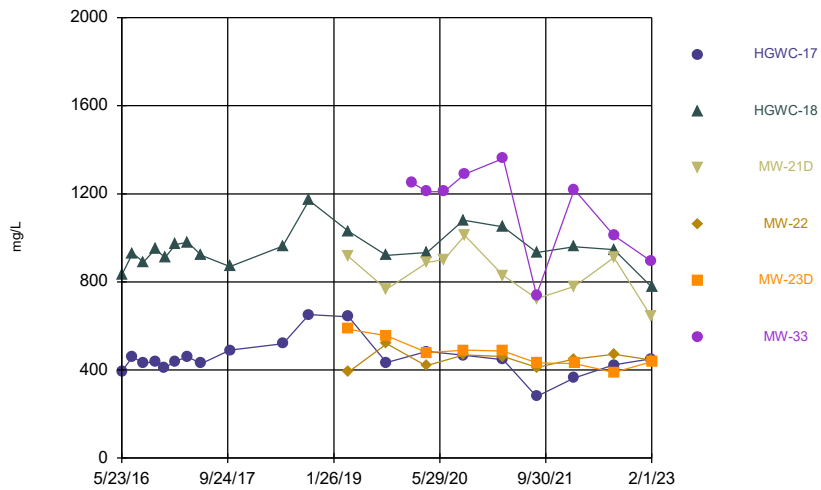
Constituent: Sulfate Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



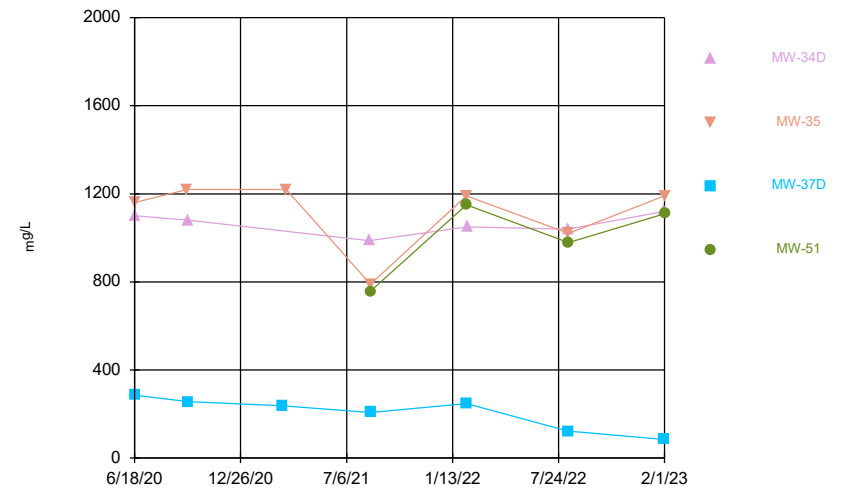
Constituent: Sulfate Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



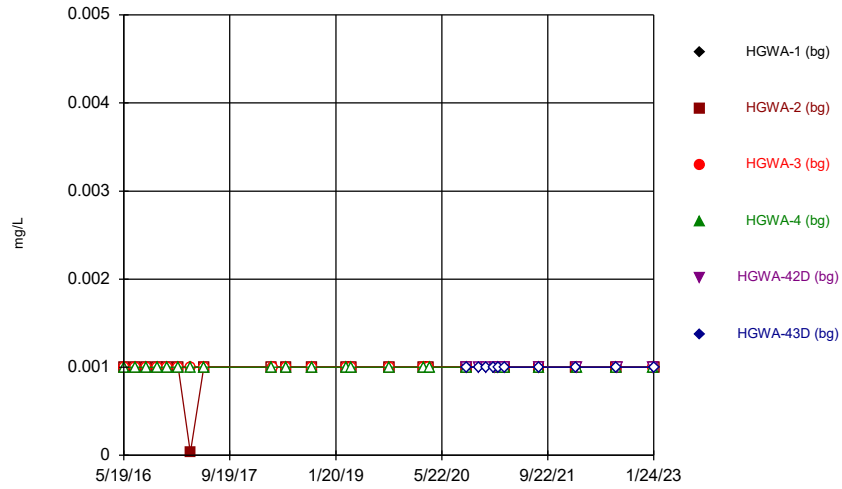
Constituent: Sulfate Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



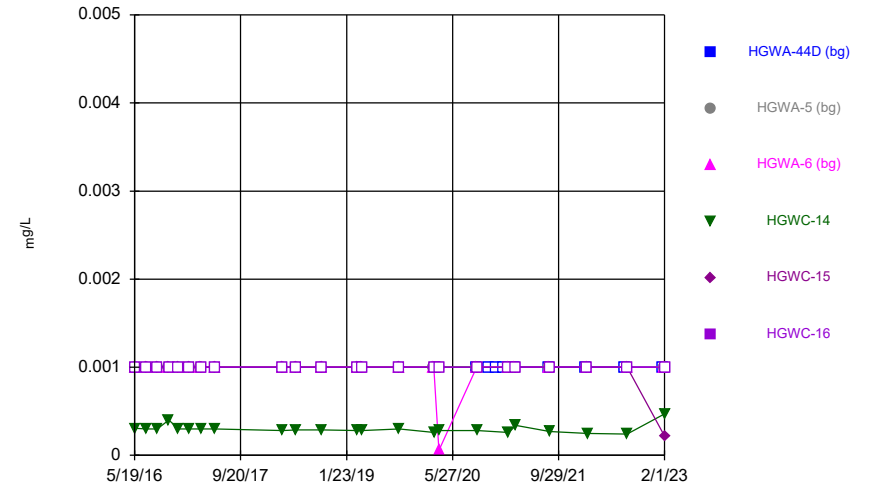
Constituent: Sulfate Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



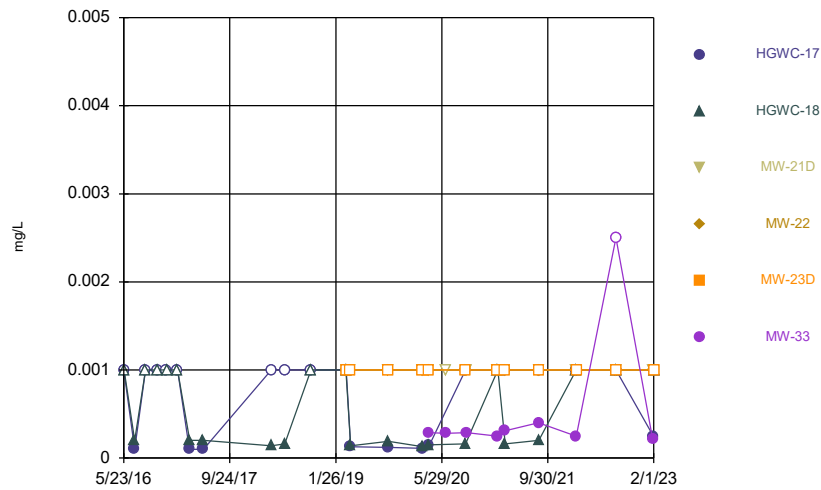
Constituent: Thallium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



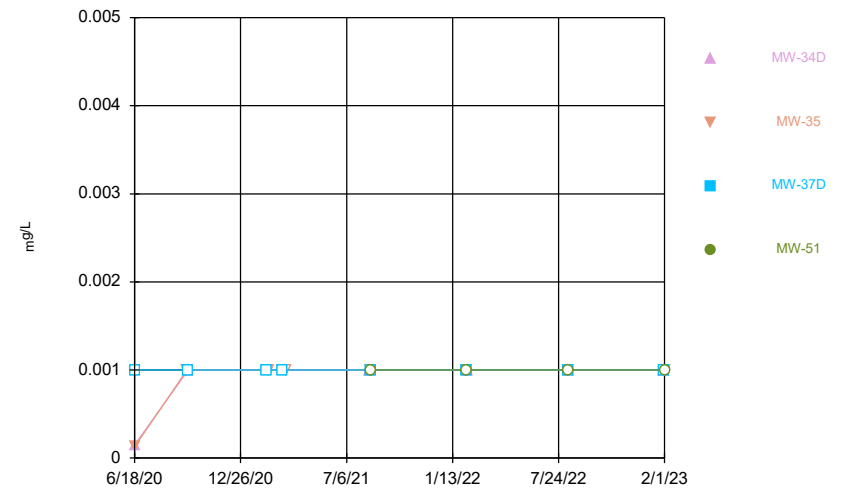
Constituent: Thallium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



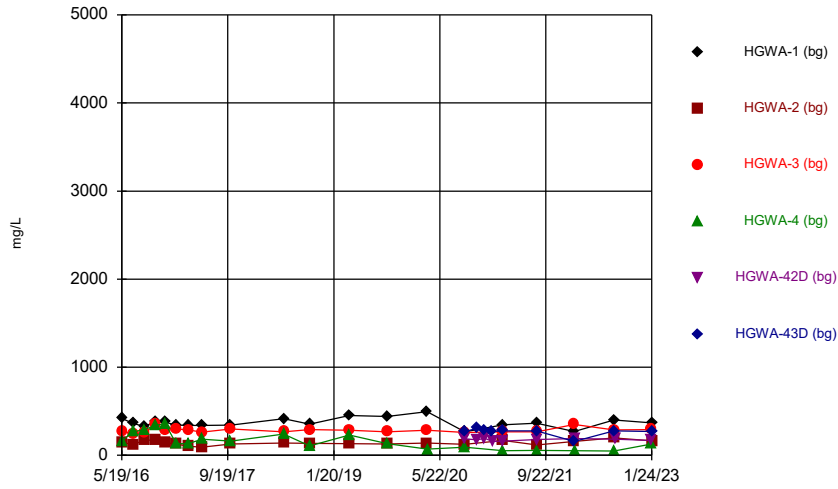
Constituent: Thallium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



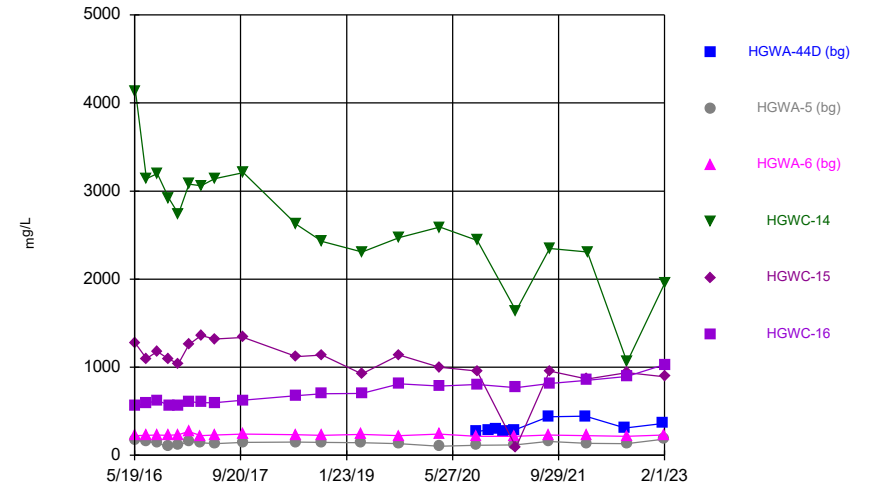
Constituent: Thallium Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



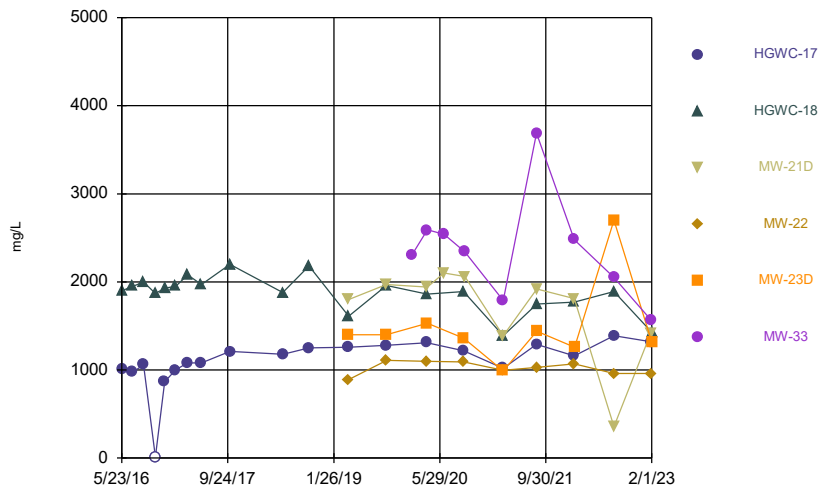
Constituent: Total Dissolved Solids Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



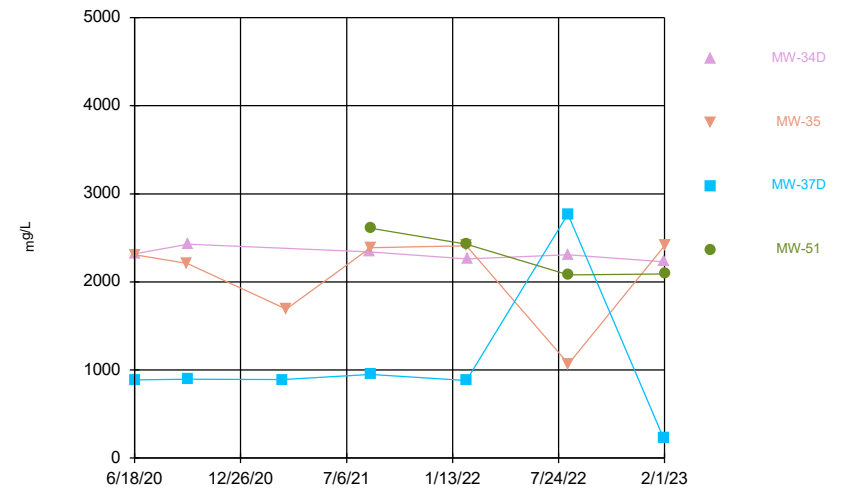
Constituent: Total Dissolved Solids Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



Constituent: Total Dissolved Solids Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



Constituent: Total Dissolved Solids Analysis Run 5/16/2023 2:05 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

# Time Series

Constituent: Antimony (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.003	<0.003	<0.003	<0.003		
7/11/2016	<0.003	<0.003		<0.003		
7/12/2016			0.0003 (J)			
8/30/2016	<0.003	<0.003	<0.003	<0.003		
10/19/2016	0.0014 (J)	<0.003	<0.003	<0.003		
12/6/2016	<0.003	<0.003	<0.003	<0.003		
1/24/2017	<0.003	<0.003	<0.003	<0.003		
3/21/2017	<0.003	<0.003	<0.003	<0.003		
5/22/2017	<0.003	<0.003	<0.003			
5/23/2017				<0.003		
4/2/2018	<0.003	<0.003		<0.003		
4/3/2018			<0.003			
3/11/2019				<0.003		
3/12/2019	<0.003	<0.003	<0.003			
9/23/2019	<0.003	<0.003	<0.003			
3/2/2020	<0.003	<0.003	<0.003	<0.003		
9/16/2020						0.00051 (J)
9/17/2020					0.00055 (J)	
11/10/2020						0.00043 (J)
11/11/2020					<0.003	
12/15/2020					0.00035 (J)	0.00031 (J)
1/19/2021						0.00029 (J)
1/20/2021					<0.003	
2/8/2021	<0.003			<0.003	0.0019 (J)	
2/9/2021		0.00062 (J)	0.00031 (J)			0.00037 (J)
3/10/2021	<0.003			<0.003	<0.003	
3/11/2021		<0.003	<0.003			0.00057 (J)
8/11/2021	<0.003					<0.003
8/12/2021		<0.003	<0.003	<0.003	<0.003	
2/1/2022	<0.003	<0.003	<0.003			<0.003
2/7/2022				<0.003	<0.003	
8/2/2022	<0.003	<0.003	<0.003	<0.003		<0.003
8/9/2022					<0.003	
1/23/2023			<0.003	<0.003	0.0016 (J)	
1/24/2023	<0.003	<0.003				<0.003



# Time Series

Constituent: Antimony (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.003				
5/20/2016			<0.003			
5/23/2016				<0.003	<0.003	<0.003
7/11/2016		<0.003	0.001 (J)			
7/12/2016				0.0003 (J)	<0.003	<0.003
8/30/2016		<0.003	<0.003			
9/1/2016				<0.003	<0.003	<0.003
10/20/2016		0.0023 (J)	<0.003			
10/24/2016				<0.003	<0.003	
10/25/2016						<0.003
12/7/2016				<0.003	<0.003	<0.003
12/8/2016		<0.003	<0.003			
1/24/2017		<0.003	<0.003			
1/26/2017				<0.003	<0.003	<0.003
3/21/2017		<0.003	<0.003			
3/22/2017						<0.003
3/23/2017				<0.003	<0.003	
5/23/2017		<0.003	<0.003			
5/24/2017				<0.003	<0.003	<0.003
4/3/2018		<0.003	<0.003		<0.003	<0.003
4/4/2018				<0.003		
3/12/2019		<0.003	<0.003			
3/14/2019				<0.003	<0.003	
3/15/2019						<0.003
3/2/2020		<0.003	<0.003			
3/3/2020				<0.003	<0.003	<0.003
9/16/2020	0.00049 (J)					
11/10/2020	<0.003					
12/15/2020	0.00047 (J)					
1/19/2021	0.00067 (J)					
2/9/2021	0.00042 (J)	<0.003	<0.003			
2/10/2021						<0.003
2/11/2021				0.00043 (J)		
2/12/2021					<0.003	
3/10/2021	0.00037 (J)					
3/11/2021		<0.003	<0.003			
3/16/2021					<0.003	
3/17/2021				<0.003		<0.003
8/12/2021		0.0014 (J)	<0.003			
8/13/2021	<0.003					
8/18/2021				<0.003		
8/19/2021					<0.003	<0.003
2/1/2022	0.0013 (J)					
2/7/2022		<0.003	0.0014 (J)			
2/8/2022					0.002 (J)	<0.003
2/9/2022				<0.003		
8/2/2022	<0.003					
8/10/2022		<0.003	<0.003			<0.003
8/11/2022				0.001 (J)	0.0016 (J)	
1/24/2023	<0.003					
1/27/2023		<0.003	<0.003			
2/1/2023				<0.003	0.0021 (J)	<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.003					
5/24/2016		<0.003				
7/12/2016	<0.003	<0.003				
9/1/2016	<0.003	<0.003				
10/25/2016	<0.003	<0.003				
12/7/2016	<0.003					
12/8/2016		<0.003				
1/26/2017	<0.003	<0.003				
3/22/2017	<0.003					
3/23/2017		<0.003				
5/25/2017	<0.003	<0.003				
4/3/2018	<0.003	<0.003				
3/14/2019		<0.003			<0.003	
3/15/2019	<0.003		<0.003	<0.003		
3/2/2020				<0.003	<0.003	
3/3/2020	<0.003	<0.003	<0.003			
2/11/2021	<0.003	<0.003	<0.003			
2/12/2021					<0.003	0.00046 (J)
2/15/2021				<0.003		
3/17/2021				<0.003	<0.003	
3/18/2021	<0.003	<0.003	<0.003			<0.003
8/18/2021	<0.003					<0.003
8/19/2021		0.0008 (J)	<0.003	0.0016 (J)	<0.003	
2/8/2022	<0.003	<0.003	<0.003	<0.003		<0.003
2/10/2022					<0.003	
8/10/2022	<0.003	<0.003				<0.003
8/11/2022			<0.003	<0.003	<0.003	
1/27/2023			<0.003			<0.003
1/30/2023	<0.003			<0.003		
2/1/2023		<0.003			<0.003	

# Time Series

Constituent: Antimony (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
2/11/2021			0.00079 (J)	
2/15/2021		0.00041 (J)		
3/12/2021			<0.003	
3/19/2021		<0.003		
8/16/2021	<0.003			
8/18/2021		<0.003	<0.003	<0.003
2/8/2022		0.0029 (J)	<0.003	<0.003
2/9/2022	<0.003			
8/10/2022	<0.003		<0.003	
8/11/2022		<0.003		<0.003
1/30/2023	0.0018 (J)		<0.003	
2/1/2023		<0.003		<0.003

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	0.00127 (J)	<0.005	<0.005		
7/11/2016	<0.005	0.002 (J)		<0.005		
7/12/2016			0.0008 (J)			
8/30/2016	<0.005	0.0017 (J)	<0.005	<0.005		
10/19/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016	<0.005	<0.005	<0.005	<0.005		
1/24/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017	0.0005 (J)	<0.005	0.0007 (J)	<0.005		
5/22/2017	<0.005	0.0006 (J)	0.0006 (J)			
5/23/2017				<0.005		
4/2/2018	<0.005	<0.005		<0.005		
4/3/2018			<0.005			
6/4/2018	<0.005	0.00088 (J)	0.0008 (J)	<0.005		
10/1/2018	<0.005	<0.005	0.0011 (J)	<0.005		
3/11/2019				<0.005		
3/12/2019	<0.005	0.00069 (J)	0.00063 (J)			
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005		<0.005		
9/23/2019	0.00046 (J)	0.00067 (J)	0.0011 (J)			
9/24/2019				<0.005		
3/2/2020	<0.005	0.00043 (J)	0.0004 (J)	<0.005		
3/25/2020	<0.005	<0.005	<0.005			
3/26/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020				<0.005		
11/10/2020						0.0021 (J)
11/11/2020				<0.005		
12/15/2020				<0.005		<0.005
1/19/2021						0.0011 (J)
1/20/2021				<0.005		
2/8/2021	<0.005			<0.005	<0.005	
2/9/2021		<0.005	<0.005			0.0017 (J)
3/10/2021	<0.005			<0.005	<0.005	
3/11/2021		<0.005	<0.005			0.0013 (J)
8/11/2021	<0.005					0.0015 (J)
8/12/2021		<0.005	<0.005	<0.005	<0.005	
2/1/2022	0.0016 (J)	0.0023 (J)	0.0024 (J)			0.0036 (J)
2/7/2022				<0.005	<0.005	
8/2/2022	<0.005	<0.005	<0.005	<0.005		<0.005
8/9/2022					<0.005	
1/23/2023			<0.005	<0.005	<0.005	
1/24/2023	<0.005	<0.005				<0.005

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				0.00268 (J)	<0.005	<0.005
7/11/2016		<0.005	<0.005			
7/12/2016				0.0059	<0.005	<0.005
8/30/2016		<0.005	<0.005			
9/1/2016				0.0056	<0.005	<0.005
10/20/2016		<0.005	<0.005			
10/24/2016				0.0058	<0.005	
10/25/2016						<0.005
12/7/2016				<0.025	<0.005	<0.005
12/8/2016		<0.005	<0.005			
1/24/2017		<0.005	<0.005			
1/26/2017				0.0089	<0.005	<0.005
3/21/2017		<0.005	<0.005			
3/22/2017						0.0005 (J)
3/23/2017				0.0069	0.0008 (J)	
5/23/2017		<0.005	<0.005			
5/24/2017				0.0048 (J)	<0.005	<0.005
4/3/2018		<0.005	<0.005		<0.005	<0.005
4/4/2018				0.0052		
6/5/2018		<0.005	<0.005			
6/6/2018				0.0059	<0.005	<0.005
10/2/2018		0.00064 (J)	<0.005			
10/3/2018				0.0032 (J)	<0.005	<0.005
3/12/2019		<0.005	<0.005			
3/14/2019				0.0029 (J)	<0.005	
3/15/2019						<0.005
4/2/2019		<0.005	<0.005			
4/4/2019					0.00017 (J)	0.0001 (J)
4/5/2019				<0.025		
9/24/2019		0.00055 (J)	<0.005	0.0039 (J)	0.00037 (J)	
9/25/2019						<0.005
3/2/2020		<0.005	<0.005			
3/3/2020				0.0035 (J)	<0.005	<0.005
3/25/2020			<0.005			
3/26/2020		<0.005			<0.005	
3/30/2020				0.0051		0.0011 (J)
9/15/2020		<0.005	<0.005			
9/16/2020	<0.005					
9/17/2020					<0.005	<0.005
9/18/2020				0.0029 (J)		
11/10/2020	<0.005					
12/15/2020	<0.005					
1/19/2021	<0.005					
2/9/2021	0.00083 (J)	<0.005	<0.005			
2/10/2021						0.0012 (J)
2/11/2021				0.0062		
2/12/2021					<0.005	
3/10/2021	<0.005					
3/11/2021		<0.005	<0.005			
3/16/2021					<0.005	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				<0.025		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	<0.005					
8/18/2021				0.0035 (J)		
8/19/2021					<0.005	<0.005
2/1/2022	0.0025 (J)					
2/7/2022		<0.005	<0.005			
2/8/2022					<0.005	<0.005
2/9/2022				0.0077		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				0.006	<0.005	
1/24/2023	0.0027 (J)					
1/27/2023		<0.005	<0.005			
2/1/2023				0.004 (J)	<0.005	<0.005

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.005					
5/24/2016		0.00294 (J)				
7/12/2016	<0.005	0.0074				
9/1/2016	<0.005	0.0073				
10/25/2016	<0.005	0.006				
12/7/2016	<0.005					
12/8/2016		0.007				
1/26/2017	<0.005	0.0068				
3/22/2017	0.0007 (J)					
3/23/2017		0.0082				
5/25/2017	0.0007 (J)	0.006				
4/3/2018	<0.005	0.0062				
6/5/2018		0.008				
6/6/2018	0.00097 (J)					
10/3/2018	<0.005	0.0039 (J)				
3/14/2019		0.0036 (J)			<0.005	
3/15/2019	<0.005		<0.005	<0.005		
4/4/2019			0.00019 (J)			
4/5/2019	<0.005	0.0015 (J)		<0.005	<0.005	
9/25/2019	<0.005	0.0044 (J)	<0.005			
9/26/2019					<0.005	
9/27/2019				0.00045 (J)		
3/2/2020				<0.005	<0.005	
3/3/2020	<0.005	0.0057	<0.005			
3/27/2020				<0.005		
3/31/2020	0.0008 (J)	0.0056				
4/1/2020			0.0013 (J)		0.00082 (J)	0.0061
6/17/2020			<0.005			0.0031 (J)
9/15/2020		0.0074				
9/16/2020	<0.005					
9/17/2020				<0.005	<0.005	
9/21/2020			<0.005			0.0083
2/11/2021	0.0012 (J)	0.0069 (B)	0.001 (J)			
2/12/2021					0.001 (J)	0.0059
2/15/2021				<0.005		
3/17/2021				<0.005	<0.005	
3/18/2021	<0.005	0.0083 (J)	<0.005			0.0054 (J)
8/18/2021	<0.005					0.0058
8/19/2021		0.0045 (J)	<0.005	<0.005	<0.005	
2/8/2022	0.0017 (J)	0.005 (J)	<0.005	<0.005		0.0069
2/10/2022					<0.005	
8/10/2022	<0.005	0.0058				<0.025
8/11/2022			0.003 (J)	<0.005	<0.005	
1/27/2023			<0.005			0.0031 (J)
1/30/2023	0.0028 (J)			<0.005		
2/1/2023		0.0036 (J)			<0.005	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0032 (J)	0.005 (J)	0.0021 (J)	
9/21/2020		0.0059		
9/23/2020	0.001 (J)		0.00095 (J)	
2/11/2021			0.0023 (J)	
2/15/2021		0.005		
3/12/2021			<0.005	
3/19/2021		<0.025		
8/16/2021	0.0024 (J)			
8/18/2021		0.0043 (J)	<0.005	0.002 (J)
2/8/2022		0.0072	<0.005	0.0046 (J)
2/9/2022	0.0054			
8/10/2022	0.0045 (J)		<0.005	
8/11/2022		<0.025		0.0043 (J)
1/30/2023	0.0047 (J)		<0.005	
2/1/2023		0.006		0.0041 (J)



# Time Series

Constituent: Barium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.0346	0.114	0.111	0.0266		
7/11/2016	0.0311	0.112		0.0309		
7/12/2016			0.115			
8/30/2016	0.0293	0.131	0.113	0.031		
10/19/2016	0.0293	0.111	0.123	0.0332		
12/6/2016	0.0304	0.108	0.127	0.0334		
1/24/2017	0.028	0.102	0.126	0.0192		
3/21/2017	0.0275	0.095	0.12	0.0175		
5/22/2017	0.0281	0.103	0.117			
5/23/2017				0.0227		
4/2/2018	0.026	0.099		0.022		
4/3/2018			0.11			
6/4/2018	0.035	0.11	0.12	0.027		
10/1/2018	0.029	0.11	0.14	0.018		
3/11/2019				0.029		
3/12/2019	0.042	0.12	0.13			
4/1/2019			0.13			
4/2/2019	0.04	0.13		0.03		
9/23/2019	0.042	0.13	0.13			
9/24/2019				0.03		
3/2/2020	0.034	0.11	0.14	0.023		
3/25/2020	0.043	0.12	0.13			
3/26/2020				0.026		
9/15/2020	0.035	0.12	0.12	0.024		
9/16/2020						0.26
9/17/2020				0.13		
11/10/2020						0.25
11/11/2020				0.18		
12/15/2020				0.19		0.29
1/19/2021						0.32
1/20/2021				0.2		
2/8/2021	0.032			0.04	0.19	
2/9/2021		0.12	0.13			0.34
3/10/2021	0.03			0.036	0.18	
3/11/2021		0.07	0.13			0.32
8/11/2021	0.03					0.28
8/12/2021		0.12	0.11	0.034	0.18	
2/1/2022	0.031	0.13	0.12			0.29
2/7/2022				0.028	0.18	
8/2/2022	0.039	0.11	0.16	0.041		0.35
8/9/2022					0.2	
1/23/2023			0.13	0.057	0.21	
1/24/2023	0.033	0.088				0.28

# Time Series

Constituent: Barium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		0.0519				
5/20/2016			0.174			
5/23/2016				<0.25	0.0315 (J)	0.0841
7/11/2016		0.0565	0.134			
7/12/2016				0.0214	0.0372	0.0886
8/30/2016		0.0548	0.212			
9/1/2016				0.0208	0.0364	0.0934
10/20/2016		0.0539	0.157			
10/24/2016				0.0208	0.0326	
10/25/2016						0.0991
12/7/2016				0.022	0.0301	0.101
12/8/2016		0.0496	0.162			
1/24/2017		0.0478	0.168			
1/26/2017				0.0238	0.0287	0.105
3/21/2017		0.0453	0.186			
3/22/2017						0.11
3/23/2017				0.0244	0.0329	
5/23/2017		0.0496	0.187			
5/24/2017				0.0228	0.0283	0.106
4/3/2018		0.038	0.14		0.019	0.099
4/4/2018				0.021		
6/5/2018		0.046	0.21			
6/6/2018				0.022	0.022	0.11
10/2/2018		0.047	0.19			
10/3/2018				0.02	0.025	0.11
3/12/2019		0.05	0.2			
3/14/2019				0.019	0.021	
3/15/2019						0.13
4/2/2019		0.044	0.19			
4/4/2019					0.018	0.11
4/5/2019				0.016		
9/24/2019		0.053	0.22	0.021	0.019	
9/25/2019						0.11
3/2/2020		0.053	0.19			
3/3/2020				0.018	0.018	0.12
3/25/2020			0.19			
3/26/2020		0.045			0.016	
3/30/2020				0.02		0.11
9/15/2020		0.045	0.19			
9/16/2020	0.24					
9/17/2020					0.017	0.11
9/18/2020				0.019		
11/10/2020	0.38					
12/15/2020	0.39					
1/19/2021	0.41					
2/9/2021	0.46	0.046	0.21			
2/10/2021						0.11
2/11/2021				0.02		
2/12/2021					0.014	
3/10/2021	0.26					
3/11/2021		0.044	0.21			
3/16/2021					0.012	

# Time Series

Constituent: Barium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.023		0.12
8/12/2021		0.044	0.18			
8/13/2021	0.22					
8/18/2021				0.018		
8/19/2021					0.01	0.1
2/1/2022	0.23					
2/7/2022		0.038	0.18			
2/8/2022					0.0098	0.1
2/9/2022				0.017		
8/2/2022	0.37					
8/10/2022		0.053	0.18			0.1
8/11/2022				0.017	0.015	
1/24/2023	0.18					
1/27/2023		0.044	0.2			
2/1/2023				0.017	0.021	0.11

# Time Series

Constituent: Barium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	0.0222 (J)					
5/24/2016		<0.2				
7/12/2016	0.0221	0.0346				
9/1/2016	0.0227	0.0336				
10/25/2016	0.0225	0.0349				
12/7/2016	0.0227					
12/8/2016		0.0339				
1/26/2017	0.0229	0.0293				
3/22/2017	0.0248					
3/23/2017		0.0313				
5/25/2017	0.0255	0.0336				
4/3/2018	0.025	0.028				
6/5/2018		0.03				
6/6/2018	0.028					
10/3/2018	0.028	0.032				
3/14/2019		0.029			0.082	
3/15/2019	0.029		0.09	0.044		
4/4/2019			0.075			
4/5/2019	0.022	0.021		0.036	0.061	
9/25/2019	0.025	0.03	0.066			
9/26/2019					0.064	
9/27/2019				0.028		
3/2/2020				0.027	0.06	
3/3/2020	0.026	0.026	0.058			
3/27/2020				0.025		
3/31/2020	0.029	0.029				
4/1/2020			0.066		0.065	0.027
6/17/2020			0.054			0.024
9/15/2020		0.03				
9/16/2020	0.025					
9/17/2020				0.02	0.057	
9/21/2020			0.049			0.024
2/11/2021	0.025	0.03	0.044			
2/12/2021					0.056	0.025
2/15/2021				0.017		
3/17/2021				0.018	0.058	
3/18/2021	0.027	0.031	0.047			0.029
8/18/2021	0.022					0.025
8/19/2021		0.031	0.042	0.018	0.05	
2/8/2022	0.021	0.02	0.033	0.014		0.02
2/10/2022					0.05	
8/10/2022	0.027	0.026				0.02 (J)
8/11/2022			0.037	0.014	0.05	
1/27/2023			0.031			0.018
1/30/2023	0.03			0.014		
2/1/2023		0.019			0.047	

# Time Series

Constituent: Barium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.044	0.029	0.19	
9/21/2020		0.028		
9/23/2020	0.038		0.14	
2/11/2021			0.14	
2/15/2021		0.026		
3/12/2021			0.12	
3/19/2021		0.032		
8/16/2021	0.035			
8/18/2021		0.025	0.12	0.032
2/8/2022		0.023	0.11	0.046
2/9/2022	0.04			
8/10/2022	0.046		0.11	
8/11/2022		0.022 (J)		0.028
1/30/2023	0.04		0.13	
2/1/2023		0.022		0.033

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.0005	<0.003	<0.0005	<0.003		
7/11/2016	<0.0005	0.0001 (J)		<0.003		
7/12/2016			<0.0005			
8/30/2016	<0.0005	<0.003	<0.0005	<0.003		
10/19/2016	<0.0005	0.0001 (J)	<0.0005	<0.003		
12/6/2016	<0.0005	0.0002 (J)	<0.0005	<0.003		
1/24/2017	<0.0005	0.0001 (J)	<0.0005	<0.003		
3/21/2017	<0.0005	0.0001 (J)	<0.0005	<0.003		
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/23/2017				<0.003		
4/2/2018	<0.0005	<0.003		<0.003		
4/3/2018			<0.0005			
3/11/2019				5E-05 (J)		
3/12/2019	<0.0005	0.00017 (J)	<0.0005			
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)		<0.003		
9/23/2019	<0.0005	0.00011 (J)	<0.0005			
9/24/2019				<0.003		
3/2/2020	<0.0005	0.00014 (J)	<0.0005	0.00019 (J)		
3/25/2020	<0.0005	0.00016 (J)	<0.0005			
3/26/2020				7.6E-05 (J)		
9/15/2020	<0.0005	0.00013 (J)	<0.0005	<0.003		
9/16/2020						<0.0005
9/17/2020				<0.0005		
11/10/2020						<0.0005
11/11/2020				<0.0005		
12/15/2020				<0.0005		<0.0005
1/19/2021						<0.0005
1/20/2021				<0.0005		
2/8/2021	<0.0005			0.00023 (J)	<0.0005	
2/9/2021		0.00014 (J)	<0.0005			<0.0005
3/10/2021	<0.0005			0.00017 (J)	<0.0005	
3/11/2021		8.6E-05 (J)	<0.0005			<0.0005
8/11/2021	<0.0005					<0.0005
8/12/2021		0.00014 (J)	<0.0005	0.00021 (J)	<0.0005	
2/1/2022	<0.0005	0.0002 (J)	<0.0005			<0.0005
2/7/2022				0.00017 (J)	<0.0005	
8/2/2022	<0.0005	0.00019 (J)	<0.0005	0.00019 (J)		<0.0005
8/9/2022					<0.0005	
1/23/2023			<0.0005	0.0001 (J)	<0.0005	
1/24/2023	<0.0005	0.00016 (J)				<0.0005

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.0005				
5/20/2016			<0.0005			
5/23/2016				<0.003	<0.0005	<0.0005
7/11/2016		<0.0005	<0.0005			
7/12/2016				0.0005 (J)	<0.0005	<0.0005
8/30/2016		<0.0005	<0.0005			
9/1/2016				0.0005 (J)	<0.0005	<0.0005
10/20/2016		<0.0005	<0.0005			
10/24/2016				0.0005 (J)	<0.0005	
10/25/2016						<0.0005
12/7/2016				0.0006 (J)	<0.0005	<0.0005
12/8/2016		<0.0005	<0.0005			
1/24/2017		<0.0005	<0.0005			
1/26/2017				0.0005 (J)	<0.0005	<0.0005
3/21/2017		<0.0005	<0.0005			
3/22/2017						<0.0005
3/23/2017				0.0006 (J)	<0.0005	
5/23/2017		<0.0005	<0.0005			
5/24/2017				0.0005 (J)	<0.0005	<0.0005
4/3/2018		<0.0005	<0.0005		<0.0005	<0.0005
4/4/2018				<0.003		
3/12/2019		<0.0005	<0.0005			
3/14/2019				0.00043 (J)	<0.0005	
3/15/2019						<0.0005
4/2/2019		<0.0005	<0.0005			
4/4/2019					<0.0005	<0.0005
4/5/2019				0.00027 (J)		
9/24/2019		<0.0005	<0.0005	0.00044 (J)	<0.0005	
9/25/2019						<0.0005
3/2/2020		<0.0005	<0.0005			
3/3/2020				0.00043 (J)	<0.0005	<0.0005
3/25/2020			<0.0005			
3/26/2020		<0.0005			<0.0005	
3/30/2020				0.00043 (J)		<0.0005
9/15/2020		<0.0005	<0.0005			
9/16/2020	<0.0005					
9/17/2020					<0.0005	<0.0005
9/18/2020				0.00043 (J)		
11/10/2020	<0.0005					
12/15/2020	<0.0005					
1/19/2021	<0.0005					
2/9/2021	<0.0005	<0.0005	<0.0005			
2/10/2021						<0.0005
2/11/2021				0.00044 (J)		
2/12/2021					<0.0005	
3/10/2021	<0.0005					
3/11/2021		<0.0005	<0.0005			
3/16/2021					<0.0005	
3/17/2021				0.00058		<0.0005
8/12/2021		<0.0005	<0.0005			
8/13/2021	<0.0005					
8/18/2021				0.00039 (J)		

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.0005	<0.0005
2/1/2022	<0.0005					
2/7/2022		<0.0005	<0.0005			
2/8/2022					<0.0005	<0.0005
2/9/2022				0.00056		
8/2/2022	<0.0005					
8/10/2022		<0.0005	<0.0005			<0.0005
8/11/2022				0.00039 (J)	<0.0005	
1/24/2023	<0.0005					
1/27/2023		<0.0005	<0.0005			
2/1/2023				0.00039 (J)	<0.0005	<0.0005



# Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.0005					
5/24/2016		0.00278 (J)				
7/12/2016	<0.0005	0.0032				
9/1/2016	<0.0005	0.0034				
10/25/2016	<0.0005	0.0034				
12/7/2016	<0.0005					
12/8/2016		0.0033				
1/26/2017	<0.0005	0.0034				
3/22/2017	<0.0005					
3/23/2017		0.0036				
5/25/2017	<0.0005	0.0036				
4/3/2018	<0.0005	<0.003				
3/14/2019		0.0026 (J)			<0.0005	
3/15/2019	<0.0005		<0.0005	<0.0005		
4/4/2019			<0.0005			
4/5/2019	<0.0005	0.0022 (J)		<0.0005	<0.0005	
9/25/2019	<0.0005	0.0031	<0.0005			
9/26/2019					<0.0005	
9/27/2019				<0.0005		
3/2/2020				<0.0005	<0.0005	
3/3/2020	<0.0005	0.0029 (J)	<0.0005			
3/27/2020				<0.0005		
3/31/2020	<0.0005	0.003				
4/1/2020			<0.0005		<0.0005	0.0011 (J)
6/17/2020			<0.0005			0.00099 (J)
9/15/2020		0.0033				
9/16/2020	<0.0005					
9/17/2020				4.7E-05 (J)	<0.0005	
9/21/2020			<0.0005			0.0009 (J)
2/11/2021	6.7E-05 (J)	0.0036	<0.0005			
2/12/2021					<0.0005	0.001 (J)
2/15/2021				6.2E-05 (J)		
3/17/2021				8.2E-05 (J)	<0.0005	
3/18/2021	4.8E-05 (J)	0.0038	<0.0005			0.0011
8/18/2021	<0.0005					0.00097
8/19/2021		0.0034	<0.0005	7E-05 (J)	<0.0005	
2/8/2022	<0.0005	0.0026	<0.0005	7.9E-05 (J)		0.00087 (J)
2/10/2022					<0.0005	
8/10/2022	6E-05 (J)	0.0032				0.0008
8/11/2022			<0.0005	<0.0005	<0.0005	
1/27/2023			<0.0005			0.00019 (J)
1/30/2023	5.7E-05 (J)			8.1E-05 (J)		
2/1/2023		0.002			<0.0005	

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.00015 (J)	0.00032 (J)	0.00012 (J)	
9/21/2020		0.0004 (J)		
9/23/2020	<0.0005		<0.0005	
2/11/2021			<0.0005	
2/15/2021		0.0006 (J)		
3/12/2021			<0.0005	
3/19/2021		0.00061		
8/16/2021	<0.0005			
8/18/2021		0.00061	<0.0005	0.00042 (J)
2/8/2022		0.0007 (J)	<0.0005	0.00011 (J)
2/9/2022	6.5E-05 (J)			
8/10/2022	<0.0005		<0.0005	
8/11/2022		0.00066 (J)		0.00028 (J)
1/30/2023	<0.0005		<0.0005	
2/1/2023		0.00049 (J)		0.00028 (J)

# Time Series

Constituent: Boron (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.0214 (J)	0.0321 (J)	<0.04	<0.1		
7/11/2016	0.0142 (J)	0.0337 (J)		0.0175 (J)		
7/12/2016			0.0074 (J)			
8/30/2016	0.0074 (J)	0.0173 (J)	<0.04	0.0072 (J)		
10/19/2016	0.0224 (J)	0.0341 (J)	0.0085 (J)	0.018 (J)		
12/6/2016	0.0211 (J)	0.0326 (J)	0.0085 (J)	0.0158 (J)		
1/24/2017	0.0165 (J)	0.0365 (J)	0.01 (J)	0.0145 (J)		
3/21/2017	0.0187 (J)	0.0349 (J)	0.0079 (J)	0.0101 (J)		
5/22/2017	0.0782	0.0475	0.0131 (J)			
5/23/2017				0.0159 (J)		
10/3/2017	0.0198 (J)	0.0386 (J)	0.0097 (J)	0.0162 (J)		
6/4/2018	0.02 (J)	0.036 (J)	0.017 (J)	0.014 (J)		
10/1/2018	0.013 (J)	0.035 (J)	0.0061 (J)	0.0093 (J)		
4/1/2019			0.0066 (J)			
4/2/2019	0.016 (J)	0.034 (J)		0.01 (J)		
9/23/2019	0.021 (J)	0.04 (J)	0.0081 (J)			
9/24/2019				0.013 (J)		
3/25/2020	0.025 (J)	0.039 (J)	0.0096 (J)			
3/26/2020				0.012 (J)		
9/15/2020	0.017 (J)	0.044 (J)	0.0071 (J)	0.013 (J)		
9/16/2020						0.061 (J)
9/17/2020				0.098 (J)		
11/10/2020						0.057 (J)
11/11/2020				0.058 (J)		
12/15/2020				0.043 (J)		0.052 (J)
1/19/2021						0.049 (J)
1/20/2021					0.045 (J)	
3/10/2021	0.015 (J)			0.012 (J)	0.048	
3/11/2021		0.056	0.015 (J)			0.06
8/11/2021	0.02 (J)					0.042
8/12/2021		0.044	<0.04	0.014 (J)	0.044	
2/1/2022	0.016 (J)	0.056	0.011 (J)			0.05
2/7/2022				0.017 (J)	0.047	
8/2/2022	0.012 (J)	0.047	<0.04	0.02 (J)		0.043
8/9/2022					0.055	
1/23/2023			0.012 (J)	0.023 (J)	0.052	
1/24/2023	0.015 (J)	0.046				0.037 (J)

# Time Series

Constituent: Boron (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.04				
5/20/2016			0.0363 (J)			
5/23/2016				15.4	2.02	1.36
7/11/2016		0.0052 (J)	0.0179 (J)			
7/12/2016				16	1.65	1.62
8/30/2016		0.0068 (J)	0.014 (J)			
9/1/2016				12.3	1.93	1.31
10/20/2016		0.0135 (J)	0.0197 (J)			
10/24/2016				13.7	1.93	
10/25/2016						1.27
12/7/2016				16.5	2.23	1.42
12/8/2016		0.0083 (J)	0.0159 (J)			
1/24/2017		0.0072 (J)	<0.2			
1/26/2017				19.2	2.31	1.19
3/21/2017		<0.04	0.0166 (J)			
3/22/2017						1.32
3/23/2017				23.1	2.72	
5/23/2017		0.0095 (J)	0.0167 (J)			
5/24/2017				25.8	2.26	1.67
10/3/2017		0.0071 (J)	0.017 (J)			
10/4/2017				20.5	2	1.43
6/5/2018		0.0066 (J)	0.016 (J)			
6/6/2018				16.7	2.4	1.9
10/2/2018		0.0081 (J)	0.014 (J)			
10/3/2018				16.4	2.4	1.7
4/2/2019		0.0052 (J)	0.013 (J)			
4/4/2019					2.3	2.1
4/5/2019				12.5		
9/24/2019		0.0088 (J)	0.016 (J)	14.7	2.9	
9/25/2019						2.7
3/25/2020			0.021 (J)			
3/26/2020		0.0072 (J)			2.1	
3/30/2020				11.7		2.4
9/15/2020		0.012 (J)	0.016 (J)			
9/16/2020	0.23					
9/17/2020					2.2	2.4
9/18/2020				11		
11/10/2020	0.29					
12/15/2020	0.31					
1/19/2021	0.4					
3/10/2021	0.39					
3/11/2021		0.0075 (J)	0.018 (J)			
3/16/2021					2.4	
3/17/2021				11.8		2.7
8/12/2021		0.0092 (J)	0.014 (J)			
8/13/2021	0.31					
8/18/2021				8.6		
8/19/2021					2.1	2.5
2/1/2022	0.44					
2/7/2022		<0.04	0.019 (J)			
2/8/2022					1.9	2.6
2/9/2022				9.9		

# Time Series

Constituent: Boron (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	0.31					
8/10/2022		0.011 (J)	0.015 (J)			2.2
8/11/2022				8.8	2.1	
1/24/2023	0.44					
1/27/2023		<0.04	0.013 (J)			
2/1/2023				7.7	2	2.8

# Time Series

Constituent: Boron (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	5.7					
5/24/2016		9.33				
7/12/2016	9.58	11.9				
9/1/2016	5.76	8.8				
10/25/2016	5.38	8.5				
12/7/2016	5.74					
12/8/2016		7.15				
1/26/2017	5.78	9.17				
3/22/2017	5.52					
3/23/2017		10.6				
5/25/2017	8.58	13.2				
10/4/2017	6.8	10				
6/5/2018		8.4				
6/6/2018	6.3					
10/3/2018	6.9	9.3				
4/4/2019			5.2			
4/5/2019	5.9	6.4		2.1	3	
9/25/2019	8.1	11.7	6.4			
9/26/2019					3.8	
9/27/2019				2.9		
1/22/2020						11.2
3/27/2020				2.4		
3/31/2020	6.9	9.4				
4/1/2020			6.3		3.5	11.6
6/17/2020			5.8			10.3
9/15/2020		9.4				
9/16/2020	6.7					
9/17/2020				2.3	2.7	
9/21/2020			5.6			9
3/17/2021				2.7	3.4	
3/18/2021	6.8	8.9	5.7			10.2
8/18/2021	5.3					9.1
8/19/2021		8.6	5.4	2.5	3.4	
2/8/2022	7.8	8.1	5.9	3.2		8.4
2/10/2022					3.2	
8/10/2022	6.9	8.4				8
8/11/2022			5	2.5	3.3	
1/27/2023			3.6			4.6
1/30/2023	6.8			2.4		
2/1/2023		5.9			3	

# Time Series

Constituent: Boron (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	9.4	11.9	0.14	
9/21/2020		12.3		
9/23/2020	10.2		0.12	
3/12/2021			0.15	
3/19/2021		11.9		
8/16/2021	8.2			
8/18/2021		11.2	0.2	9.7
2/8/2022		10.8	0.14	10.5
2/9/2022	9.6			
8/10/2022	10.2		0.11	
8/11/2022		9.6		8.2
1/30/2023	8		0.15	
2/1/2023		8.7		8.3

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.0005	<0.0005	<0.0005	<0.0005		
7/11/2016	<0.0005	<0.0005		<0.0005		
7/12/2016			<0.0005			
8/30/2016	<0.0005	<0.0005	<0.0005	<0.0005		
10/19/2016	<0.0005	<0.0005	<0.0005	<0.0005		
12/6/2016	<0.0005	<0.0005	<0.0005	<0.0005		
1/24/2017	<0.0005	0.0001 (J)	<0.0005	<0.0005		
3/21/2017	<0.0005	7E-05 (J)	<0.0005	<0.0005		
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/23/2017				<0.0005		
4/2/2018	<0.0005	<0.0005		<0.0005		
4/3/2018			<0.0005			
6/4/2018	<0.0005	0.00014 (J)	<0.0005	<0.0005		
10/1/2018	<0.0005	<0.0005	<0.0005	<0.0005		
3/11/2019				<0.0005		
3/12/2019	<0.0005	0.00013 (J)	<0.0005			
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)		<0.0005		
9/23/2019	<0.0005	<0.0005	<0.0005			
9/24/2019				<0.0005		
3/2/2020	<0.0005	<0.0005	<0.0005	<0.0005		
3/25/2020	<0.0005	0.00014 (J)	<0.0005			
3/26/2020				<0.0005		
9/15/2020	<0.0005	0.00012 (J)	<0.0005	<0.0005		
9/16/2020						<0.0005
9/17/2020				<0.0005		
11/10/2020						<0.0005
11/11/2020				<0.0005		
12/15/2020				<0.0005		<0.0005
1/19/2021						<0.0005
1/20/2021				<0.0005		
2/8/2021	<0.0005			<0.0005	<0.0005	
2/9/2021		0.00016 (J)	<0.0005			<0.0005
3/10/2021	<0.0005			<0.0005	<0.0005	
3/11/2021		<0.0005	<0.0005			<0.0005
8/11/2021	<0.0005					<0.0005
8/12/2021		0.00014 (J)	<0.0005	<0.0005	<0.0005	
2/1/2022	<0.0005	0.00017 (J)	<0.0005			<0.0005
2/7/2022				<0.0005	<0.0005	
8/2/2022	<0.0005	0.00023 (J)	<0.0005	<0.0005		<0.0005
8/9/2022					<0.0005	
1/23/2023			<0.0005	<0.0005	<0.0005	
1/24/2023	<0.0005	0.00021 (J)				<0.0005



# Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.0005				
5/20/2016			<0.0005			
5/23/2016				0.000139 (J)	0.00271 (J)	<0.0005
7/11/2016		<0.0005	<0.0005			
7/12/2016				<0.0005	0.0019	<0.0005
8/30/2016		<0.0005	<0.0005			
9/1/2016				0.0001 (J)	0.0017	<0.0005
10/20/2016		<0.0005	<0.0005			
10/24/2016				0.0002 (J)	0.0018	
10/25/2016						<0.0005
12/7/2016				0.0001 (J)	0.0018	<0.0005
12/8/2016		<0.0005	<0.0005			
1/24/2017		<0.0005	<0.0005			
1/26/2017				0.0001 (J)	0.0013	<0.0005
3/21/2017		<0.0005	<0.0005			
3/22/2017						<0.0005
3/23/2017				0.0002 (J)	0.002	
5/23/2017		<0.0005	<0.0005			
5/24/2017				0.0001 (J)	0.0041	<0.0005
4/3/2018		<0.0005	<0.0005		0.0022	<0.0005
4/4/2018				<0.0005		
6/5/2018		<0.0005	<0.0005			
6/6/2018				0.00012 (J)	0.0021	<0.0005
10/2/2018		<0.0005	<0.0005			
10/3/2018				0.0001 (J)	0.0026	<0.0005
3/12/2019		<0.0005	<0.0005			
3/14/2019				<0.0005	0.0024	
3/15/2019						<0.0005
4/2/2019		<0.0005	<0.0005			
4/4/2019					0.0018	<0.0005
4/5/2019				7.9E-05 (J)		
9/24/2019		<0.0005	<0.0005	<0.0005	0.0014 (J)	
9/25/2019						<0.0005
3/2/2020		<0.0005	<0.0005			
3/3/2020				<0.0005	0.0015 (J)	<0.0005
3/25/2020			<0.0005			
3/26/2020		<0.0005			0.0016 (J)	
3/30/2020				<0.0005		<0.0005
9/15/2020		<0.0005	<0.0005			
9/16/2020	<0.0005					
9/17/2020					0.0016 (J)	<0.0005
9/18/2020				<0.0005		
11/10/2020	<0.0005					
12/15/2020	<0.0005					
1/19/2021	<0.0005					
2/9/2021	<0.0005	<0.0005	<0.0005			
2/10/2021						<0.0005
2/11/2021				<0.0005		
2/12/2021					0.0014 (J)	
3/10/2021	<0.0005					
3/11/2021		<0.0005	<0.0005			
3/16/2021					0.0011	

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				<0.0005		<0.0005
8/12/2021		<0.0005	<0.0005			
8/13/2021	<0.0005					
8/18/2021				0.00013 (J)		
8/19/2021					0.0012	<0.0005
2/1/2022	<0.0005					
2/7/2022		<0.0005	<0.0005			
2/8/2022					0.0011	<0.0005
2/9/2022				<0.0005		
8/2/2022	<0.0005					
8/10/2022		<0.0005	<0.0005			<0.0005
8/11/2022				<0.0005	0.00095	
1/24/2023	<0.0005					
1/27/2023		<0.0005	<0.0005			
2/1/2023				<0.0005	0.00088	<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.0005					
5/24/2016		<0.02				
7/12/2016	<0.0005	0.0022				
9/1/2016	<0.0005	0.0024				
10/25/2016	<0.0005	0.0022				
12/7/2016	<0.0005					
12/8/2016		0.0024				
1/26/2017	<0.0005	0.0025				
3/22/2017	7E-05 (J)					
3/23/2017		0.0025				
5/25/2017	<0.0005	0.0027				
4/3/2018	<0.0005	0.0022				
6/5/2018		0.0022				
6/6/2018	<0.0005					
10/3/2018	<0.0005	0.0027				
3/14/2019		0.0019			<0.0025	
3/15/2019	<0.0005		<0.0005	0.00082 (J)		
4/4/2019			<0.0005			
4/5/2019	<0.0005	0.0017		0.00064 (J)	<0.0025	
9/25/2019	<0.0005	0.0023 (J)	<0.0005			
9/26/2019					<0.0025	
9/27/2019				0.0014 (J)		
3/2/2020				0.0021 (J)	<0.0025	
3/3/2020	<0.0005	0.0021 (J)	<0.0005			
3/27/2020				0.0019 (J)		
3/31/2020	<0.0005	0.0017 (J)				
4/1/2020			<0.0005		<0.0025	0.00022 (J)
6/17/2020			<0.0005			0.00021 (J)
9/15/2020		0.0019 (J)				
9/16/2020	<0.0005					
9/17/2020				0.0021 (J)	0.0006 (J)	
9/21/2020			<0.0005			0.00016 (J)
2/11/2021	<0.0005	0.0016 (J)	<0.0005			
2/12/2021					0.00045 (J)	0.00017 (J)
2/15/2021				0.002 (J)		
3/17/2021				0.0022	0.00057	
3/18/2021	<0.0005	0.0015	<0.0005			0.00019 (J)
8/18/2021	<0.0005					0.00017 (J)
8/19/2021		0.0014	<0.0005	0.0021	0.00012 (J)	
2/8/2022	<0.0005	0.00076	<0.0005	0.002		0.00013 (J)
2/10/2022					0.00024 (J)	
8/10/2022	<0.0005	0.0017				<0.0025
8/11/2022			<0.0005	0.002	0.00021 (J)	
1/27/2023			<0.0005			0.00017 (J)
1/30/2023	<0.0005			0.0017		
2/1/2023		0.001			0.00012 (J)	

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	<0.0025	0.00053 (J)	<0.0005	
9/21/2020		0.001 (J)		
9/23/2020	<0.0025		<0.0005	
2/11/2021			<0.0005	
2/15/2021		0.0017 (J)		
3/12/2021			<0.0005	
3/19/2021		0.0018		
8/16/2021	0.00023 (J)			
8/18/2021		0.0015	<0.0005	0.00094
2/8/2022		0.0015	<0.0005	0.00024 (J)
2/9/2022	0.00072			
8/10/2022	0.00041 (J)		<0.0005	
8/11/2022		0.0013 (J)		0.00045 (J)
1/30/2023	0.00047 (J)		<0.0005	
2/1/2023		0.0017		0.0016

# Time Series

Constituent: Calcium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	138	22.9	76.2	48.4		
7/11/2016	97.2	22.3		73		
7/12/2016			61.5			
8/30/2016	97.5	26.4	65.1	85.7		
10/19/2016	99.2	21.7	73.2	89.7		
12/6/2016	105	18.2	74.9	80		
1/24/2017	95.7	18.5	69.6	30.8		
3/21/2017	106	18.6	75.7	34		
5/22/2017	107	17.8	71.5			
5/23/2017				43		
10/3/2017	102	20.2	76.3	46.9		
6/4/2018	124	19.1	73.4	81.9		
10/1/2018	108	20.5 (J)	80.9	22 (J)		
4/1/2019			80.5			
4/2/2019	132	22.5 (J)		76		
9/23/2019	118	19.5	71			
9/24/2019				36.6		
3/25/2020	127	23	89.8			
3/26/2020				14.9		
9/15/2020	103	21.1	73.1	20.4		
9/16/2020						56
9/17/2020				43.8		
11/10/2020						63.3
11/11/2020				44.4		
12/15/2020				47.3		62.6
1/19/2021						60.1
1/20/2021				41.8		
3/10/2021	111			5.9	43.4	
3/11/2021		43.8	83.8			59.6
8/11/2021	113					61
8/12/2021		21.9	84	5.4	43.6	
2/1/2022	106	27.2	85.1			55.9
2/7/2022				5.9	48.7	
8/2/2022	117	31.2	84.6	6		54.1
8/9/2022					44.1	
1/23/2023			85	24	43.7	
1/24/2023	117	29.4				56.6

# Time Series

Constituent: Calcium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		35.5				
5/20/2016			56.1			
5/23/2016				664	184	146
7/11/2016		35.4	49.3			
7/12/2016				528	186	142
8/30/2016		28	53.9			
9/1/2016				586	189	141
10/20/2016		26.7	50.7			
10/24/2016				564	200	
10/25/2016						138
12/7/2016				590	203	146
12/8/2016		23.5	49.2			
1/24/2017		24.5	48.3			
1/26/2017				558	212	139
3/21/2017		30.8	51.3			
3/22/2017						150
3/23/2017				652	229	
5/23/2017		24.2	49.1			
5/24/2017				617	265	153
10/3/2017		29	55.1			
10/4/2017				644	230	156
6/5/2018		27.8	54.5			
6/6/2018				606	250	177
10/2/2018		28.9	54.7			
10/3/2018				558	234	160
4/2/2019		26.3	49.7			
4/4/2019					214	196
4/5/2019				606		
9/24/2019		29.3	52.5	507	202	
9/25/2019						185
3/25/2020			58.1			
3/26/2020		27.8			240	
3/30/2020				600		208
9/15/2020		27.9	49.9			
9/16/2020	30					
9/17/2020					188	190
9/18/2020				623		
11/10/2020	33.6					
12/15/2020	28.7					
1/19/2021	33					
3/10/2021	18.3					
3/11/2021		28.3	53.1			
3/16/2021					196	
3/17/2021				572		198
8/12/2021		32	54.7			
8/13/2021	28.9					
8/18/2021				583		
8/19/2021					203	207
2/1/2022	24.8					
2/7/2022		30	53.4			
2/8/2022					186	218
2/9/2022				571		

# Time Series

Constituent: Calcium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	20.9					
8/10/2022		27.4	55.7			207
8/11/2022				519	210	
1/24/2023	13.2					
1/27/2023		28.5	55.4			
2/1/2023				464	174	216

# Time Series

Constituent: Calcium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	225					
5/24/2016		403				
7/12/2016	199	328				
9/1/2016	213	379				
10/25/2016	206	362				
12/7/2016	212					
12/8/2016		366				
1/26/2017	198	394				
3/22/2017	239					
3/23/2017		440				
5/25/2017	292	492				
10/4/2017	305	470				
6/5/2018		425				
6/6/2018	299					
10/3/2018	286	421				
4/4/2019			427			
4/5/2019	340	400		178	352	
9/25/2019	305	437	420			
9/26/2019					306	
9/27/2019				202		
1/22/2020						638
3/27/2020				212		
3/31/2020	328	418				
4/1/2020			438		342	567
6/17/2020			434			561
9/15/2020		430				
9/16/2020	277					
9/17/2020				203	361	
9/21/2020			428			562
3/17/2021				200	341	
3/18/2021	266	407	382			574
8/18/2021	281					549
8/19/2021		416	365	203	307	
2/8/2022	280	418	366	221		548
2/10/2022					288	
8/10/2022	316	433				498
8/11/2022			430	198	315	
1/27/2023			281			371
1/30/2023	286			189		
2/1/2023		288			294	



# Time Series

Constituent: Calcium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	584	517	165	
9/21/2020		503		
9/23/2020	556		158	
3/12/2021			170	
3/19/2021		552		
8/16/2021	554			
8/18/2021		546	180	532
2/8/2022		519	167	537
2/9/2022	557			
8/10/2022	585		113	
8/11/2022		499		521
1/30/2023	558		74.6	
2/1/2023		503		492

# Time Series

Constituent: Chloride (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	9.94	6.14	5.93	4.56		
7/11/2016	6.3	5.9		5		
7/12/2016			6.2			
8/30/2016	6	6.2	6.4	4.9		
10/19/2016	5.8	6.1	6.5	4.6		
12/6/2016	5.4	6	7.2	4.5		
1/24/2017	5.2	6.1	6.4	4.7		
3/21/2017	4.6	5.9	7.5	4.3		
5/22/2017	4.6	5.9	6.5			
5/23/2017				4.5		
10/3/2017	5.6	6.3	6.5	4.8		
6/4/2018	13.1	6.1	6.3	4.5		
10/1/2018	6.6	6.4	6.4	3.8		
4/1/2019			6.5			
4/2/2019	20.3	5.8		4.4		
9/23/2019	17.7	5.1	5.9			
9/24/2019				3.6		
3/25/2020	20.4	5.2	6.1			
3/26/2020				3.4		
9/15/2020	13.4	5	6	3.3		
9/16/2020						4.1
9/17/2020					5.8	
11/10/2020						4.4
11/11/2020					3.1	
12/15/2020					3.2	4.7
1/19/2021						4.1
1/20/2021					2.8	
3/10/2021	7.4			2.9	3	
3/11/2021		5.1	5.9			4.5
8/11/2021	9.6					3.5
8/12/2021		5.2	4.8	2.4	2.6	
2/1/2022	7.5	7	5.7			4.1
2/7/2022				2.4	3.1	
8/2/2022	14.1	7.8	5.9	2.9		4.3
8/9/2022					3.7	
1/23/2023			5.6	1.6	3.3	
1/24/2023	9	7.1				4.3

# Time Series

Constituent: Chloride (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		1.57				
5/20/2016			1.35			
5/23/2016				659	209	25.8
7/11/2016		2	1.7			
7/12/2016				620	190	34
8/30/2016		2	1.6			
9/1/2016				510	200	34
10/20/2016		2.2	1.6			
10/24/2016				110	200	
10/25/2016						35
12/7/2016				510	240	38
12/8/2016		2	1.6			
1/24/2017		1.6	1.9			
1/26/2017				640	260	41
3/21/2017		2	1.3			
3/22/2017						41
3/23/2017				600	280	
5/23/2017		1.7	1.2			
5/24/2017				510	240	44
10/3/2017		1.7	2.1			
10/4/2017				420	210	50
6/5/2018		1.6	1.2			
6/6/2018				357	196	50.6
10/2/2018		2.4	1.7			
10/3/2018				368	200	49.9
4/2/2019		1.7	1.6			
4/4/2019					138	76.8
4/5/2019				227		
9/24/2019		1.7	1.3	188	120	
9/25/2019						84.4
3/25/2020			1.2			
3/26/2020		1.4			142	
3/30/2020				236		80.2
9/15/2020		1.7	1.2			
9/16/2020	7.2					
9/17/2020					108	99.3
9/18/2020				288		
11/10/2020	7.8					
12/15/2020	9.4					
1/19/2021	9.5					
3/10/2021	12.3					
3/11/2021		1.4	1.2			
3/16/2021					103	
3/17/2021				233		93.8
8/12/2021		1.4	0.94 (J)			
8/13/2021	39.9					
8/18/2021				141		
8/19/2021					89.9	90.1
2/1/2022	44.8					
2/7/2022		1.4	1.1			
2/8/2022					76.6	96.4
2/9/2022				174		

# Time Series

Constituent: Chloride (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	19.8					
8/10/2022		2.1	1.3			98.3
8/11/2022				147	89.2	
1/24/2023	24.9					
1/27/2023		1.6	1.4			
2/1/2023				108	85	112

# Time Series

Constituent: Chloride (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	94					
5/24/2016		280				
7/12/2016	100	300				
9/1/2016	95	270				
10/25/2016	98	290				
12/7/2016	89					
12/8/2016		300				
1/26/2017	99	340				
3/22/2017	100					
3/23/2017		350				
5/25/2017	99	290				
10/4/2017	130	260				
6/5/2018		261				
6/6/2018	166					
10/3/2018	193	302				
4/4/2019			299			
4/5/2019	195	217		131	195	
9/25/2019	139	181	245			
9/26/2019					204	
9/27/2019				176		
1/22/2020						231
3/27/2020				141		
3/31/2020	161	126				
4/1/2020			236		166	242
6/17/2020			223			250
9/15/2020		150				
9/16/2020	156					
9/17/2020				153	171	
9/21/2020			236			273
3/17/2021				127	151	
3/18/2021	138	90.2	208			199
8/18/2021	90.7					118
8/19/2021		95.8	173	118	137	
2/8/2022	117	105	196	110		166
2/10/2022					138	
8/10/2022	148	95.2				120
8/11/2022			216	125	124	
1/27/2023			167			83.4
1/30/2023	154			109		
2/1/2023		92.7			137	

# Time Series

Constituent: Chloride (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	259	229	151	
9/21/2020		257		
9/23/2020	294		166	
3/12/2021			124	
3/19/2021		250		
8/16/2021	264			
8/18/2021		149	122	123
2/8/2022		202	151	194
2/9/2022	251			
8/10/2022	185		84.8	
8/11/2022		172		144
1/30/2023	173		49.2	
2/1/2023		189		158

# Time Series

Constituent: Chromium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	<0.005	<0.005	<0.005		
7/11/2016	<0.005	<0.005		<0.005		
7/12/2016			<0.005			
8/30/2016	<0.005	<0.005	<0.005	<0.005		
10/19/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016	<0.005	<0.005	<0.005	<0.005		
1/24/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017	0.0005 (J)	<0.005	<0.005	0.0004 (J)		
5/22/2017	<0.005	<0.005	0.0007 (J)			
5/23/2017				<0.005		
4/2/2018	<0.005	<0.005		<0.005		
4/3/2018			<0.005			
3/11/2019				<0.005		
3/12/2019	<0.005	<0.005	<0.005			
4/1/2019			<0.005			
4/2/2019	<0.005	0.0079 (J)		0.019		
9/23/2019	<0.005	0.00058 (J)	<0.005			
9/24/2019				<0.005		
3/2/2020	<0.005	0.00041 (J)	<0.005	0.0004 (J)		
3/25/2020	0.00072 (J)	<0.005	<0.005			
3/26/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020				<0.005		
11/10/2020						<0.005
11/11/2020					0.00063 (J)	
12/15/2020					0.0025 (J)	<0.005
1/19/2021						<0.005
1/20/2021					<0.005	
2/8/2021	<0.005			<0.005	0.00078 (J)	
2/9/2021		<0.005	<0.005			0.00095 (J)
3/10/2021	<0.005			<0.005	<0.005	
3/11/2021		<0.005	<0.005			<0.005
8/11/2021	<0.005					<0.005
8/12/2021		<0.005	<0.005	<0.005	<0.005	
2/1/2022	<0.005	<0.005	<0.005			<0.005
2/7/2022				<0.005	<0.005	
8/2/2022	<0.005	<0.005	<0.005	<0.005		<0.005
8/9/2022					<0.005	
1/23/2023			<0.005	<0.005	<0.005	
1/24/2023	<0.005	<0.005				<0.005

# Time Series

Constituent: Chromium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				<0.025	<0.025	<0.025
7/11/2016		<0.005	<0.005			
7/12/2016				<0.025	<0.025	<0.025
8/30/2016		<0.005	<0.005			
9/1/2016				<0.025	<0.025	<0.025
10/20/2016		<0.005	<0.005			
10/24/2016				<0.025	<0.025	
10/25/2016						<0.025
12/7/2016				<0.025	<0.025	<0.025
12/8/2016		<0.005	<0.005			
1/24/2017		<0.005	<0.005			
1/26/2017				<0.025	<0.025	<0.025
3/21/2017		<0.005	0.0007 (J)			
3/22/2017						0.0021 (J)
3/23/2017				<0.025	0.0005 (J)	
5/23/2017		<0.005	<0.005			
5/24/2017				<0.025	<0.025	<0.025
4/3/2018		<0.005	<0.005		<0.025	<0.025
4/4/2018				<0.025		
3/12/2019		<0.005	<0.005			
3/14/2019				<0.025	<0.025	
3/15/2019						<0.025
4/2/2019		<0.005	<0.005			
4/4/2019					<0.025	<0.025
4/5/2019				<0.025		
9/24/2019		<0.005	<0.005	<0.025	0.00041 (J)	
9/25/2019						<0.025
3/2/2020		0.0005 (J)	<0.005			
3/3/2020				0.00042 (J)	<0.025	0.00071 (J)
3/25/2020			<0.005			
3/26/2020		<0.005			<0.025	
3/30/2020				0.00066 (J)		0.0004 (J)
9/15/2020		<0.005	<0.005			
9/16/2020	0.0012 (J)					
9/17/2020					<0.025	<0.025
9/18/2020				<0.025		
11/10/2020	0.00089 (J)					
12/15/2020	0.00072 (J)					
1/19/2021	0.0011 (J)					
2/9/2021	0.00066 (J)	<0.005	<0.005			
2/10/2021						<0.025
2/11/2021				<0.025		
2/12/2021					<0.025	
3/10/2021	<0.005					
3/11/2021		0.0011 (J)	<0.005			
3/16/2021					0.0012 (J)	
3/17/2021				<0.025		<0.025
8/12/2021		<0.005	<0.005			
8/13/2021	0.0016 (J)					
8/18/2021				<0.025		



# Time Series

Constituent: Chromium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.025	<0.025
2/1/2022	0.0013 (J)					
2/7/2022		<0.005	<0.005			
2/8/2022					<0.025	<0.025
2/9/2022				<0.025		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.025
8/11/2022				<0.025	<0.025	
1/24/2023	<0.005					
1/27/2023		<0.005	<0.005			
2/1/2023				<0.025	<0.025	<0.025

# Time Series

Constituent: Chromium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.005					
5/24/2016		<0.025				
7/12/2016	<0.005	<0.025				
9/1/2016	<0.005	<0.025				
10/25/2016	<0.005	<0.025				
12/7/2016	<0.005					
12/8/2016		<0.025				
1/26/2017	<0.005	<0.025				
3/22/2017	<0.005					
3/23/2017		0.0005 (J)				
5/25/2017	<0.005	<0.025				
4/3/2018	<0.005	<0.025				
3/14/2019		<0.025			<0.025	
3/15/2019	<0.005		<0.005	<0.005		
4/4/2019			<0.005			
4/5/2019	<0.005	<0.025		<0.005	<0.025	
9/25/2019	<0.005	<0.025	<0.005			
9/26/2019					<0.025	
9/27/2019				0.0004 (J)		
3/2/2020				<0.005	<0.025	
3/3/2020	0.0018 (J)	0.0004 (J)	<0.005			
3/27/2020				<0.005		
3/31/2020	<0.005	<0.025				
4/1/2020			<0.005		0.00086 (J)	0.00069 (J)
6/17/2020			0.00057 (J)			<0.005
9/15/2020		0.00063 (J)				
9/16/2020	<0.005					
9/17/2020				<0.005	<0.025	
9/21/2020			<0.005			<0.005
2/11/2021	0.00074 (J)	<0.025	<0.005			
2/12/2021					<0.025	<0.005
2/15/2021				<0.005		
3/17/2021				0.00075 (J)	0.00083 (J)	
3/18/2021	0.00069 (J)	<0.025	0.00074 (J)			<0.005
8/18/2021	<0.005					<0.005
8/19/2021		<0.025	<0.005	<0.005	<0.025	
2/8/2022	<0.005	<0.025	<0.005	<0.005		<0.005
2/10/2022					<0.025	
8/10/2022	<0.005	<0.025				<0.005
8/11/2022			<0.005	<0.005	<0.025	
1/27/2023			<0.005			<0.005
1/30/2023	<0.005			<0.005		
2/1/2023		<0.025			<0.025	

# Time Series

Constituent: Chromium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0059 (J)	<0.025	0.0048 (J)	
9/21/2020		0.00079 (J)		
9/23/2020	<0.005		<0.005	
2/11/2021			0.0014 (J)	
2/15/2021		<0.025		
3/12/2021			<0.005	
3/19/2021		0.00083 (J)		
8/16/2021	<0.005			
8/18/2021		<0.025	<0.005	<0.025
2/8/2022		<0.025	<0.005	<0.025
2/9/2022	<0.005			
8/10/2022	<0.005		<0.005	
8/11/2022		<0.025		<0.025
1/30/2023	<0.005		<0.005	
2/1/2023		<0.025		<0.025

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	0.0293	<0.005	<0.005		
7/11/2016	0.0004 (J)	0.0267		<0.005		
7/12/2016			<0.005			
8/30/2016	<0.005	0.028	<0.005	<0.005		
10/19/2016	<0.005	0.0201	<0.005	<0.005		
12/6/2016	<0.005	0.0184	<0.005	<0.005		
1/24/2017	<0.005	0.0206	<0.005	<0.005		
3/21/2017	<0.005	0.0251	<0.005	<0.005		
5/22/2017	<0.005	0.0263	<0.005			
5/23/2017				<0.005		
4/2/2018	<0.005	0.019		<0.005		
4/3/2018			<0.005			
6/4/2018	<0.005	0.025	<0.005	<0.005		
10/1/2018	<0.005	0.026	<0.005	<0.005		
3/11/2019				<0.005		
3/12/2019	<0.005	0.017	<0.005			
4/1/2019			<0.005			
4/2/2019	<0.005	0.019		<0.005		
9/23/2019	<0.005	0.038	<0.005			
9/24/2019				<0.005		
3/2/2020	<0.005	0.019	<0.005	0.00063 (J)		
3/25/2020	<0.005	0.02	<0.005			
3/26/2020				0.00058 (J)		
9/15/2020	<0.005	0.021	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020				<0.005		
11/10/2020						<0.005
11/11/2020				<0.005		
12/15/2020				0.00049 (J)		<0.005
1/19/2021						<0.005
1/20/2021				<0.005		
2/8/2021	<0.005			0.00074 (J)	<0.005	
2/9/2021		0.02	<0.005			<0.005
3/10/2021	<0.005			0.00065 (J)	<0.005	
3/11/2021		0.013	<0.005			<0.005
8/11/2021	<0.005					<0.005
8/12/2021		0.022	<0.005	0.0007 (J)	<0.005	
2/1/2022	<0.005	0.025	<0.005			<0.005
2/7/2022				0.00068 (J)	<0.005	
8/2/2022	0.00054 (J)	0.024	<0.005	0.00066 (J)		<0.005
8/9/2022					<0.005	
1/23/2023			<0.005	0.00049 (J)	<0.005	
1/24/2023	<0.005	0.024				<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				<0.25	0.0419 (J)	<0.005
7/11/2016		0.001 (J)	<0.005			
7/12/2016				0.0232	0.0393	<0.005
8/30/2016		0.001 (J)	<0.005			
9/1/2016				0.0248	0.045	<0.005
10/20/2016		0.0008 (J)	<0.005			
10/24/2016				0.0253	0.0557	
10/25/2016						<0.005
12/7/2016				0.0269	0.0536	<0.005
12/8/2016		0.0006 (J)	<0.005			
1/24/2017		0.0006 (J)	<0.005			
1/26/2017				0.0294	0.055	<0.005
3/21/2017		0.0008 (J)	<0.005			
3/22/2017						<0.005
3/23/2017				0.0311	0.0715	
5/23/2017		0.0006 (J)	<0.005			
5/24/2017				0.0279	0.0446	<0.005
4/3/2018		<0.005	<0.005		0.032	<0.005
4/4/2018				0.025		
6/5/2018		<0.005	<0.005			
6/6/2018				0.027	0.032	<0.005
10/2/2018		<0.005	<0.005			
10/3/2018				0.023	0.051	<0.005
3/12/2019		0.00099 (J)	<0.005			
3/14/2019				0.025	0.038	
3/15/2019						<0.005
4/2/2019		0.0012 (J)	<0.005			
4/4/2019					0.035	0.00028 (J)
4/5/2019				0.021		
9/24/2019		0.00063 (J)	<0.005	0.026	0.022	
9/25/2019						<0.005
3/2/2020		0.00093 (J)	<0.005			
3/3/2020				0.029	0.03	0.00037 (J)
3/25/2020			<0.005			
3/26/2020		0.0013 (J)			0.022	
3/30/2020				0.028		<0.005
9/15/2020		0.00047 (J)	<0.005			
9/16/2020	<0.005					
9/17/2020					0.026	<0.005
9/18/2020				0.027		
11/10/2020	<0.005					
12/15/2020	<0.005					
1/19/2021	<0.005					
2/9/2021	<0.005	0.00071 (J)	<0.005			
2/10/2021						<0.005
2/11/2021				0.033		
2/12/2021					0.019	
3/10/2021	<0.005					
3/11/2021		0.0013 (J)	<0.005			
3/16/2021					0.018	

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.034		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	<0.005					
8/18/2021				0.033		
8/19/2021					0.011	<0.005
2/1/2022	<0.005					
2/7/2022		0.00055 (J)	<0.005			
2/8/2022					0.0081	<0.005
2/9/2022				0.038		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				0.037	0.0088	
1/24/2023	<0.005					
1/27/2023		0.00063 (J)	<0.005			
2/1/2023				0.035	0.0091	<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	0.0167					
5/24/2016		0.17 (J)				
7/12/2016	0.0148	0.168				
9/1/2016	0.0151	0.18				
10/25/2016	0.0141	0.188				
12/7/2016	0.0141					
12/8/2016		0.206				
1/26/2017	0.0154	0.195				
3/22/2017	0.0169					
3/23/2017		0.223				
5/25/2017	0.0154	0.209				
4/3/2018	0.016	0.19				
6/5/2018		0.19				
6/6/2018	0.018					
10/3/2018	0.016	0.19				
3/14/2019		0.16			0.0013 (J)	
3/15/2019	0.017		<0.005	0.028		
4/4/2019			0.00034 (J)			
4/5/2019	0.016	0.14		0.022	0.0012 (J)	
9/25/2019	0.015	0.18	<0.005			
9/26/2019					0.00098 (J)	
9/27/2019				0.035		
1/22/2020						0.052
3/2/2020				0.043	0.0011 (J)	
3/3/2020	0.016	0.15	<0.005			
3/27/2020				0.025		
3/31/2020	0.016	0.16				
4/1/2020			<0.005		0.0011 (J)	0.058
6/17/2020			<0.005			0.053
9/15/2020		0.16				
9/16/2020	0.013					
9/17/2020				0.029	0.00096 (J)	
9/21/2020			<0.005			0.047
2/11/2021	0.012	0.14	<0.005			
2/12/2021					0.001 (J)	0.055
2/15/2021				0.038		
3/17/2021				0.039	0.0011 (J)	
3/18/2021	0.012	0.14	<0.005			0.057
8/18/2021	0.009					0.054
8/19/2021		0.15	<0.005	0.022	0.00089 (J)	
2/8/2022	0.0066	0.16	<0.005	0.034		0.048
2/10/2022					0.001 (J)	
8/10/2022	0.012	0.16				0.046
8/11/2022			<0.005	0.015	0.00088 (J)	
1/27/2023			<0.005			0.034
1/30/2023	0.011			0.027		
2/1/2023		0.11			0.00081 (J)	

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.011	0.091	0.0015 (J)	
9/21/2020		0.084		
9/23/2020	0.0056		<0.005	
2/11/2021			0.00048 (J)	
2/15/2021		0.095		
3/12/2021			<0.005	
3/19/2021		0.1		
8/16/2021	0.0093			
8/18/2021		0.085	<0.005	0.03
2/8/2022		0.09	<0.005	0.031
2/9/2022	0.0065			
8/10/2022	0.0066		<0.005	
8/11/2022		0.082		0.027
1/30/2023	0.0071		<0.005	
2/1/2023		0.088		0.021 (J)



# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.397 (U)	0.627 (U)	0.342 (U)	0.662 (U)		
7/11/2016	0.738 (U)	1.38		1.19		
7/12/2016			0.499 (U)			
8/30/2016	0.581 (U)	1.05 (U)	0.976 (U)	0.847 (U)		
10/19/2016	0.213 (U)	1.11 (U)	0.626 (U)	2.34		
12/6/2016	0.444 (U)	0.741 (U)	0.805 (U)	0.925 (U)		
1/24/2017	0.373 (U)	0.908 (U)	0.336 (U)	0.607 (U)		
3/21/2017	0.816 (U)	0.567 (U)	0.358 (U)	0.074 (U)		
5/22/2017	0.554 (U)	0.638 (U)	0.744 (U)			
5/23/2017				0.55 (U)		
4/2/2018	0.405 (U)	0.761 (U)		0.371 (U)		
4/3/2018			0.684 (U)			
6/4/2018	1.13 (U)	0.975 (U)	0.0291 (U)	0.622 (U)		
10/1/2018	0.132 (U)	0.434 (U)	0.781 (U)	0.132 (U)		
3/11/2019				0.781 (U)		
3/12/2019	0.327 (U)	0.454 (U)	1.01 (U)			
4/1/2019			0.76 (U)			
4/2/2019	0.739 (U)	0.651 (U)		0.494 (U)		
9/24/2019				0.455 (U)		
9/30/2019	0.306 (U)	1.04 (U)	0.384 (U)			
3/2/2020	0.61 (U)	1.58	0.249 (U)	0.937 (U)		
3/25/2020	4.36	0.621 (U)	0.833 (U)			
3/26/2020				0.578 (U)		
9/15/2020	0.748 (U)	0.124 (U)	0.161 (U)	0.179 (U)		
9/16/2020						0.531 (U)
9/17/2020				0.665 (U)		
11/10/2020						0.788 (U)
11/11/2020				1.28		
12/15/2020				0.261 (U)		1.04 (U)
1/19/2021						0.685 (U)
1/20/2021				0.845 (U)		
2/8/2021	0.223 (U)			0.558 (U)	0.429 (U)	
2/9/2021		0.721 (U)	0.447 (U)			0.138 (U)
3/10/2021	0 (U)			0.281 (U)	1.21	
3/11/2021		0.737 (U)	0.128 (U)			1.51 (U)
8/11/2021	0.115 (U)					0.394 (U)
8/12/2021		0.746 (U)	0.389 (U)	0.359 (U)	0.11 (U)	
2/1/2022	0.143 (U)	0.588 (U)	0.266 (U)			1.12
2/7/2022				0.0978 (U)	0.066 (U)	
8/2/2022	0.203 (U)	0.861 (U)	0.4 (U)	0.963 (U)		0.662 (U)
1/23/2023			0.311 (U)	0.961	1.12	
1/24/2023	0.549 (U)	0.829 (U)				1.25

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		0.685 (U)				
5/20/2016			0.843 (U)			
5/23/2016				0.568 (U)	0.171 (U)	
7/1/2016						0 (U)
7/11/2016		1.68	0.494 (U)			
7/12/2016				1.31	0.611 (U)	0.182 (U)
8/30/2016		2.42	0.946 (U)			
9/1/2016				1.64	0.766 (U)	1.23
10/20/2016		0.351 (U)	0.664 (U)			
10/24/2016				1.88	0.969	
10/25/2016						1.05 (U)
12/7/2016				1.35	0.302 (U)	1.11 (U)
12/8/2016		0.905 (U)	0.421 (U)			
1/24/2017		0.0774 (U)	0.965 (U)			
1/26/2017				2.1	0.626 (U)	1.29 (U)
3/21/2017		0.0599 (U)	0.139 (U)			
3/22/2017						0.453 (U)
3/23/2017				1.17	0.662 (U)	
5/23/2017		0.477 (U)	0.308 (U)			
5/24/2017				1 (U)	0.202 (U)	1.05 (U)
4/3/2018		0.858 (U)	0.828 (U)		0.384 (U)	0.783 (U)
4/4/2018				1.72		
6/5/2018		0.767 (U)	0.424 (U)			
6/6/2018				1.31 (U)	1.32 (U)	0.595 (U)
10/2/2018		0.489 (U)	0.643 (U)			
10/3/2018				1.48	0.858 (U)	1.03 (U)
3/12/2019		0.833 (U)	0.982 (U)			
3/14/2019				1.5	0.462 (U)	
3/15/2019						0.591 (U)
4/2/2019		1.07 (U)	0.621 (U)			
4/4/2019					0.512 (U)	0.96 (U)
4/5/2019				1.43 (U)		
9/24/2019		0.201 (U)	0.874 (U)	1.17	0.582 (U)	
9/25/2019						0.643 (U)
3/2/2020		0.547 (U)	0.676 (U)			
3/3/2020				1.84	1.43	1.32 (U)
3/25/2020			0.509 (U)			
3/26/2020		0.907 (U)			0.855 (U)	
3/30/2020				1.08 (U)		0.288 (U)
9/15/2020		0.601 (U)	1.36 (U)			
9/16/2020	0.422 (U)					
9/17/2020					0.395 (U)	1.1 (U)
9/18/2020				1.8 (U)		
11/10/2020	0.293 (U)					
12/15/2020	0.7 (U)					
1/19/2021	0.79 (U)					
2/9/2021	0.486 (U)	0.37 (U)	0.324 (U)			
2/10/2021						0.773 (U)
2/11/2021				0.73 (U)		
2/12/2021					1.65	
3/10/2021	0.811 (U)					
3/11/2021		1.07 (U)	0.601 (U)			

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/16/2021					0.801 (U)	
3/17/2021				1.84		0.228 (U)
8/12/2021		0.922 (U)	0.0804 (U)			
8/13/2021	1.2					
8/18/2021				0.858 (U)		
8/19/2021					0.527 (U)	0.668 (U)
2/1/2022	0.665 (U)					
2/7/2022		0.106 (U)	0.346 (U)			
2/8/2022					0.0242 (U)	0.168 (U)
2/9/2022				0.346 (U)		
8/2/2022	0.952 (U)					
8/10/2022		0.568 (U)	0.648 (U)			
8/11/2022				1.31	0.656 (U)	0.249 (U)
1/24/2023	0.421 (U)					
1/27/2023		1.47 (U)	0.801 (U)			
2/1/2023				1.13	0.626 (U)	0.757 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	0.618 (U)					
5/24/2016		1.82				
7/12/2016	0.867	1.76				
9/1/2016	0.857 (U)	1.51				
10/25/2016	1.11 (U)	2.69				
12/7/2016	0.964 (U)					
12/8/2016		2.21				
1/26/2017	0.612 (U)	2.26				
3/22/2017	0.437 (U)					
3/23/2017		1.81				
5/25/2017	1.21 (U)	1.63				
4/3/2018	0.409 (U)	2.53				
6/5/2018		1.91				
6/6/2018	0.772 (U)					
10/3/2018	1.08 (U)	2.22				
3/14/2019		1.37 (U)			0.872 (U)	
3/15/2019	0.917 (U)		0.972 (U)	0.977		
4/4/2019			0.791 (U)			
4/5/2019	1.07 (U)	2.22		1.06 (U)	0.932 (U)	
9/25/2019	1.54	2.77	0.751 (U)			
9/26/2019					1.25	
9/27/2019				1.44 (U)		
3/2/2020				0.872 (U)	0.964 (U)	
3/3/2020	1.33	2.35	1.94			
3/27/2020				0.96 (U)		
3/31/2020	0.591 (U)	2.7				
4/1/2020			0.758 (U)		0.914 (U)	2.57
6/17/2020			0.691 (U)			1.43 (U)
9/15/2020		1.65				
9/16/2020	0.295 (U)					
9/17/2020				0.0879 (U)	0.32 (U)	
9/21/2020			0.436 (U)			2.53
2/11/2021	0.831 (U)	1.11	0.317 (U)			
2/12/2021					1.21 (U)	2.26
2/15/2021				0.215 (U)		
3/17/2021				0.981 (U)	0.579 (U)	
3/18/2021	0.856 (U)	1.63	0.5 (U)			0.733 (U)
8/18/2021	0.548 (U)					1.77
8/19/2021		1.45	1.17	0.689 (U)	0.69 (U)	
2/8/2022	1 (U)	0.93 (U)	0.463 (U)	0.0657 (U)		0.967 (U)
2/10/2022					0.919 (U)	
8/11/2022	0.361 (U)	1.46	0.691 (U)	0.789 (U)	0.39 (U)	1.52
1/27/2023			0.256 (U)			1.44 (U)
1/30/2023	0.5 (U)			0.621 (U)		
2/1/2023		0.871			0.406 (U)	

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	1.36	2.02	1.79	
9/21/2020		3.85		
9/23/2020	0.563 (U)		0.98 (U)	
2/11/2021			0.12 (U)	
2/15/2021		1.52		
3/12/2021			0.578 (U)	
3/19/2021		0.524 (U)		
8/16/2021	0.693 (U)			
8/18/2021		1.67	1.31	0.973 (U)
2/8/2022		1.38	0.345 (U)	0.431 (U)
2/9/2022	0.297 (U)			
8/11/2022	1.05	1.71	0.505 (U)	1.02
1/30/2023	0.689 (U)		0.309 (U)	
2/1/2023		1.24		0.82 (U)

# Time Series

Constituent: Field pH (s.u.) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	7.27	5.81	7.45	6.51		
7/11/2016	7.06	5.68		6.65		
7/12/2016			7.32			
8/30/2016	7.28	5.63	7.43	7.14		
10/19/2016	7.02	5.46	7.03	7.08		
12/6/2016	7.09	5.38	7.08	7		
1/24/2017	7.2	5.37	7.39	6.16		
3/21/2017	7.01	4.9	6.83	6.07		
5/22/2017	7.11	5.2	7.02			
5/23/2017				6.28		
10/3/2017	7.21	5.3	7.47	6.45		
4/2/2018	7.1	5.4		6.23		
4/3/2018			7.38			
6/4/2018	7.06	5.27	7.38	6.82		
10/1/2018	7.09	5.31	7.13	5.73		
3/11/2019				6.27		
3/12/2019	7.03	5.42	7.29			
4/1/2019			7.16			
4/2/2019	6.86	5.41		6.66		
9/23/2019	7.02	5.33	7.3			
9/24/2019				6.16		
3/2/2020	7.1	5.43	7.12	5.63		
3/25/2020	6.95	5.36	7.4			
3/26/2020				5.77		
9/15/2020	7.15	5.22	7.29	5.75		
9/16/2020						7.52
9/17/2020				7.62		
11/10/2020						7.27
11/11/2020				7.68		
12/15/2020				7.64		7.39
1/19/2021						7.39
1/20/2021					7.68	
2/8/2021	7.11			4.94	7.64	
2/9/2021		5.42	7.23			7.44
3/10/2021	6.95			5.28	7.7	
3/11/2021		5.8	7.33			7.46
8/11/2021	6.98					7.4
8/12/2021		5.05	7.31	5.26	7.7	
2/1/2022	7.19	5.24	7.45			7.52
2/7/2022				5.24	7.85	
8/2/2022	7.03	4.57	7.02	4.86		7.15
8/9/2022					7.58	
1/23/2023			7.32	5.62	7.55	
1/24/2023	6.76	5.22				7.56

# Time Series

Constituent: Field pH (s.u.) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		6.62				
5/20/2016			7.58			
5/23/2016				4.56	6.17	7.15
7/11/2016		6.54	7.32			
7/12/2016				4.49	6.17	7.1
8/30/2016		6.38	7.69			
9/1/2016				4.54	6.22	7.29
10/20/2016		6.52	7.43			
10/24/2016				4.63	5.97	
10/25/2016						7.03
12/7/2016				4.6	5.87	6.85
12/8/2016		6.5	7.56			
1/24/2017		6.59	7.52			
1/26/2017				4.8	6.05	7.07
3/21/2017		6.55	7.4			
3/22/2017						7.15
3/23/2017				4.57	5.79	
5/23/2017		6.5	7.53			
5/24/2017				4.61	6.01	7.11
10/3/2017		6.63	7.51			
10/4/2017				4.74	5.82	7.17
4/3/2018		6.59	7.53		5.98	7.07
4/4/2018				4.5		
6/5/2018		6.44	7.37			
6/6/2018				4.49	6.12	7
10/2/2018		6.35	7.36			
10/3/2018				4.67	5.92	6.94
3/12/2019		6.42	7.5			
3/14/2019				4.66	5.71	
3/15/2019						7.09
4/2/2019		6.38	7.46			
4/4/2019					5.66	6.95
4/5/2019				4.67		
9/24/2019		6.4	7.41	4.77	6.33	
9/25/2019						6.92
3/2/2020		6.8	7.67			
3/3/2020				4.77	6	7.1
3/25/2020			7.39			
3/26/2020		6.38			6.03	
3/30/2020				4.57		7.09
9/15/2020		6.33	7.37			
9/16/2020	7.83					
9/17/2020					6.11	7.11
9/18/2020				4.88		
11/10/2020	7.84					
12/15/2020	7.87					
1/19/2021	7.86					
2/9/2021	7.84	6.35	7.4			
2/10/2021						7.08
2/11/2021				4.84		
2/12/2021					5.99	
3/10/2021	7.92					

# Time Series

Constituent: Field pH (s.u.) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/11/2021		6.48	7.56			
3/16/2021					6.08	
3/17/2021				4.72		7.19
8/12/2021		6.46	7.47			
8/13/2021	7.77					
8/18/2021				4.9		
8/19/2021					6.18	7.04
2/1/2022	8.25					
2/7/2022		6.51	7.65			
2/8/2022					6.04	7.18
2/9/2022				4.97		
8/2/2022	7.9					
8/10/2022		6.22	7.53			7.09
8/11/2022				4.93	6.29	
1/24/2023	8.22					
1/27/2023		6.52	7.66			
2/1/2023				4.93	6.22	7.15



# Time Series

Constituent: Field pH (s.u.) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	6.4					
5/24/2016		4.83				
7/12/2016	6.09	4.58				
9/1/2016	6.35	4.51				
10/25/2016	6.23	4.53				
12/7/2016	6.23					
12/8/2016		4.56				
1/26/2017	6.24	4.61				
3/22/2017	6.25					
3/23/2017		4.63				
5/25/2017	6.27	4.69				
10/4/2017	6.18	4.58				
4/3/2018	6.22	4.54				
6/5/2018		4.57				
6/6/2018	6.22					
10/3/2018	6.23	4.41				
3/14/2019		4.39			6.68	
3/15/2019	6.32		6.81	5.95		
4/4/2019			6.7			
4/5/2019	6.26	4.5		5.96	6.66	
9/25/2019	6.28	4.54	6.54			
9/26/2019					6.64	
9/27/2019				5.81		
3/2/2020				5.97	7.05	
3/3/2020	6.35	4.55	6.72			
3/27/2020				5.71		
3/31/2020	6.28	4.43				
4/1/2020			6.9		6.8	4.35
6/17/2020			6.47			4.36
9/15/2020		4.47				
9/16/2020	6.35					
9/17/2020				5.66	6.71	
9/21/2020			6.92			4.48
2/11/2021	6.31	4.53	6.87			
2/12/2021					6.8	4.4
2/15/2021				5.48		
3/17/2021				5.57	6.86	
3/18/2021	6.43	4.54	6.95			4.27
8/18/2021	6.43					4.42
8/19/2021		4.43	6.85	6.05	6.72	
2/8/2022	6.42	4.59	7.09	5.37		4.42
2/10/2022					6.87	
8/10/2022	6.29	4.41				4.36
8/11/2022			6.96	5.3	6.57	
1/27/2023			7.31			5.61
1/30/2023	6.44			5.47		
2/1/2023		4.66			6.69	

# Time Series

Constituent: Field pH (s.u.) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/17/2020	7.35	5.46	7.78	
9/21/2020		5.4		
9/23/2020	7.05		7.62	
2/11/2021			7.42	
2/15/2021		4.82		
3/12/2021			7.5	
3/19/2021		4.89		
8/16/2021	7.05			
8/18/2021		4.89	7.52	6.19
2/8/2022		4.86	7.63	6.57
2/9/2022	7.21			
8/10/2022	7		7.47	
8/11/2022		4.86		6.37
1/30/2023	6.99		7.56	
2/1/2023		4.89		6.37

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.105 (J)	0.0303 (J)	0.0513 (J)	0.036 (J)		
7/11/2016	0.16 (J)	0.05 (J)		0.09 (J)		
7/12/2016			0.12 (J)			
8/30/2016	0.09 (J)	0.06 (J)	0.09 (J)	0.06 (J)		
10/19/2016	0.1 (J)	0.04 (J)	0.1 (J)	0.07 (J)		
12/6/2016	0.11 (J)	0.36	0.21 (J)	0.07 (J)		
1/24/2017	0.09 (J)	<0.1	0.06 (J)	<0.1		
3/21/2017	0.13 (J)	<0.1	0.005 (J)	<0.1		
5/22/2017	0.12 (J)	<0.1	0.05 (J)			
5/23/2017				0.01 (J)		
10/3/2017	0.13 (J)	<0.1	0.13 (J)	<0.1		
4/2/2018	<0.3	<0.1		<0.1		
4/3/2018			<0.1			
6/4/2018	0.074 (J)	<0.1	<0.1	0.097 (J)		
10/1/2018	<0.3	<0.1	<0.1	<0.1		
3/11/2019				0.035 (J)		
3/12/2019	0.29 (J)	0.038 (J)	0.072 (J)			
4/1/2019			0.029 (J)			
4/2/2019	0.1 (J)	0.071 (J)		<0.1		
9/23/2019	0.078 (J)	<0.1	<0.1			
9/24/2019				<0.1		
3/2/2020	0.076 (J)	<0.1	<0.1	<0.1		
3/25/2020	0.098 (J)	<0.1	<0.1			
3/26/2020				<0.1		
9/15/2020	0.082 (J)	<0.1	<0.1	<0.1		
9/16/2020						0.22
9/17/2020					0.2	
11/10/2020						0.19
11/11/2020					0.1	
12/15/2020					0.11	0.21
1/19/2021						0.16
1/20/2021					0.082 (J)	
2/8/2021	0.078 (J)			<0.1	0.096 (J)	
2/9/2021		<0.1	0.074 (J)			0.19
3/10/2021	0.079 (J)			<0.1	0.11	
3/11/2021		0.1	<0.1			0.2
8/11/2021	0.058 (J)					0.15
8/12/2021		<0.1	<0.1	<0.1	0.079 (J)	
2/1/2022	0.064 (J)	<0.1	<0.1			0.19
2/7/2022				<0.1	0.085 (J)	
8/2/2022	0.09 (J)	0.053 (J)	0.067 (J)	0.076 (J)		0.22
8/9/2022					0.12	
1/23/2023			0.061 (J)	0.12	0.11	
1/24/2023	0.089 (J)	0.053 (J)				0.23

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		0.08 (J)				
5/20/2016			0.065 (J)			
5/23/2016				<0.1	<0.1	0.038 (J)
7/11/2016		0.09 (J)	0.13 (J)			
7/12/2016				0.2 (J)	0.09 (J)	0.26 (J)
8/30/2016		0.08 (J)	0.07 (J)			
9/1/2016				0.08 (J)	0.22 (J)	0.42
10/20/2016		0.1 (J)	0.06 (J)			
10/24/2016				0.04 (J)	0.07 (J)	
10/25/2016						0.25 (J)
12/7/2016				0.11 (J)	0.23 (J)	0.23 (J)
12/8/2016		0.08 (J)	0.06 (J)			
1/24/2017		0.09 (J)	0.02 (J)			
1/26/2017				0.13 (J)	<0.1	0.02 (J)
3/21/2017		0.04 (J)	0.08 (J)			
3/22/2017						0.3
3/23/2017				0.28 (J)	0.12 (J)	
5/23/2017		0.04 (J)	0.006 (J)			
5/24/2017				0.32	0.31	0.46
10/3/2017		0.06 (J)	<0.1			
10/4/2017				0.52	0.6	<0.1
4/3/2018		<0.1	<0.1		<0.1	<0.1
4/4/2018				<0.1		
6/5/2018		0.083 (J)	0.055 (J)			
6/6/2018				0.25 (J)	0.17 (J)	<0.1
10/2/2018		<0.1	0.076 (J)			
10/3/2018				0.21 (J)	<0.1	<0.1
3/12/2019		0.079 (J)	0.061 (J)			
3/14/2019				0.24 (J)	<0.1	
3/15/2019						<0.1
4/2/2019		0.12 (J)	<0.1			
4/4/2019					0.066 (J)	<0.1
4/5/2019				0.66		
9/24/2019		0.058 (J)	<0.1	0.053 (J)	0.12 (J)	
9/25/2019						<0.1
3/2/2020		0.053 (J)	<0.1			
3/3/2020				<0.1	0.064 (J)	<0.1
3/25/2020			<0.1			
3/26/2020		0.066 (J)			<0.1	
3/30/2020				0.092 (J)		0.059 (J)
9/15/2020		0.061 (J)	<0.1			
9/16/2020	0.52					
9/17/2020					<0.1	<0.1
9/18/2020				<0.1		
11/10/2020	0.59					
12/15/2020	0.67					
1/19/2021	0.74					
2/9/2021	0.44	0.053 (J)	<0.1			
2/10/2021						0.21
2/11/2021				0.059 (J)		
2/12/2021					0.053 (J)	
3/10/2021	0.65					

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/11/2021		0.06 (J)	0.17			
3/16/2021					<0.1	
3/17/2021				0.076 (J)		<0.1
8/12/2021		<0.1	<0.1			
8/13/2021	0.87					
8/18/2021				<0.1		
8/19/2021					<0.1	<0.1
2/1/2022	0.96					
2/7/2022		<0.1	<0.1			
2/8/2022					<0.1	<0.1
2/9/2022				0.053 (J)		
8/2/2022	0.8					
8/10/2022		0.078 (J)	0.067 (J)			0.054 (J)
8/11/2022				0.085 (J)	0.097 (J)	
1/24/2023	1.3					
1/27/2023		0.088 (J)	0.067 (J)			
2/1/2023				0.094 (J)	0.086 (J)	0.053 (J)

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.3					
5/24/2016		<0.3				
7/12/2016	0.09 (J)	0.54				
9/1/2016	0.03 (J)	0.49				
10/25/2016	0.07 (J)	0.58				
12/7/2016	0.54					
12/8/2016		0.63				
1/26/2017	<0.3	0.71				
3/22/2017	0.07 (J)					
3/23/2017		0.57				
5/25/2017	0.42	0.54				
10/4/2017	0.93	0.95				
4/3/2018	<0.3	0.33				
6/5/2018		0.66				
6/6/2018	0.23 (J)					
10/3/2018	<0.3	0.32				
3/14/2019		0.88			<0.1	
3/15/2019	<0.3		<0.1	<0.1		
4/4/2019			0.1 (J)			
4/5/2019	0.16 (J)	0.37		0.13 (J)	0.14 (J)	
9/25/2019	0.081 (J)	0.73	<0.1			
9/26/2019					0.16 (J)	
9/27/2019				0.28 (J)		
1/22/2020						0.18 (J)
3/2/2020				<0.1	<0.1	
3/3/2020	<0.3	0.34	<0.1			
3/27/2020				<0.1		
3/31/2020	<0.3	0.45				
4/1/2020			<0.1		<0.1	0.15 (J)
6/17/2020			<0.1			0.25
9/15/2020		0.31				
9/16/2020	0.058 (J)					
9/17/2020				<0.1	<0.1	
9/21/2020			<0.1			0.14
2/11/2021	0.058 (J)	0.71	<0.1			
2/12/2021					<0.1	0.25
2/15/2021				<0.1		
3/17/2021				<0.1	<0.1	
3/18/2021	0.057 (J)	0.64	<0.1			0.4
8/18/2021	0.062 (J)					0.16
8/19/2021		0.31	<0.1	<0.1	<0.1	
2/8/2022	0.055 (J)	0.19	<0.1	<0.1		0.14
2/10/2022					<0.1	
8/10/2022	0.086 (J)	0.3				0.21
8/11/2022			0.056 (J)	0.063 (J)	0.06 (J)	
1/27/2023			0.05 (J)			0.087 (J)
1/30/2023	0.097 (J)			0.064 (J)		
2/1/2023		0.21			0.074 (J)	

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.082 (J)	0.053 (J)	0.1	
9/21/2020		<0.1		
9/23/2020	<0.1		0.065 (J)	
2/11/2021			0.077 (J)	
2/15/2021		0.093 (J)		
3/12/2021			0.061 (J)	
3/19/2021		0.082 (J)		
8/16/2021	0.066 (J)			
8/18/2021		0.052 (J)	0.05 (J)	0.072 (J)
2/8/2022		0.065 (J)	0.055 (J)	0.078 (J)
2/9/2022	0.051 (J)			
8/10/2022	0.081 (J)		0.084 (J)	
8/11/2022		0.088 (J)		0.11
1/30/2023	0.089 (J)		0.092 (J)	
2/1/2023		0.1		0.18

# Time Series

Constituent: Lead (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.001	<0.001	<0.001	<0.001		
7/11/2016	<0.001	<0.001		<0.001		
7/12/2016			0.0001 (J)			
8/30/2016	<0.001	<0.001	<0.001	<0.001		
10/19/2016	<0.001	<0.001	<0.001	<0.001		
12/6/2016	<0.001	<0.001	<0.001	0.0002 (J)		
1/24/2017	<0.001	<0.001	<0.001	<0.001		
3/21/2017	<0.001	6E-05 (J)	0.0001 (J)	<0.001		
5/22/2017	<0.001	9E-05 (J)	<0.001			
5/23/2017				<0.001		
4/2/2018	<0.001	<0.001		<0.001		
4/3/2018			<0.001			
3/11/2019				<0.001		
3/12/2019	<0.001	<0.001	<0.001			
4/1/2019			<0.001			
4/2/2019	<0.001	<0.001		<0.001		
9/23/2019	7.8E-05 (J)	9.2E-05 (J)	<0.001			
9/24/2019				<0.001		
3/2/2020	4.8E-05 (J)	9.5E-05 (J)	<0.001	0.00026 (J)		
3/25/2020	<0.001	0.00011 (J)	<0.001			
3/26/2020				5.9E-05 (J)		
9/15/2020	<0.001	8E-05 (J)	4.2E-05 (J)	4.9E-05 (J)		
9/16/2020						5E-05 (J)
9/17/2020				6.2E-05 (J)		
11/10/2020						6.9E-05 (J)
11/11/2020				8.4E-05 (J)		
12/15/2020				0.00045 (J)		8.2E-05 (J)
1/19/2021						4.4E-05 (J)
1/20/2021					<0.001	
2/8/2021	5.8E-05 (J)			0.00024 (J)	8.1E-05 (J)	
2/9/2021		9.4E-05 (J)	<0.001			0.00029 (J)
3/10/2021	<0.001			0.00016 (J)	<0.001	
3/11/2021		7.6E-05 (J)	<0.001			9.4E-05 (J)
8/11/2021	<0.001					<0.001
8/12/2021		<0.001	<0.001	<0.001	<0.001	
2/1/2022	<0.001	<0.001	<0.001			<0.001
2/7/2022				<0.001	<0.001	
8/2/2022	<0.001	<0.001	<0.001	<0.001		<0.001
8/9/2022					<0.001	
1/23/2023			<0.001	<0.001	<0.001	
1/24/2023	<0.001	<0.001				<0.001



# Time Series

Constituent: Lead (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.001				
5/20/2016			<0.001			
5/23/2016				0.00182 (J)	<0.001	<0.001
7/11/2016		<0.001	<0.001			
7/12/2016				0.0015 (J)	<0.001	<0.001
8/30/2016		<0.001	<0.001			
9/1/2016				0.0016 (J)	<0.001	<0.001
10/20/2016		0.0002 (J)	<0.001			
10/24/2016				0.0016 (J)	<0.001	
10/25/2016						<0.001
12/7/2016				0.0018 (J)	<0.001	<0.001
12/8/2016		<0.001	<0.001			
1/24/2017		<0.001	<0.001			
1/26/2017				0.002 (J)	<0.001	0.0001 (J)
3/21/2017		<0.001	<0.001			
3/22/2017						0.0002 (J)
3/23/2017				0.0019 (J)	0.001 (J)	
5/23/2017		9E-05 (J)	0.0003 (J)			
5/24/2017				0.0016 (J)	0.0001 (J)	0.0001 (J)
4/3/2018		<0.001	<0.001		<0.001	<0.001
4/4/2018				<0.001		
3/12/2019		<0.001	<0.001			
3/14/2019				0.0014 (J)	<0.001	
3/15/2019						<0.001
4/2/2019		<0.001	<0.001			
4/4/2019					7.2E-05 (J)	0.00016 (J)
4/5/2019				0.0012 (J)		
9/24/2019		<0.001	7.1E-05 (J)	0.0013 (J)	0.0002 (J)	
9/25/2019						<0.001
3/2/2020		<0.001	<0.001			
3/3/2020				0.0017 (J)	5.3E-05 (J)	0.00016 (J)
3/25/2020			<0.001			
3/26/2020		<0.001			<0.001	
3/30/2020				0.0015 (J)		7.3E-05 (J)
9/15/2020		<0.001	<0.001			
9/16/2020	0.00021 (J)					
9/17/2020					<0.001	7.8E-05 (J)
9/18/2020				0.0012 (J)		
11/10/2020	0.0002 (J)					
12/15/2020	0.00011 (J)					
1/19/2021	0.00019 (J)					
2/9/2021	0.0001 (J)	<0.001	<0.001			
2/10/2021						9.4E-05 (J)
2/11/2021				0.0015 (J)		
2/12/2021					<0.001	
3/10/2021	<0.001					
3/11/2021		<0.001	<0.001			
3/16/2021					<0.001	
3/17/2021				0.0019		5.8E-05 (J)
8/12/2021		<0.001	<0.001			
8/13/2021	<0.001					
8/18/2021				0.0015		

# Time Series

Constituent: Lead (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.001	<0.001
2/1/2022	<0.001					
2/7/2022		<0.001	<0.001			
2/8/2022					<0.001	<0.001
2/9/2022				0.0014		
8/2/2022	<0.001					
8/10/2022		<0.001	<0.001			<0.001
8/11/2022				<0.001	<0.001	
1/24/2023	<0.001					
1/27/2023		<0.001	<0.001			
2/1/2023				0.0011	<0.001	<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.001					
5/24/2016		0.00154 (J)				
7/12/2016	<0.001	0.0012 (J)				
9/1/2016	<0.001	0.0014 (J)				
10/25/2016	<0.001	0.0015 (J)				
12/7/2016	<0.001					
12/8/2016		0.0017 (J)				
1/26/2017	<0.001	0.0013 (J)				
3/22/2017	0.0001 (J)					
3/23/2017		0.001 (J)				
5/25/2017	<0.001	0.0012 (J)				
4/3/2018	<0.001	<0.001				
3/14/2019		0.0015 (J)			<0.001	
3/15/2019	<0.001		<0.001	<0.001		
4/4/2019			<0.001			
4/5/2019	7.6E-05 (J)	0.0015 (J)		<0.001	<0.001	
9/25/2019	8.9E-05 (J)	0.0015 (J)	<0.001			
9/26/2019					<0.001	
9/27/2019				0.0001 (J)		
3/2/2020				9.4E-05 (J)	5.1E-05 (J)	
3/3/2020	0.00013 (J)	0.0013 (J)	4.7E-05 (J)			
3/27/2020				<0.001		
3/31/2020	7.7E-05 (J)	0.0014 (J)				
4/1/2020			4.8E-05 (J)		<0.001	0.0017 (J)
6/17/2020			<0.001			0.0017 (J)
9/15/2020		0.0014 (J)				
9/16/2020	6.5E-05 (J)					
9/17/2020				<0.001	0.00016 (J)	
9/21/2020			<0.001			0.0017 (J)
2/11/2021	0.00018 (J)	0.00098 (J)	0.00066 (J)			
2/12/2021					<0.001	0.0018 (J)
2/15/2021				3.6E-05 (J)		
3/17/2021				<0.001	<0.001	
3/18/2021	8.8E-05 (J)	0.00096 (J)	7.3E-05 (J)			0.0017
8/18/2021	<0.001					0.0016
8/19/2021		0.0013	<0.001	<0.001	<0.001	
2/8/2022	<0.001	0.0009 (J)	<0.001	<0.001		0.0014
2/10/2022					<0.001	
8/10/2022	<0.001	0.0011				<0.001
8/11/2022			<0.001	<0.001	<0.001	
1/27/2023			<0.001			<0.001
1/30/2023	<0.001			<0.001		
2/1/2023		<0.001			<0.001	

# Time Series

Constituent: Lead (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.00087 (J)	0.00016 (J)	0.0017 (J)	
9/21/2020		0.00099 (J)		
9/23/2020	<0.001		8.2E-05 (J)	
2/11/2021			0.00039 (J)	
2/15/2021		0.00055 (J)		
3/12/2021			<0.001	
3/19/2021		0.00066 (J)		
8/16/2021	<0.001			
8/18/2021		<0.001	<0.001	<0.001
2/8/2022		<0.001	<0.001	<0.001
2/9/2022	<0.001			
8/10/2022	<0.001		<0.001	
8/11/2022		<0.001		<0.001
1/30/2023	<0.001		<0.001	
2/1/2023		<0.001		<0.001

# Time Series

Constituent: Lithium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.03	<0.03	<0.03	<0.03		
7/11/2016	<0.03	0.0014 (J)		0.0015 (J)		
7/12/2016			0.0024 (J)			
8/30/2016	<0.03	<0.03	0.0025 (J)	0.0027 (J)		
10/19/2016	<0.03	<0.03	0.003 (J)	0.0042 (J)		
12/6/2016	<0.03	<0.03	0.0033 (J)	0.0046 (J)		
1/24/2017	<0.03	<0.03	0.003 (J)	<0.03		
3/21/2017	<0.03	0.0012 (J)	0.0034 (J)	<0.03		
5/22/2017	<0.03	<0.03	0.003 (J)			
5/23/2017				<0.03		
4/2/2018	<0.03	0.0015 (J)		<0.03		
4/3/2018			0.003 (J)			
6/4/2018	0.001 (J)	0.0016 (J)	0.0027 (J)	0.00097 (J)		
10/1/2018	0.00099 (J)	0.0013 (J)	0.0032 (J)	<0.03		
3/11/2019				<0.03		
3/12/2019	0.001 (J)	0.0018 (J)	0.0032 (J)			
4/1/2019			0.0032 (J)			
4/2/2019	0.001 (J)	0.0018 (J)		0.00098 (J)		
9/23/2019	0.0011 (J)	0.0016 (J)	0.0029 (J)			
9/24/2019				<0.03		
3/2/2020	0.0012 (J)	0.0017 (J)	0.0037 (J)	0.0012 (J)		
3/25/2020	0.00083 (J)	0.0017 (J)	0.0035 (J)			
3/26/2020				0.00095 (J)		
9/15/2020	0.00087 (J)	0.0015 (J)	0.0026 (J)	<0.03		
9/16/2020						0.0018 (J)
9/17/2020				0.0039 (J)		
11/10/2020						0.0013 (J)
11/11/2020				0.0086 (J)		
12/15/2020				0.008 (J)		0.0019 (J)
1/19/2021						0.0025 (J)
1/20/2021				0.01 (J)		
2/8/2021	0.00086 (J)			0.0013 (J)	0.0098 (J)	
2/9/2021		0.0012 (J)	0.0032 (J)			0.0026 (J)
3/10/2021	0.0009 (J)			0.0011 (J)	0.0094 (J)	
3/11/2021		0.0011 (J)	0.0035 (J)			0.0022 (J)
8/11/2021	0.00078 (J)					0.0024 (J)
8/12/2021		0.0012 (J)	0.0028 (J)	0.0013 (J)	0.0096 (J)	
2/1/2022	0.0011 (J)	0.0017 (J)	0.0037 (J)			0.0024 (J)
2/7/2022				0.0013 (J)	0.0097 (J)	
8/2/2022	<0.03	0.0013 (J)	0.003 (J)	0.0011 (J)		0.0019 (J)
8/9/2022					0.011 (J)	
1/23/2023			0.003 (J)	<0.03	0.0097 (J)	
1/24/2023	0.00092 (J)	0.0014 (J)				0.002 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.03				
5/20/2016			<0.03			
5/23/2016				<0.03	<0.03	<0.03
7/11/2016		0.0034 (J)	0.01 (J)			
7/12/2016				<0.03	<0.03	0.0037 (J)
8/30/2016		0.003 (J)	0.0095 (J)			
9/1/2016				<0.03	0.0021 (J)	0.0033 (J)
10/20/2016		0.0031 (J)	0.0105 (J)			
10/24/2016				<0.03	<0.03	
10/25/2016						0.0029 (J)
12/7/2016				<0.03	<0.03	0.0029 (J)
12/8/2016		0.0027 (J)	0.01 (J)			
1/24/2017		0.0028 (J)	0.0108 (J)			
1/26/2017				<0.03	<0.03	0.0028 (J)
3/21/2017		0.0037 (J)	0.0115 (J)			
3/22/2017						0.0025 (J)
3/23/2017				<0.03	0.0016 (J)	
5/23/2017		0.0033 (J)	0.011 (J)			
5/24/2017				<0.03	0.0029 (J)	0.0029 (J)
4/3/2018		0.0033 (J)	0.012 (J)		0.0026 (J)	0.0028 (J)
4/4/2018				<0.03		
6/5/2018		0.0034 (J)	0.011 (J)			
6/6/2018				<0.03	0.0013 (J)	0.0031 (J)
10/2/2018		0.0035 (J)	0.01 (J)			
10/3/2018				<0.03	0.0017 (J)	0.0026 (J)
3/12/2019		0.0032 (J)	0.011 (J)			
3/14/2019				<0.03	<0.03	
3/15/2019						0.0041 (J)
4/2/2019		0.0028 (J)	0.0095 (J)			
4/4/2019					0.0009 (J)	0.0032 (J)
4/5/2019				<0.03		
9/24/2019		0.0035 (J)	0.011 (J)	<0.03	0.0012 (J)	
9/25/2019						0.0038 (J)
3/2/2020		0.0036 (J)	0.012			
3/3/2020				<0.03	0.0084 (J)	0.0047 (J)
3/25/2020			0.011 (J)			
3/26/2020		0.0029 (J)			0.0061 (J)	
3/30/2020				<0.03		0.0041 (J)
9/15/2020		0.003 (J)	0.0095 (J)			
9/16/2020	0.014 (J)					
9/17/2020					0.0094 (J)	0.0043 (J)
9/18/2020				<0.03		
11/10/2020	0.025 (J)					
12/15/2020	0.028 (J)					
1/19/2021	0.034					
2/9/2021	0.026 (J)	0.003 (J)	0.01 (J)			
2/10/2021						0.0038 (J)
2/11/2021				<0.03		
2/12/2021					0.036	
3/10/2021	0.03					
3/11/2021		0.0037 (J)	0.012 (J)			
3/16/2021					0.032	

# Time Series

Constituent: Lithium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				<0.03		0.0048 (J)
8/12/2021		0.0032 (J)	0.0094 (J)			
8/13/2021	0.032					
8/18/2021				<0.03		
8/19/2021					0.0058 (J)	0.0042 (J)
2/1/2022	0.048					
2/7/2022		0.0029 (J)	0.0097 (J)			
2/8/2022					0.014 (J)	0.0034 (J)
2/9/2022				<0.03		
8/2/2022	0.041					
8/11/2022				<0.03	0.0025 (J)	
1/24/2023	0.064					
1/27/2023		0.003 (J)	0.0096 (J)			
2/1/2023				<0.03	0.016 (J)	0.0036 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.03					
5/24/2016		0.0142 (J)				
7/12/2016	<0.03	0.0141 (J)				
9/1/2016	<0.03	0.0158 (J)				
10/25/2016	<0.03	0.016 (J)				
12/7/2016	<0.03					
12/8/2016		0.0144 (J)				
1/26/2017	<0.03	0.0136 (J)				
3/22/2017	<0.03					
3/23/2017		0.0151 (J)				
5/25/2017	0.0011 (J)	0.0154 (J)				
4/3/2018	<0.03	0.013 (J)				
6/5/2018		0.013 (J)				
6/6/2018	<0.03					
10/3/2018	<0.03	0.015 (J)				
3/14/2019		0.011 (J)			0.0028 (J)	
3/15/2019	0.0011 (J)		0.025 (J)	0.002 (J)		
4/4/2019			0.019 (J)			
4/5/2019	0.00074 (J)	0.0084 (J)		0.0013 (J)	0.0021 (J)	
9/25/2019	0.0011 (J)	0.015 (J)	0.024 (J)			
9/26/2019					0.0023 (J)	
9/27/2019				0.0013 (J)		
3/2/2020				0.0015 (J)	0.0025 (J)	
3/3/2020	0.0012 (J)	0.012 (J)	0.026 (J)			
3/27/2020				0.0013 (J)		
3/31/2020	0.0009 (J)	0.012 (J)				
4/1/2020			0.026 (J)		0.0024 (J)	0.0011 (J)
6/17/2020			0.023 (J)			0.00097 (J)
9/15/2020		0.014 (J)				
9/16/2020	0.0012 (J)					
9/17/2020				0.0011 (J)	0.0021 (J)	
9/21/2020			0.022 (J)			0.00086 (J)
2/11/2021	0.0013 (J)	0.011 (J)	0.021 (J)			
2/12/2021					0.0023 (J)	0.0011 (J)
2/15/2021				0.0011 (J)		
3/17/2021				0.0012 (J)	0.0024 (J)	
3/18/2021	0.0014 (J)	0.013 (J)	0.026 (J)			0.0012 (J)
8/18/2021	0.0012 (J)					0.00097 (J)
8/19/2021		0.013 (J)	0.022 (J)	0.0012 (J)	0.0022 (J)	
2/8/2022	0.0014 (J)	0.01 (J)	0.022 (J)	0.0011 (J)		0.001 (J)
2/10/2022					0.0029 (J)	
8/11/2022			0.022 (J)	0.0011 (J)	0.002 (J)	
1/27/2023			0.018 (J)			<0.03
1/30/2023	0.0014 (J)			0.0011 (J)		
2/1/2023		0.0093 (J)			0.0019 (J)	



# Time Series

Constituent: Lithium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0021 (J)	0.0046 (J)	0.038 (J)	
9/21/2020		0.0036 (J)		
9/23/2020	0.0011 (J)		0.031	
2/11/2021			0.034	
2/15/2021		0.0043 (J)		
3/12/2021			0.035	
3/19/2021		0.0045 (J)		
8/16/2021	0.001 (J)			
8/18/2021		0.0036 (J)	0.03	0.0022 (J)
2/8/2022		0.0039 (J)	0.029 (J)	0.001 (J)
2/9/2022	0.0022 (J)			
8/11/2022		<0.03		0.0014 (J)
1/30/2023	0.0013 (J)		0.021 (J)	
2/1/2023		0.0034 (J)		0.0015 (J)

# Time Series

Constituent: Mercury (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.0002	<0.0002	<0.0002	<0.0002		
7/11/2016	<0.0002	<0.0002		<0.0002		
7/12/2016			<0.0002			
8/30/2016	4E-05 (J)	4E-05 (J)	<0.0002	5E-05 (J)		
10/19/2016	<0.0002	<0.0002	<0.0002	<0.0002		
12/6/2016	<0.0002	<0.0002	<0.0002	5E-05 (J)		
1/24/2017	<0.0002	<0.0002	<0.0002	0.0001 (J)		
3/21/2017	<0.0002	<0.0002	<0.0002	0.00016 (J)		
5/22/2017	<0.0002	<0.0002	<0.0002			
5/23/2017				5E-05 (J)		
4/2/2018	<0.0002	<0.0002		<0.0002		
4/3/2018			<0.0002			
3/11/2019				<0.0002		
3/12/2019	<0.0002	<0.0002	<0.0002			
3/2/2020	<0.0002	<0.0002	<0.0002	<0.0002		
9/16/2020						<0.0002
9/17/2020					<0.0002	
11/10/2020						<0.0002
11/11/2020					<0.0002	
12/15/2020					<0.0002	<0.0002
1/19/2021						<0.0002
1/20/2021					<0.0002	
2/8/2021	<0.0002			<0.0002	<0.0002	
2/9/2021		<0.0002	<0.0002			<0.0002
2/1/2022	<0.0002	<0.0002	<0.0002			<0.0002
2/7/2022				<0.0002	<0.0002	
8/2/2022	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
8/9/2022					<0.0002	
1/23/2023			<0.0002	<0.0002	<0.0002	
1/24/2023	<0.0002	<0.0002				<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.0002				
5/20/2016			<0.0002			
5/23/2016				<0.0002	<0.0002	<0.0002
7/11/2016		<0.0002	<0.0002			
7/12/2016				<0.0002	<0.0002	<0.0002
8/30/2016		<0.0002	4.4E-05 (J)			
9/1/2016				<0.0002	<0.0002	<0.0002
10/20/2016		<0.0002	<0.0002			
10/24/2016				<0.0002	<0.0002	
10/25/2016						<0.0002
12/7/2016				<0.0002	<0.0002	<0.0002
12/8/2016		<0.0002	<0.0002			
1/24/2017		<0.0002	<0.0002			
1/26/2017				<0.0002	<0.0002	<0.0002
3/21/2017		<0.0002	<0.0002			
3/22/2017						<0.0002
3/23/2017				<0.0002	<0.0002	
5/23/2017		<0.0002	<0.0002			
5/24/2017				<0.0002	<0.0002	<0.0002
4/3/2018		<0.0002	<0.0002		<0.0002	<0.0002
4/4/2018				<0.0002		
3/12/2019		<0.0002	<0.0002			
3/14/2019				<0.0002	<0.0002	
3/15/2019						<0.0002
3/2/2020		<0.0002	<0.0002			
3/3/2020				<0.0002	<0.0002	<0.0002
9/16/2020	<0.0002					
11/10/2020	<0.0002					
12/15/2020	<0.0002					
1/19/2021	<0.0002					
2/9/2021	<0.0002	<0.0002	<0.0002			
2/10/2021						<0.0002
2/11/2021				<0.0002		
2/12/2021					<0.0002	
2/1/2022	<0.0002					
2/7/2022		<0.0002	<0.0002			
2/8/2022					<0.0002	<0.0002
2/9/2022				<0.0002		
8/2/2022	<0.0002					
8/11/2022				<0.0002	<0.0002	
1/24/2023	<0.0002					
1/27/2023		<0.0002	<0.0002			
2/1/2023				<0.0002	<0.0002	<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.0002					
5/24/2016		<0.0002				
7/12/2016	<0.0002	<0.0002				
9/1/2016	<0.0002	6E-05 (J)				
10/25/2016	<0.0002	4E-05 (J)				
12/7/2016	<0.0002					
12/8/2016		<0.0002				
1/26/2017	<0.0002	8E-05 (J)				
3/22/2017	<0.0002					
3/23/2017		9E-05 (J)				
5/25/2017	<0.0002	8E-05 (J)				
4/3/2018	<0.0002	<0.0002				
3/14/2019		<0.0002			<0.0002	
3/15/2019	<0.0002		<0.0002	<0.0002		
3/2/2020				<0.0002	<0.0002	
3/3/2020	<0.0002	<0.0002	<0.0002			
2/11/2021	<0.0002	<0.0002	<0.0002			
2/12/2021					<0.0002	<0.0002
2/15/2021				<0.0002		
2/8/2022	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
2/10/2022					<0.0002	
8/11/2022			<0.0002	0.00016 (J)	0.00017 (J)	
1/27/2023			<0.0002			<0.0002
1/30/2023	<0.0002			<0.0002		
2/1/2023		<0.0002			<0.0002	

# Time Series

Constituent: Mercury (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
2/11/2021			<0.0002	
2/15/2021		<0.0005		
2/8/2022		0.00014 (J)	<0.0002	<0.0002
2/9/2022	<0.0002			
8/11/2022		0.00014 (J)		0.00013 (J)
1/30/2023	<0.0002		<0.0002	
2/1/2023		0.00084		<0.0002

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.01	<0.01	<0.01	<0.01		
7/11/2016	<0.01	<0.01		<0.01		
7/12/2016			<0.01			
8/30/2016	<0.01	<0.01	<0.01	<0.01		
10/19/2016	<0.01	<0.01	<0.01	<0.01		
12/6/2016	<0.01	<0.01	<0.01	<0.01		
1/24/2017	<0.01	<0.01	<0.01	<0.01		
3/21/2017	<0.01	<0.01	<0.01	<0.01		
5/22/2017	<0.01	<0.01	<0.01			
5/23/2017				<0.01		
4/2/2018	<0.01	<0.01		<0.01		
4/3/2018			<0.01			
3/11/2019				<0.01		
3/12/2019	<0.01	<0.01	<0.01			
4/1/2019			<0.01			
4/2/2019	<0.01	<0.01		<0.01		
9/23/2019	<0.01	<0.01	<0.01			
9/24/2019				<0.01		
3/2/2020	<0.01	<0.01	<0.01	<0.01		
3/25/2020	<0.01	<0.01	<0.01			
3/26/2020				<0.01		
9/15/2020	<0.01	<0.01	<0.01	<0.01		
9/16/2020						0.0044 (J)
9/17/2020					0.0037 (J)	
11/10/2020						0.0072 (J)
11/11/2020					<0.01	
12/15/2020					0.00082 (J)	0.0044 (J)
1/19/2021						0.0038 (J)
1/20/2021					<0.01	
2/8/2021	<0.01			<0.01	<0.01	
2/9/2021		<0.01	<0.01			0.0045 (J)
3/10/2021	<0.01			<0.01	<0.01	
3/11/2021		<0.01	<0.01			0.0064 (J)
8/11/2021	<0.01					0.0034 (J)
8/12/2021		<0.01	<0.01	<0.01	<0.01	
2/1/2022	<0.01	<0.01	<0.01			0.0036 (J)
2/7/2022				<0.01	0.00099 (J)	
8/2/2022	<0.01	<0.01	<0.01	<0.01		0.0042 (J)
8/9/2022					<0.01	
1/23/2023			<0.01	<0.01	<0.01	
1/24/2023	<0.01	<0.01				0.0027 (J)

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.01				
5/20/2016			<0.01			
5/23/2016				<0.01	<0.01	<0.01
7/11/2016		<0.01	0.0008 (J)			
7/12/2016				<0.01	0.0007 (J)	<0.01
8/30/2016		<0.01	<0.01			
9/1/2016				<0.01	<0.01	<0.01
10/20/2016		<0.01	<0.01			
10/24/2016				<0.01	<0.01	
10/25/2016						<0.01
12/7/2016				<0.01	<0.01	<0.01
12/8/2016		<0.01	<0.01			
1/24/2017		<0.01	<0.01			
1/26/2017				<0.01	<0.01	<0.01
3/21/2017		<0.01	0.0002 (J)			
3/22/2017						<0.01
3/23/2017				<0.01	<0.01	
5/23/2017		<0.01	<0.01			
5/24/2017				<0.01	<0.01	<0.01
4/3/2018		<0.01	<0.01		<0.01	<0.01
4/4/2018				<0.01		
3/12/2019		<0.01	<0.01			
3/14/2019				<0.01	<0.01	
3/15/2019						<0.01
4/2/2019		<0.01	<0.01			
4/4/2019					<0.01	<0.01
4/5/2019				<0.01		
9/24/2019		<0.01	<0.01	<0.01	<0.01	
9/25/2019						<0.01
3/2/2020		<0.01	<0.01			
3/3/2020				<0.01	<0.01	<0.01
3/25/2020			<0.01			
3/26/2020		<0.01			<0.01	
3/30/2020				<0.01		<0.01
9/15/2020		<0.01	<0.01			
9/16/2020	0.0019 (J)					
9/17/2020					<0.01	<0.01
9/18/2020				<0.01		
11/10/2020	0.0018 (J)					
12/15/2020	0.0019 (J)					
1/19/2021	0.0035 (J)					
2/9/2021	0.0038 (J)	<0.01	<0.01			
2/10/2021						<0.01
2/11/2021				<0.01		
2/12/2021					<0.01	
3/10/2021	0.0019 (J)					
3/11/2021		<0.01	<0.01			
3/16/2021					<0.01	
3/17/2021				<0.01		<0.01
8/12/2021		<0.01	<0.01			
8/13/2021	0.0051 (J)					
8/18/2021				<0.01		

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.01	<0.01
2/1/2022	0.0055 (J)					
2/7/2022		<0.01	<0.01			
2/8/2022					<0.01	<0.01
2/9/2022				<0.01		
8/2/2022	0.002 (J)					
8/11/2022				<0.01	<0.01	
1/24/2023	0.0026 (J)					
1/27/2023		<0.01	<0.01			
2/1/2023				<0.01	<0.01	<0.01



# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.01					
5/24/2016		<0.01				
7/12/2016	<0.01	<0.01				
9/1/2016	<0.01	<0.01				
10/25/2016	<0.01	<0.01				
12/7/2016	<0.01					
12/8/2016		<0.01				
1/26/2017	<0.01	<0.01				
3/22/2017	<0.01					
3/23/2017		<0.01				
5/25/2017	<0.01	<0.01				
4/3/2018	<0.01	<0.01				
3/14/2019		<0.01			<0.01	
3/15/2019	<0.01		0.045	<0.01		
4/4/2019			0.033			
4/5/2019	<0.01	<0.01		0.00013 (J)	0.0014 (J)	
9/25/2019	<0.01	<0.01	0.038			
9/26/2019					0.0025 (J)	
9/27/2019				<0.01		
3/2/2020				<0.01	0.003 (J)	
3/3/2020	<0.01	<0.01	0.025			
3/27/2020				<0.01		
3/31/2020	<0.01	<0.01				
4/1/2020			0.024		0.0032 (J)	<0.01
6/17/2020			0.019			<0.01
9/15/2020		<0.01				
9/16/2020	<0.01					
9/17/2020				<0.01	0.0026 (J)	
9/21/2020			0.017			<0.01
2/11/2021	<0.01	<0.01	0.016			
2/12/2021					0.0039 (J)	<0.01
2/15/2021				<0.01		
3/17/2021				<0.01	0.0034 (J)	
3/18/2021	<0.01	<0.01	0.016			<0.01
8/18/2021	<0.01					<0.01
8/19/2021		<0.01	0.018	<0.01	0.0034 (J)	
2/8/2022	<0.01	<0.01	0.016	<0.01		<0.01
2/10/2022					0.0034 (J)	
8/11/2022			0.023	<0.01	0.0039 (J)	
1/27/2023			0.028			<0.01
1/30/2023	<0.01			<0.01		
2/1/2023		<0.01			0.0041 (J)	

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	<0.01	<0.01	0.023	
9/21/2020		<0.01		
9/23/2020	<0.01		0.015	
2/11/2021			0.019	
2/15/2021		<0.01		
3/12/2021			0.014	
3/19/2021		<0.01		
8/16/2021	<0.01			
8/18/2021		<0.01	0.0083 (J)	<0.01
2/8/2022		<0.01	0.007 (J)	<0.01
2/9/2022	<0.01			
8/11/2022		<0.01		<0.01
1/30/2023	<0.01		0.0063 (J)	
2/1/2023		<0.01		<0.01

# Time Series

Constituent: Selenium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	<0.005	<0.005	<0.005		
7/11/2016	<0.005	<0.005		<0.005		
7/12/2016			<0.005			
8/30/2016	<0.005	<0.005	<0.005	<0.005		
10/19/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016	<0.005	<0.005	<0.005	<0.005		
1/24/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017	<0.005	<0.005	<0.005	<0.005		
5/22/2017	<0.005	<0.005	<0.005			
5/23/2017				<0.005		
4/2/2018	<0.005	<0.005		<0.005		
4/3/2018			<0.005			
6/4/2018	<0.005	<0.005	<0.005	<0.005		
10/1/2018	<0.005	<0.005	<0.005	<0.005		
3/11/2019				<0.005		
3/12/2019	<0.005	<0.005	<0.005			
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005		<0.005		
9/23/2019	<0.005	<0.005	<0.005			
9/24/2019				<0.005		
3/2/2020	<0.005	<0.005	<0.005	<0.005		
3/25/2020	<0.005	<0.005	<0.005			
3/26/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020				<0.005		
11/10/2020						<0.005
11/11/2020				<0.005		
12/15/2020				<0.005		<0.005
1/19/2021						<0.005
1/20/2021				<0.005		
2/8/2021	<0.005			<0.005	<0.005	
2/9/2021		<0.005	<0.005			<0.005
3/10/2021	0.0047 (J)			<0.005	<0.005	
3/11/2021		<0.005	<0.005			<0.005
8/11/2021	<0.005					<0.005
8/12/2021		<0.005	<0.005	<0.005	<0.005	
2/1/2022	<0.005	<0.005	<0.005			<0.005
2/7/2022				<0.005	<0.005	
8/2/2022	<0.005	0.0014 (J)	<0.005	<0.005		<0.005
8/9/2022					<0.005	
1/23/2023			<0.005	<0.005	<0.005	
1/24/2023	<0.005	<0.005				<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				0.017	<0.005	<0.005
7/11/2016		<0.005	<0.005			
7/12/2016				0.0146	<0.005	<0.005
8/30/2016		<0.005	<0.005			
9/1/2016				0.0137	<0.005	<0.005
10/20/2016		<0.005	<0.005			
10/24/2016				0.0135	0.0012 (J)	
10/25/2016						<0.005
12/7/2016				0.01 (J)	0.0041 (J)	<0.005
12/8/2016		<0.005	<0.005			
1/24/2017		0.0011 (J)	<0.005			
1/26/2017				0.0214	<0.005	<0.005
3/21/2017		<0.005	<0.005			
3/22/2017						<0.005
3/23/2017				0.0167	0.0016 (J)	
5/23/2017		<0.005	<0.005			
5/24/2017				0.0083 (J)	<0.005	<0.005
4/3/2018		<0.005	<0.005		<0.005	<0.005
4/4/2018				0.012		
6/5/2018		<0.005	<0.005			
6/6/2018				0.014	<0.005	<0.005
10/2/2018		<0.005	<0.005			
10/3/2018				0.0056 (J)	<0.005	<0.005
3/12/2019		<0.005	<0.005			
3/14/2019				0.0048 (J)	<0.005	
3/15/2019						<0.005
4/2/2019		<0.005	<0.005			
4/4/2019					0.00021 (J)	8.9E-05 (J)
4/5/2019				0.00091 (J)		
9/24/2019		<0.005	<0.005	0.0064 (J)	<0.005	
9/25/2019						<0.005
3/2/2020		<0.005	<0.005			
3/3/2020				0.0045 (J)	<0.005	<0.005
3/25/2020			<0.005			
3/26/2020		<0.005			<0.005	
3/30/2020				0.0049 (J)		<0.005
9/15/2020		<0.005	<0.005			
9/16/2020	<0.005					
9/17/2020					<0.005	<0.005
9/18/2020				0.0045 (J)		
11/10/2020	<0.005					
12/15/2020	<0.005					
1/19/2021	<0.005					
2/9/2021	<0.005	<0.005	<0.005			
2/10/2021						<0.005
2/11/2021				0.0072 (J)		
2/12/2021					<0.005	
3/10/2021	<0.005					
3/11/2021		<0.005	<0.005			
3/16/2021					<0.005	

# Time Series

Constituent: Selenium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.01 (J)		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	<0.005					
8/18/2021				0.0077		
8/19/2021					<0.005	<0.005
2/1/2022	<0.005					
2/7/2022		<0.005	<0.005			
2/8/2022					<0.005	<0.005
2/9/2022				0.0047 (J)		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				0.0037 (J)	<0.005	
1/24/2023	<0.005					
1/27/2023		<0.005	<0.005			
2/1/2023				0.0036 (J)	<0.005	<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.005					
5/24/2016		<0.2				
7/12/2016	<0.005	0.036				
9/1/2016	0.0014 (J)	0.0347				
10/25/2016	<0.005	0.0282				
12/7/2016	0.0023 (J)					
12/8/2016		0.0373				
1/26/2017	<0.005	0.0385				
3/22/2017	<0.005					
3/23/2017		0.0414				
5/25/2017	<0.005	0.019				
4/3/2018	<0.005	0.029				
6/5/2018		0.038				
6/6/2018	<0.005					
10/3/2018	<0.005	0.017				
3/14/2019		0.016			<0.005	
3/15/2019	<0.005		<0.005	<0.005		
4/4/2019			<0.005			
4/5/2019	9.3E-05 (J)	0.0018 (J)		<0.005	<0.005	
9/25/2019	<0.005	0.02	<0.005			
9/26/2019					<0.005	
9/27/2019				<0.005		
3/2/2020				<0.005	<0.005	
3/3/2020	<0.005	0.014	<0.005			
3/27/2020				<0.005		
3/31/2020	<0.005	0.019				
4/1/2020			<0.005		<0.005	0.011
6/17/2020			<0.005			0.014
9/15/2020		0.059				
9/16/2020	<0.005					
9/17/2020				0.002 (J)	<0.005	
9/21/2020			<0.005			0.041
2/11/2021	<0.005	0.023	<0.005			
2/12/2021					<0.005	0.011
2/15/2021				<0.005		
3/17/2021				<0.005	<0.005	
3/18/2021	<0.005	0.019 (J)	<0.005			0.028
8/18/2021	<0.005					0.014
8/19/2021		0.01	<0.005	<0.005	<0.005	
2/8/2022	<0.005	0.0082	<0.005	<0.005		0.0078
2/10/2022					<0.005	
8/10/2022	<0.005	0.0096				0.007 (J)
8/11/2022			<0.005	<0.005	<0.005	
1/27/2023			<0.005			0.015
1/30/2023	<0.005			<0.005		
2/1/2023		0.0054			<0.005	

# Time Series

Constituent: Selenium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0025 (J)	0.014	<0.005	
9/21/2020		0.037		
9/23/2020	<0.005		<0.005	
2/11/2021			<0.005	
2/15/2021		0.01		
3/12/2021			<0.005	
3/19/2021		0.016 (J)		
8/16/2021	<0.005			
8/18/2021		0.014	<0.005	0.004 (J)
2/8/2022		0.0083	<0.005	<0.005
2/9/2022	<0.005			
8/10/2022	<0.005		<0.005	
8/11/2022		0.0089 (J)		0.0023 (J)
1/30/2023	0.0016 (J)		<0.005	
2/1/2023		0.0063		0.0021 (J)

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	66.9	48.6	42.3	1.22		
7/11/2016	41	45		3.7		
7/12/2016			44			
8/30/2016	36	42	40	6.8		
10/19/2016	46	44	43	11		
12/6/2016	59	44	43	13		
1/24/2017	46	46	48	5.7		
3/21/2017	63	46	45	1.7		
5/22/2017	77	48	46			
5/23/2017				1.5		
10/3/2017	42	47	48	1.3		
6/4/2018	71.8	47.8	46.6	4.9		
10/1/2018	49.1	48.1	48.6	0.59 (J)		
4/1/2019			50.4			
4/2/2019	84.3	48.7		4.9		
9/23/2019	70.2	47.2	43.9			
9/24/2019				<1		
3/25/2020	85.9	46.3	50.5			
3/26/2020				<1		
9/15/2020	47.3	51.5	44.7	<1		
9/16/2020						43
9/17/2020				10.9		
11/10/2020						39
11/11/2020				9.4		
12/15/2020				10.9		38.8
1/19/2021						37.3
1/20/2021					9.8	
3/10/2021	49.6			1.2	10.8	
3/11/2021		52.9	50.4			38.6
8/11/2021	48.9					30.5
8/12/2021		47.4	38.6	1.1	7.8	
2/1/2022	43.7	67.1	46			37.5
2/7/2022				2.9	10.4	
8/2/2022	58.1	86.9	43.5	4.9		37
8/9/2022					11.2	
1/23/2023			39.5	42.5	11.1	
1/24/2023	48.3	79.7				34.7



# Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		25				
5/20/2016			34.4			
5/23/2016				1070	424	203
7/11/2016		27	34			
7/12/2016				1300	440	220
8/30/2016		23	36			
9/1/2016				1300	440	220
10/20/2016		19	36			
10/24/2016				280	420	
10/25/2016						230
12/7/2016				1300	450	220
12/8/2016		20	36			
1/24/2017		20	37			
1/26/2017				1400	490	250
3/21/2017		23	37			
3/22/2017						240
3/23/2017				1500	530	
5/23/2017		21	38			
5/24/2017				1400	500	230
10/3/2017		21	38			
10/4/2017				1400	560	220
6/5/2018		22.9	38			
6/6/2018				1520	469	233
10/2/2018		20.3	38.5			
10/3/2018				1550	600	215
4/2/2019		23.8	35.5			
4/4/2019					528	251
4/5/2019				1520		
9/24/2019		20.7	35.4	1110	382	
9/25/2019						223
3/25/2020			35.1			
3/26/2020		21.6			438	
3/30/2020				1150		223
9/15/2020		21.2	35.3			
9/16/2020	6.9					
9/17/2020					416	254
9/18/2020				1260		
11/10/2020	6.3					
12/15/2020	6.7					
1/19/2021	7.4					
3/10/2021	<1					
3/11/2021		22.7	35.5			
3/16/2021					379	
3/17/2021				1300		250
8/12/2021		17.4	28.6			
8/13/2021	56.1					
8/18/2021				768		
8/19/2021					223	228
2/1/2022	56.3					
2/7/2022		20.6	33			
2/8/2022					360	238
2/9/2022				1190		

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	13.2					
8/10/2022		19.7	34			206
8/11/2022				1200	365	
1/24/2023	10.1					
1/27/2023		22.7	35			
2/1/2023				1060	341	257

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	395					
5/24/2016		834				
7/12/2016	460	930				
9/1/2016	430	890				
10/25/2016	440	950				
12/7/2016	410					
12/8/2016		910				
1/26/2017	440	970				
3/22/2017	460					
3/23/2017		980				
5/25/2017	430	920				
10/4/2017	490	870				
6/5/2018		962				
6/6/2018	520					
10/3/2018	651	1170				
4/4/2019			915			
4/5/2019	642	1030		392	585	
9/25/2019	434	920	767			
9/26/2019					556	
9/27/2019				520		
1/22/2020						1250
3/27/2020				419		
3/31/2020	484	934				
4/1/2020			889		478	1210
6/17/2020			901			1210
9/15/2020		1080				
9/16/2020	467					
9/17/2020				468	490	
9/21/2020			1010			1290
3/17/2021				461	486	
3/18/2021	447	1050	829			1360
8/18/2021	280					740
8/19/2021		934	724	412 (M1)	432	
2/8/2022	364	960	779	449		1220
2/10/2022					430	
8/10/2022	423	946				1010
8/11/2022			910	472	389	
1/27/2023			646			895
1/30/2023	451			445		
2/1/2023		776			438	

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	1100	1160	286	
9/21/2020		1220		
9/23/2020	1080		256	
3/12/2021			237	
3/19/2021		1220		
8/16/2021	987			
8/18/2021		789	207	757
2/8/2022		1190	248	1150
2/9/2022	1050			
8/10/2022	1040		122	
8/11/2022		1020		979
1/30/2023	1120		85.2	
2/1/2023		1190		1110

# Time Series

Constituent: Thallium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.001	<0.001	<0.001	<0.001		
7/11/2016	<0.001	<0.001		<0.001		
7/12/2016			<0.001			
8/30/2016	<0.001	<0.001	<0.001	<0.001		
10/19/2016	<0.001	<0.001	<0.001	<0.001		
12/6/2016	<0.001	<0.001	<0.001	<0.001		
1/24/2017	<0.001	<0.001	<0.001	<0.001		
3/21/2017	<0.001	3E-05 (J)	<0.001	<0.001		
5/22/2017	<0.001	<0.001	<0.001			
5/23/2017				<0.001		
4/2/2018	<0.001	<0.001		<0.001		
4/3/2018			<0.001			
6/4/2018	<0.001	<0.001	<0.001	<0.001		
10/1/2018	<0.001	<0.001	<0.001	<0.001		
3/11/2019				<0.001		
3/12/2019	<0.001	<0.001	<0.001			
4/1/2019			<0.001			
4/2/2019	<0.001	<0.001		<0.001		
9/23/2019	<0.001	<0.001	<0.001			
9/24/2019				<0.001		
3/2/2020	<0.001	<0.001	<0.001	<0.001		
3/25/2020	<0.001	<0.001	<0.001			
3/26/2020				<0.001		
9/15/2020	<0.001	<0.001	<0.001	<0.001		
9/16/2020						<0.001
9/17/2020				<0.001		
11/10/2020						<0.001
11/11/2020				<0.001		
12/15/2020				<0.001		<0.001
1/19/2021						<0.001
1/20/2021					<0.001	
2/8/2021	<0.001			<0.001	<0.001	
2/9/2021		<0.001	<0.001			<0.001
3/10/2021	<0.001			<0.001	<0.001	
3/11/2021		<0.001	<0.001			<0.001
8/11/2021	<0.001					<0.001
8/12/2021		<0.001	<0.001	<0.001	<0.001	
2/1/2022	<0.001	<0.001	<0.001			<0.001
2/7/2022				<0.001	<0.001	
8/2/2022	<0.001	<0.001	<0.001	<0.001		<0.001
8/9/2022					<0.001	
1/23/2023			<0.001	<0.001	<0.001	
1/24/2023	<0.001	<0.001				<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.001				
5/20/2016			<0.001			
5/23/2016				0.000306 (J)	<0.001	<0.001
7/11/2016		<0.001	<0.001			
7/12/2016				0.0003 (J)	<0.001	<0.001
8/30/2016		<0.001	<0.001			
9/1/2016				0.0003 (J)	<0.001	<0.001
10/20/2016		<0.001	<0.001			
10/24/2016				0.0004	<0.001	
10/25/2016						<0.001
12/7/2016				0.0003 (J)	<0.001	<0.001
12/8/2016		<0.001	<0.001			
1/24/2017		<0.001	<0.001			
1/26/2017				0.0003 (J)	<0.001	<0.001
3/21/2017		<0.001	<0.001			
3/22/2017						<0.001
3/23/2017				0.0003 (J)	<0.001	
5/23/2017		<0.001	<0.001			
5/24/2017				0.0003 (J)	<0.001	<0.001
4/3/2018		<0.001	<0.001		<0.001	<0.001
4/4/2018				0.00028 (J)		
6/5/2018		<0.001	<0.001			
6/6/2018				0.00029 (J)	<0.001	<0.001
10/2/2018		<0.001	<0.001			
10/3/2018				0.00029 (J)	<0.001	<0.001
3/12/2019		<0.001	<0.001			
3/14/2019				0.00028 (J)	<0.001	
3/15/2019						<0.001
4/2/2019		<0.001	<0.001			
4/4/2019					<0.001	<0.001
4/5/2019				0.00028 (J)		
9/24/2019		<0.001	<0.001	0.0003 (J)	<0.001	
9/25/2019						<0.001
3/2/2020		<0.001	<0.001			
3/3/2020				0.00026 (J)	<0.001	<0.001
3/25/2020			5.7E-05 (J)			
3/26/2020		<0.001			<0.001	
3/30/2020				0.00028 (J)		<0.001
9/15/2020		<0.001	<0.001			
9/16/2020	<0.001					
9/17/2020					<0.001	<0.001
9/18/2020				0.00028 (J)		
11/10/2020	<0.001					
12/15/2020	<0.001					
1/19/2021	<0.001					
2/9/2021	<0.001	<0.001	<0.001			
2/10/2021						<0.001
2/11/2021				0.00026 (J)		
2/12/2021					<0.001	
3/10/2021	<0.001					
3/11/2021		<0.001	<0.001			
3/16/2021					<0.001	

# Time Series

Constituent: Thallium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.00034 (J)		<0.001
8/12/2021		<0.001	<0.001			
8/13/2021	<0.001					
8/18/2021				0.00027 (J)		
8/19/2021					<0.001	<0.001
2/1/2022	<0.001					
2/7/2022		<0.001	<0.001			
2/8/2022					<0.001	<0.001
2/9/2022				0.00025 (J)		
8/2/2022	<0.001					
8/10/2022		<0.001	<0.001			<0.001
8/11/2022				0.00024 (J)	<0.001	
1/24/2023	<0.001					
1/27/2023		<0.001	<0.001			
2/1/2023				0.00047 (J)	0.00022 (J)	<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.001					
5/24/2016		<0.001				
7/12/2016	0.0001 (J)	0.0002 (J)				
9/1/2016	<0.001	<0.001				
10/25/2016	<0.001	<0.001				
12/7/2016	<0.001					
12/8/2016		<0.001				
1/26/2017	<0.001	<0.001				
3/22/2017	0.0001 (J)					
3/23/2017		0.0002 (J)				
5/25/2017	0.0001 (J)	0.0002 (J)				
4/3/2018	<0.001	0.00014 (J)				
6/5/2018		0.00016 (J)				
6/6/2018	<0.001					
10/3/2018	<0.001	<0.001				
3/14/2019		<0.001			<0.001	
3/15/2019	<0.001		<0.001	<0.001		
4/4/2019			<0.001			
4/5/2019	0.00013 (J)	0.00014 (J)		<0.001	<0.001	
9/25/2019	0.00012 (J)	0.00019 (J)	<0.001			
9/26/2019					<0.001	
9/27/2019				<0.001		
3/2/2020				<0.001	<0.001	
3/3/2020	0.00011 (J)	0.00013 (J)	<0.001			
3/27/2020				<0.001		
3/31/2020	0.00014 (J)	0.00015 (J)				
4/1/2020			<0.001		<0.001	0.00029 (J)
6/17/2020			<0.001			0.00028 (J)
9/15/2020		0.00016 (J)				
9/16/2020	<0.001					
9/17/2020				<0.001	<0.001	
9/21/2020			<0.001			0.00029 (J)
2/11/2021	<0.001	<0.001	<0.001			
2/12/2021					<0.001	0.00025 (J)
2/15/2021				<0.001		
3/17/2021				<0.001	<0.001	
3/18/2021	<0.001	0.00016 (J)	<0.001			0.00031 (J)
8/18/2021	<0.001					0.0004 (J)
8/19/2021		0.0002 (J)	<0.001	<0.001	<0.001	
2/8/2022	<0.001	<0.001	<0.001	<0.001		0.00025 (J)
2/10/2022					<0.001	
8/10/2022	<0.001	<0.001				<0.005
8/11/2022			<0.001	<0.001	<0.001	
1/27/2023			<0.001			0.00021 (J)
1/30/2023	0.00025 (J)			<0.001		
2/1/2023		<0.001			<0.001	



# Time Series

Constituent: Thallium (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.00015 (J)	0.00013 (J)	<0.001	
9/21/2020		<0.001		
9/23/2020	<0.001		<0.001	
2/11/2021			<0.001	
2/15/2021		<0.001		
3/12/2021			<0.001	
3/19/2021		<0.001		
8/16/2021	<0.001			
8/18/2021		<0.001	<0.001	<0.001
2/8/2022		<0.001	<0.001	<0.001
2/9/2022	<0.001			
8/10/2022	<0.001		<0.001	
8/11/2022		<0.001		<0.001
1/30/2023	<0.001		<0.001	
2/1/2023		<0.001		<0.001

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	421	143	267	165		
7/11/2016	363	125		266		
7/12/2016			249			
8/30/2016	330	168	254	292		
10/19/2016	380	176	357	338		
12/6/2016	377	145	285	356		
1/24/2017	342	129	300	131		
3/21/2017	340	103	288	132		
5/22/2017	338	92	263			
5/23/2017				183		
10/3/2017	343	127	300	161		
6/4/2018	415	140	266	240		
10/1/2018	354	135	291	106		
4/1/2019			284			
4/2/2019	452	133		230		
9/23/2019	442	129	268			
9/24/2019				131		
3/25/2020	496	138	284			
3/26/2020				69		
9/15/2020	265	124	258	93		
9/16/2020						272
9/17/2020				188		
11/10/2020						307
11/11/2020				175		
12/15/2020				193		289
1/19/2021						270
1/20/2021				158		
3/10/2021	348			53	163	
3/11/2021		169	267			279
8/11/2021	366					277
8/12/2021		118	265	55	179	
2/1/2022	270	156	350			156
2/7/2022				54	190	
8/2/2022	400	196	287	48		278
8/9/2022					182	
1/23/2023			293	128	168	
1/24/2023	369	164				271

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		168				
5/20/2016			223			
5/23/2016				4130	1270	570
7/11/2016		158	225			
7/12/2016				3140	1100	585
8/30/2016		141	232			
9/1/2016				3200	1180	625
10/20/2016		99	225			
10/24/2016				2920	1090	
10/25/2016						563
12/7/2016				2740	1040	561
12/8/2016		116	235			
1/24/2017		156	272			
1/26/2017				3080	1260	608
3/21/2017		144	222			
3/22/2017						599
3/23/2017				3060	1360	
5/23/2017		134	231			
5/24/2017				3140	1320	598
10/3/2017		147	243			
10/4/2017				3210	1340	626
6/5/2018		152	235			
6/6/2018				2620	1120	678
10/2/2018		146	228			
10/3/2018				2430	1140	700
4/2/2019		144	238			
4/4/2019					926	704
4/5/2019				2310		
9/24/2019		133	222	2470	1140	
9/25/2019						813
3/25/2020			240			
3/26/2020		104			1000	
3/30/2020				2590		787
9/15/2020		116	217			
9/16/2020	270					
9/17/2020					956	804
9/18/2020				2440		
11/10/2020	287					
12/15/2020	295					
1/19/2021	278					
3/10/2021	289					
3/11/2021		118	215			
3/16/2021					92	
3/17/2021				1640		768
8/12/2021		158	229			
8/13/2021	436					
8/18/2021				2350		
8/19/2021					958	816
2/1/2022	444					
2/7/2022		135	224			
2/8/2022					866	852
2/9/2022				2310		

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	311					
8/10/2022		134	217			894
8/11/2022				1060	940	
1/24/2023	363					
1/27/2023		182	229			
2/1/2023				1950	892	1030

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	1010					
5/24/2016		1900				
7/12/2016	976	1950				
9/1/2016	1060	2000				
10/25/2016	<25	1870				
12/7/2016	866					
12/8/2016		1930				
1/26/2017	1000	1950				
3/22/2017	1080					
3/23/2017		2080				
5/25/2017	1080	1970				
10/4/2017	1210	2200				
6/5/2018		1880				
6/6/2018	1180					
10/3/2018	1250	2180				
4/4/2019			1800			
4/5/2019	1260	1610		890	1400	
9/25/2019	1280	1960	1970			
9/26/2019					1400	
9/27/2019				1110		
1/22/2020						2310
3/27/2020				1100		
3/31/2020	1310	1860				
4/1/2020			1940		1530	2590
6/17/2020			2100			2540
9/15/2020		1890				
9/16/2020	1220					
9/17/2020				1090	1360	
9/21/2020			2060			2340
3/17/2021				998	990	
3/18/2021	1020	1390	1390			1790
8/18/2021	1290					3690
8/19/2021		1750	1920	1030	1440	
2/8/2022	1160	1770	1810	1070		2480
2/10/2022					1260	
8/10/2022	1390	1890				2050
8/11/2022			356	960	2700	
1/27/2023			1420			1570
1/30/2023	1320			961		
2/1/2023		1430			1320	

# Time Series

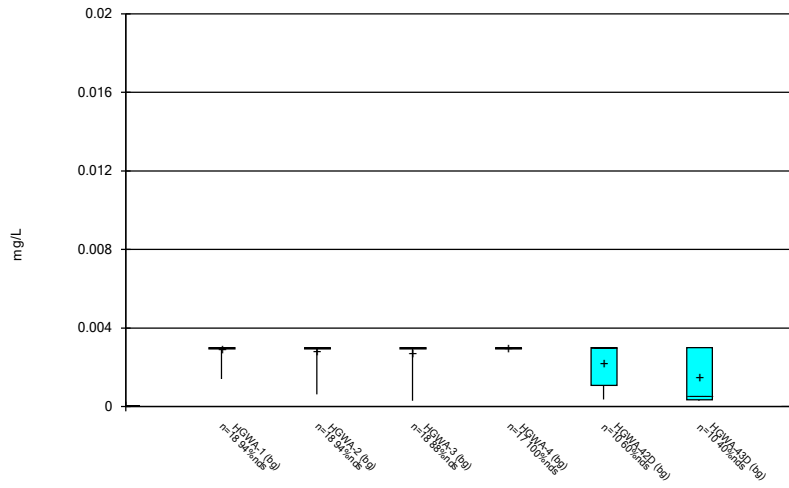
Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	2320	2310	888	
9/21/2020		2210		
9/23/2020	2430		894	
3/12/2021			890	
3/19/2021		1690		
8/16/2021	2340			
8/18/2021		2390	950	2610
2/8/2022		2410	882	2430
2/9/2022	2260			
8/10/2022	2310		2770	
8/11/2022		1070		2080
1/30/2023	2230		226	
2/1/2023		2410		2090

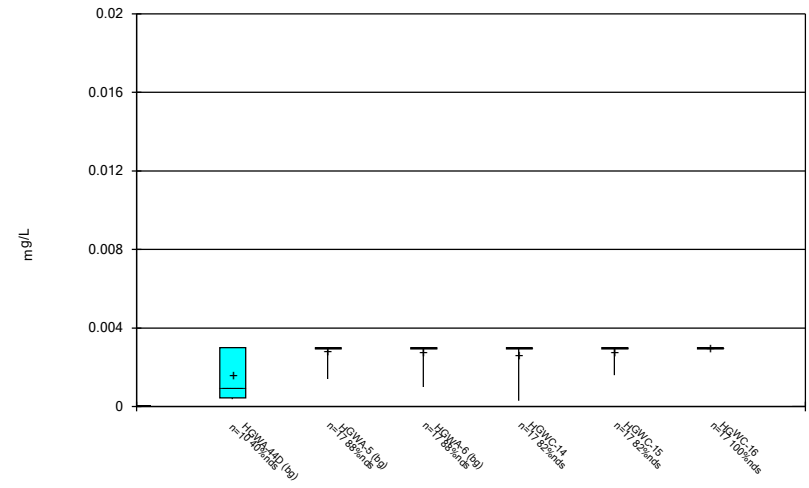
FIGURE B.

Box & Whiskers Plot



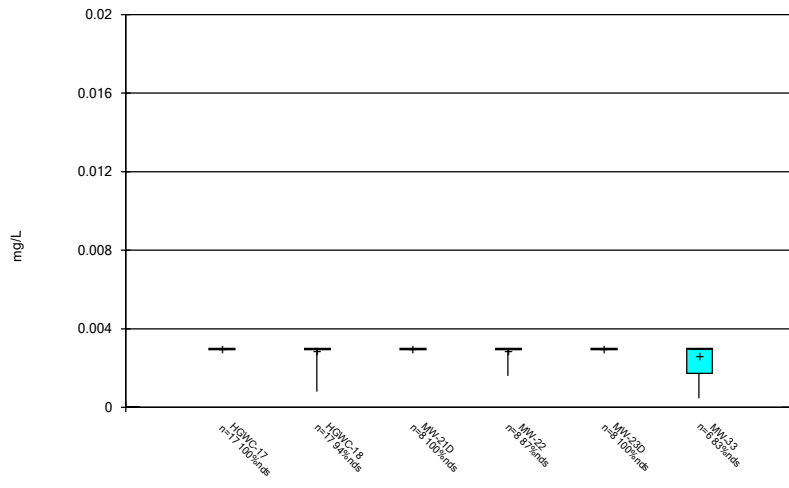
Constituent: Antimony Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



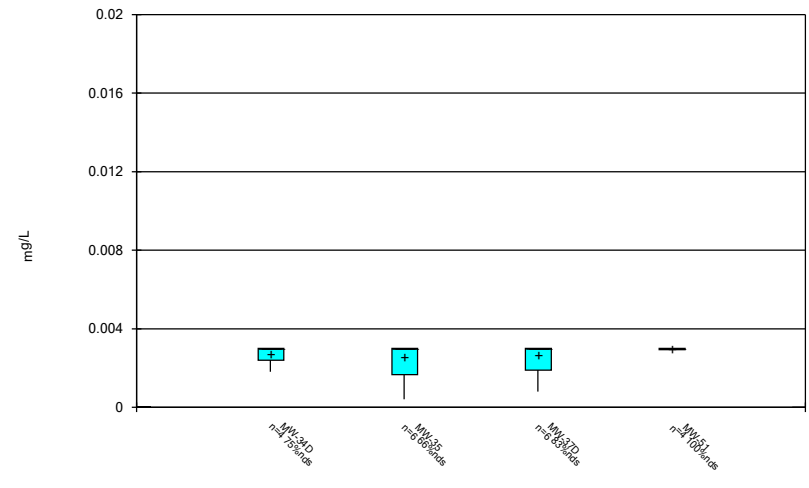
Constituent: Antimony Analysis Run 5/16/2023 2:06 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

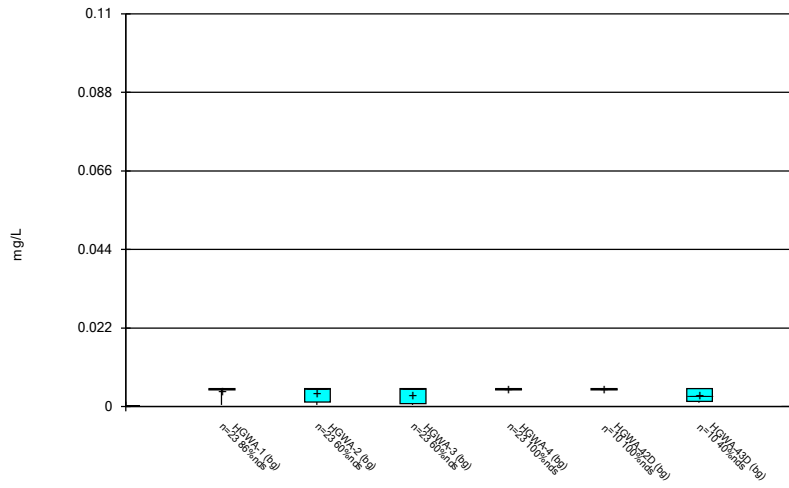
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

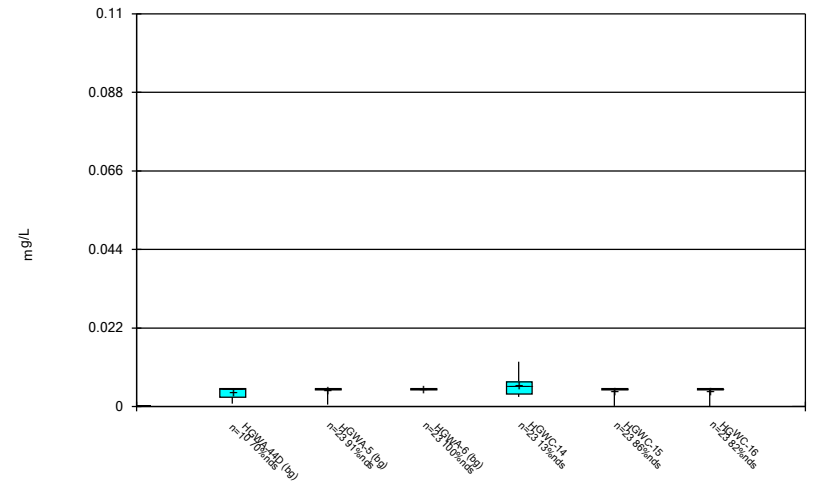


Box & Whiskers Plot



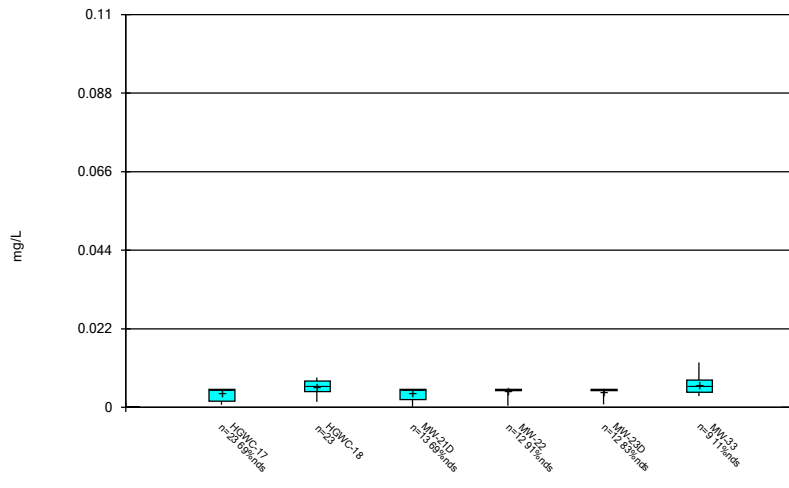
Constituent: Arsenic Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



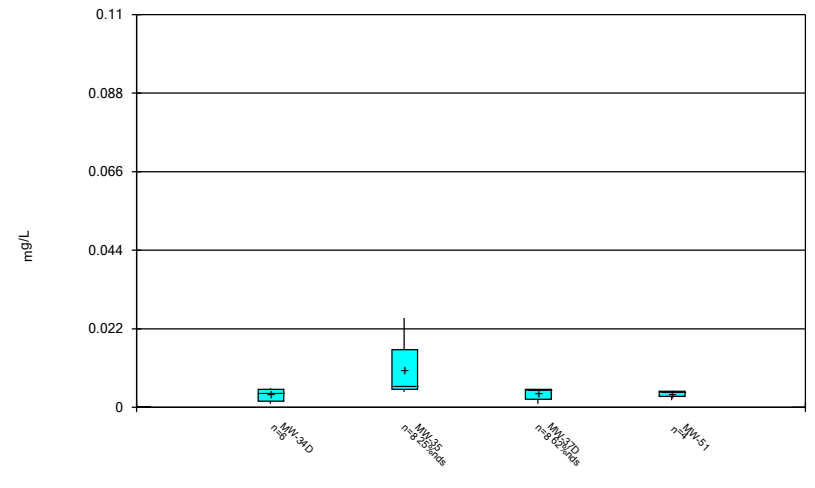
Constituent: Arsenic Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



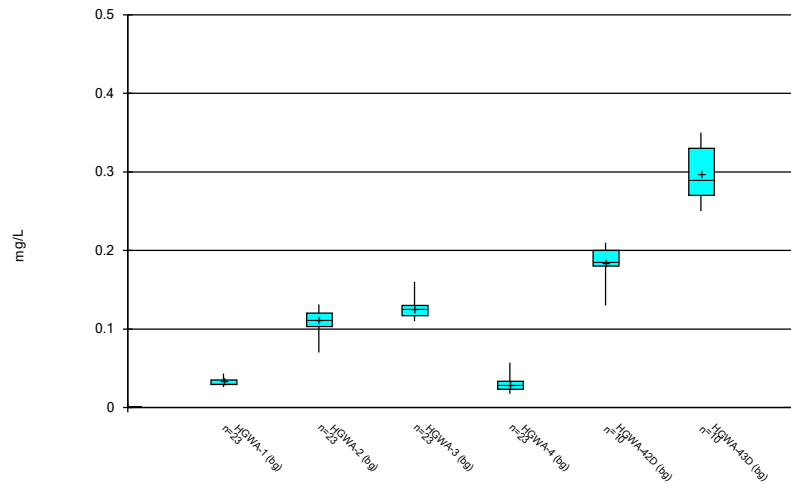
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



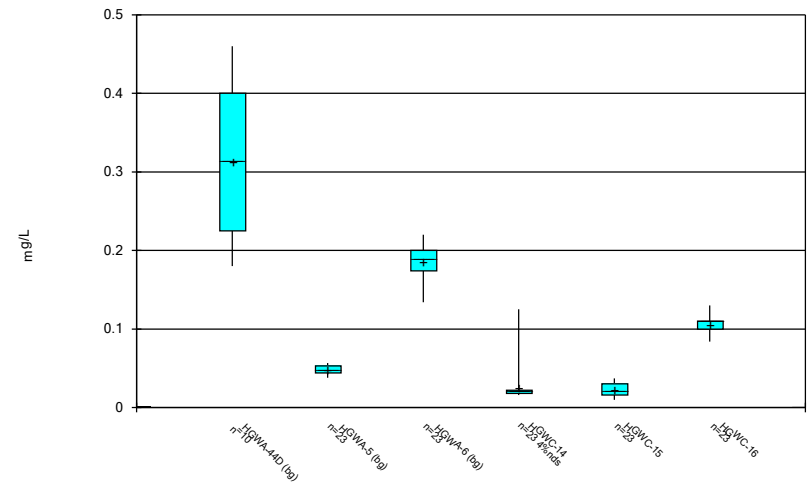
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



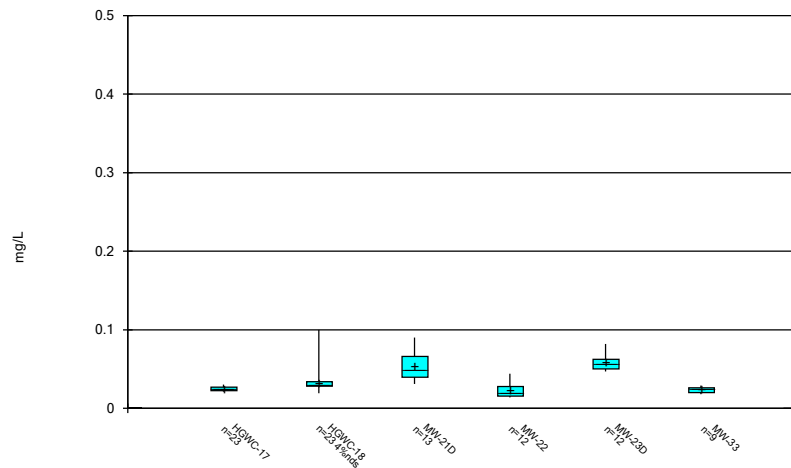
Constituent: Barium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



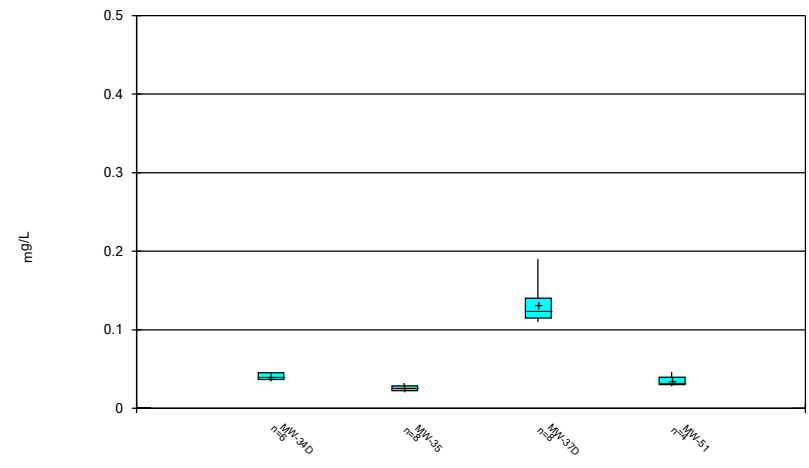
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



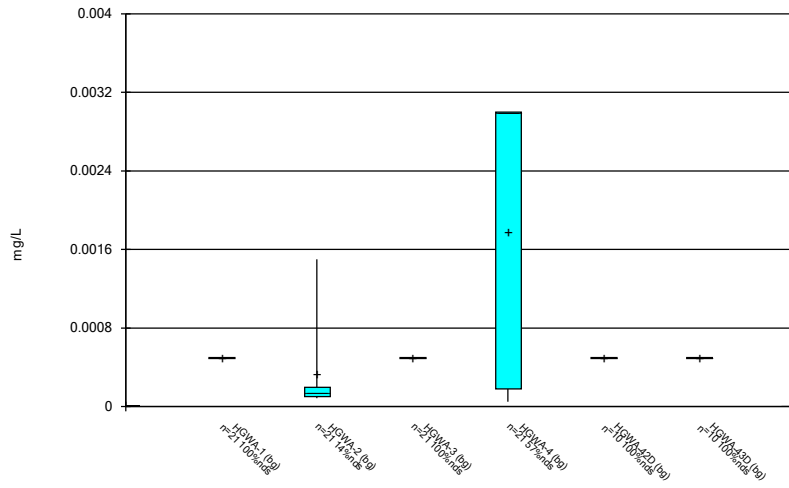
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



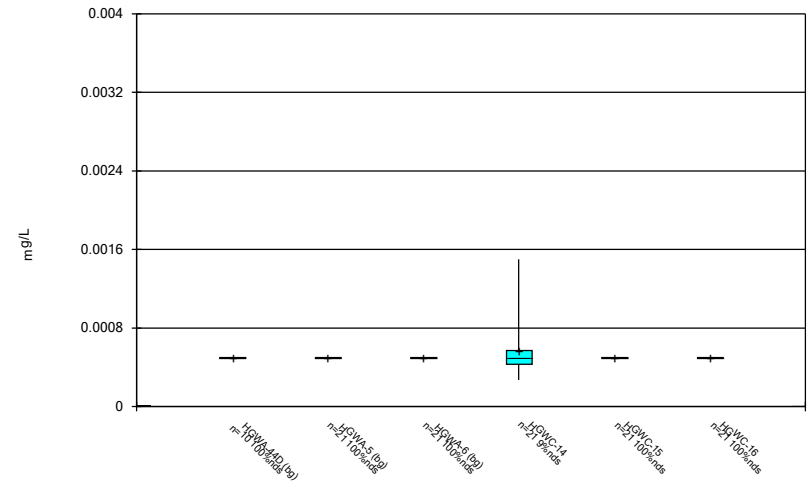
Constituent: Barium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



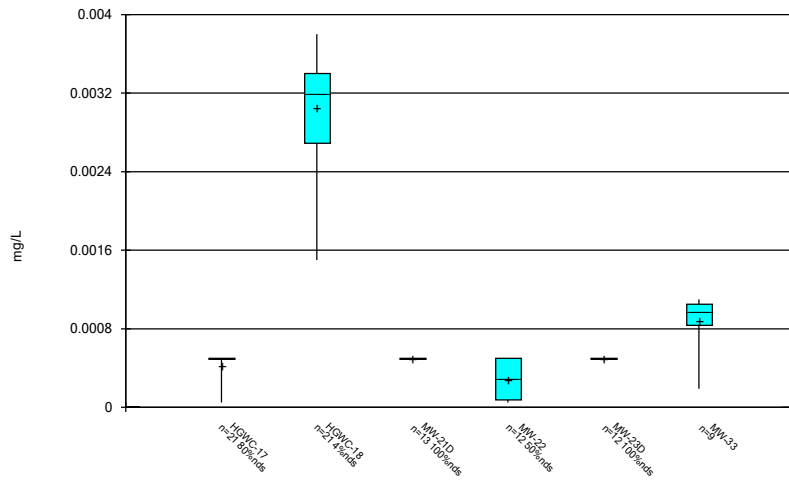
Constituent: Beryllium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



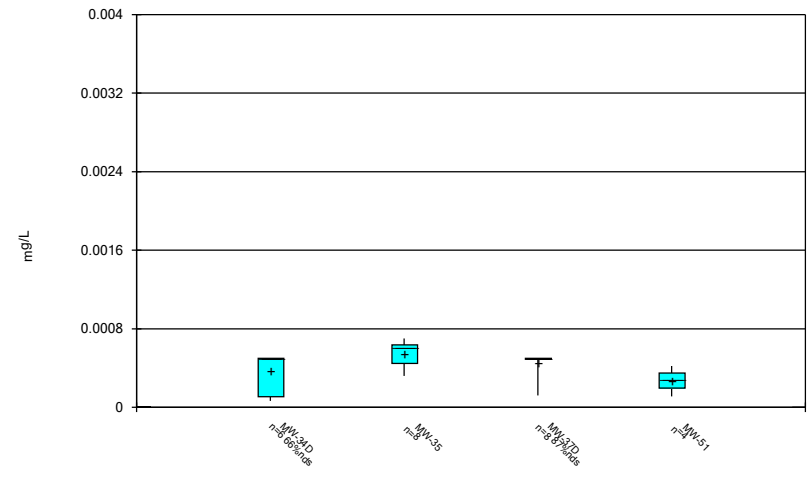
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



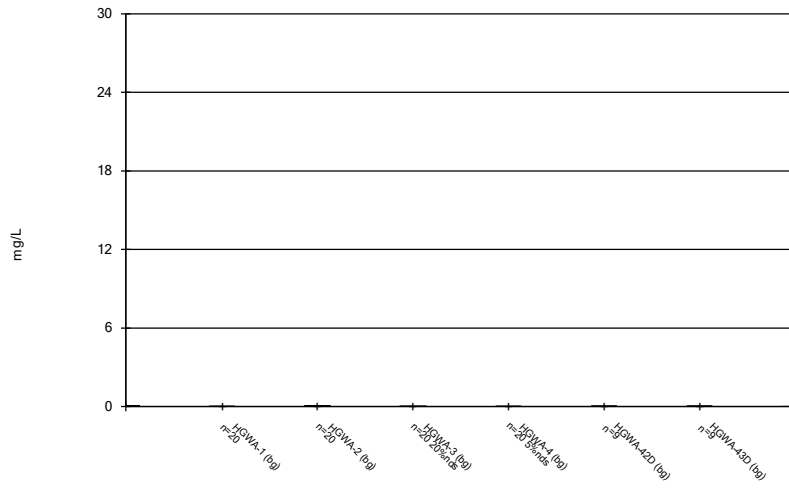
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



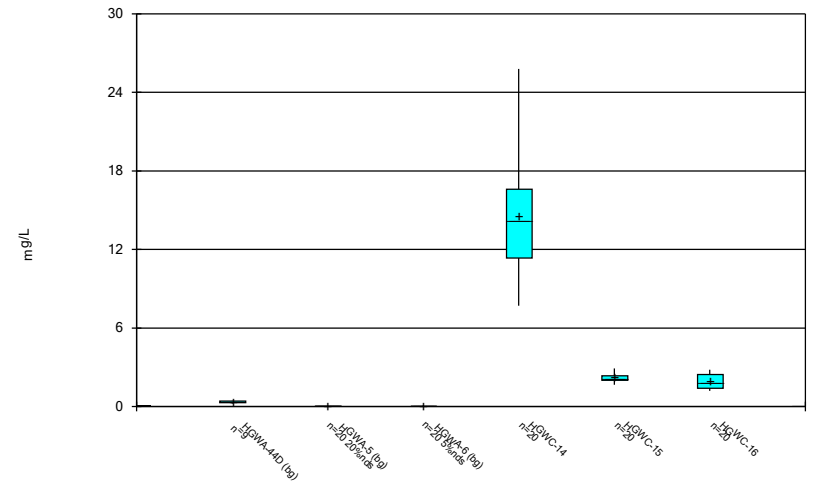
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



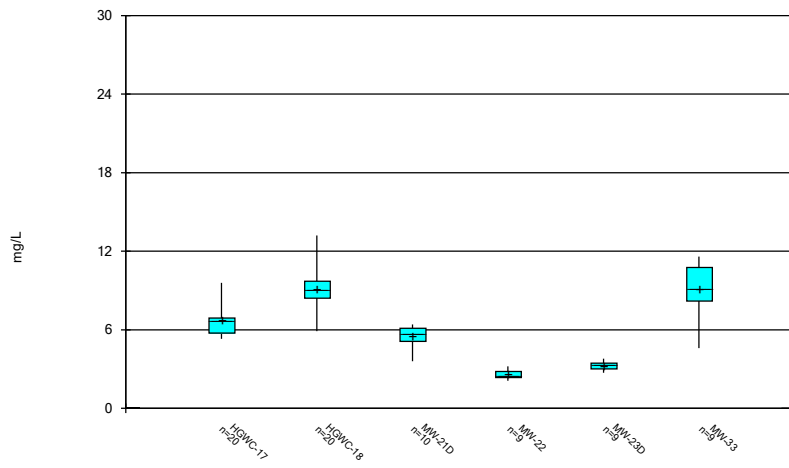
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



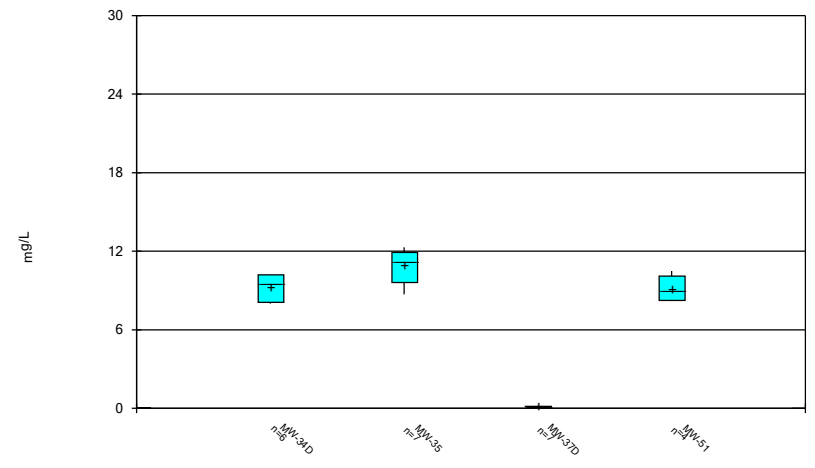
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



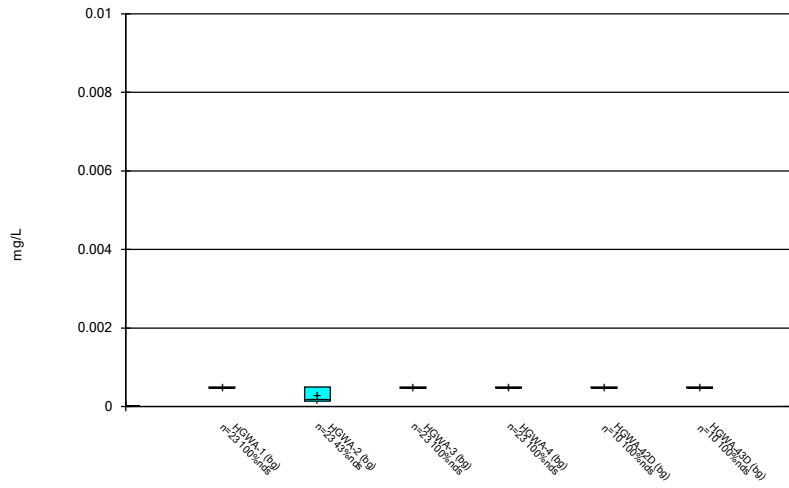
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



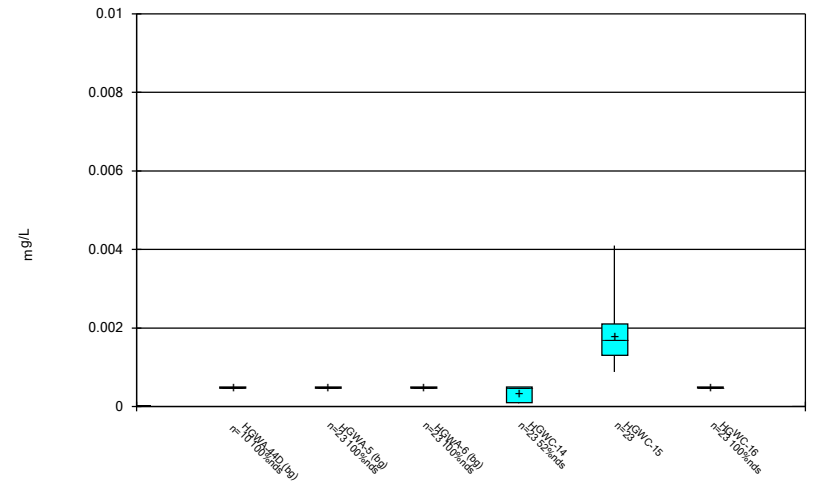
Constituent: Boron Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



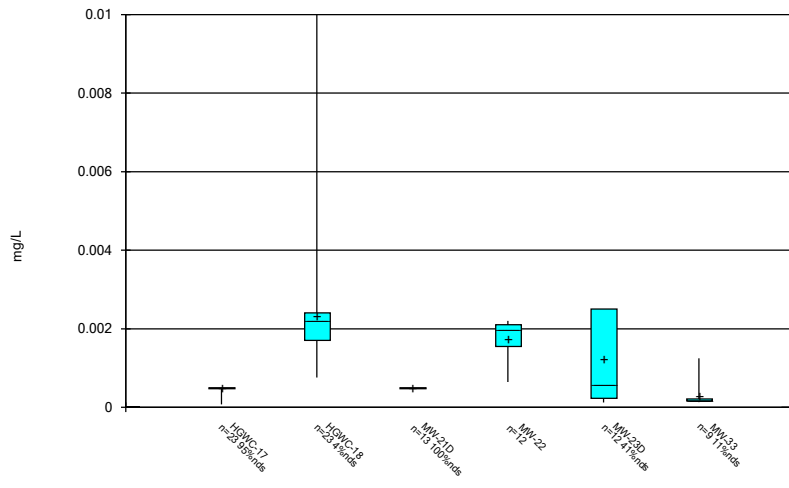
Constituent: Cadmium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



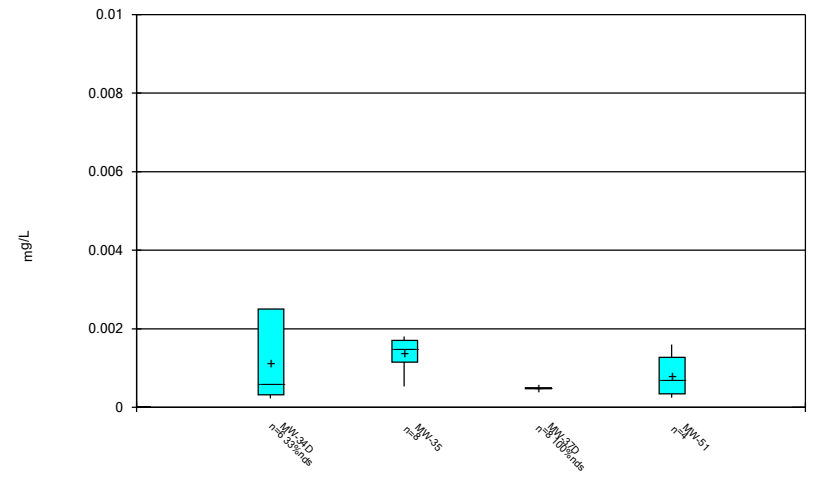
Constituent: Cadmium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



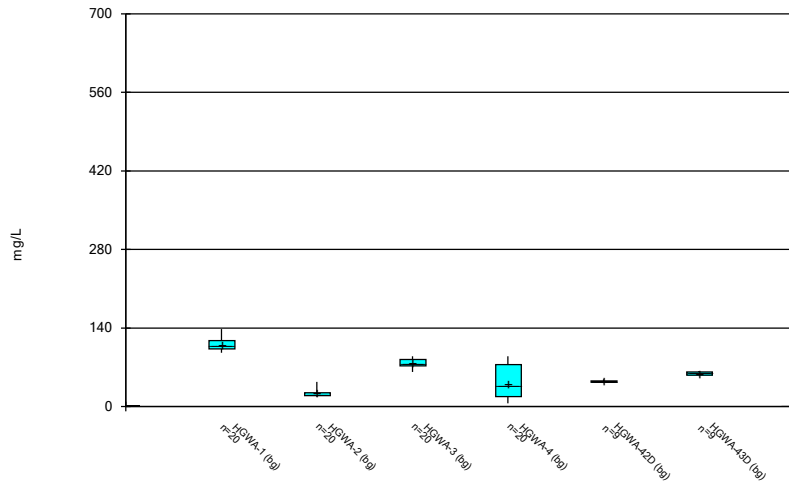
Constituent: Cadmium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



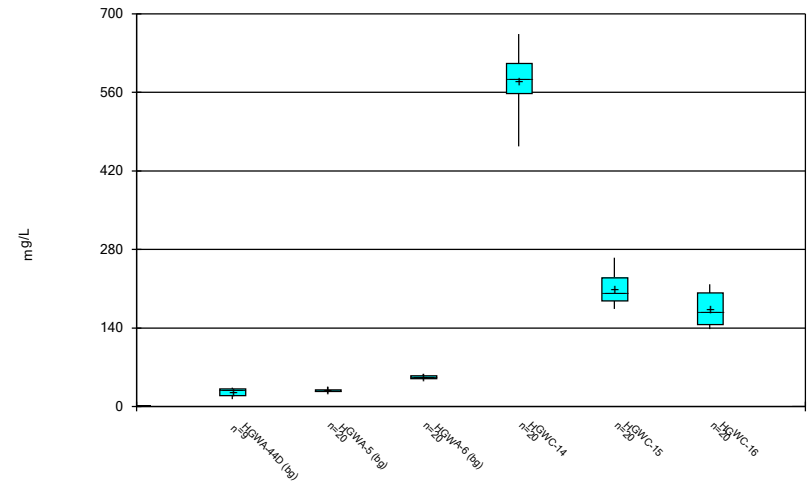
Constituent: Cadmium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



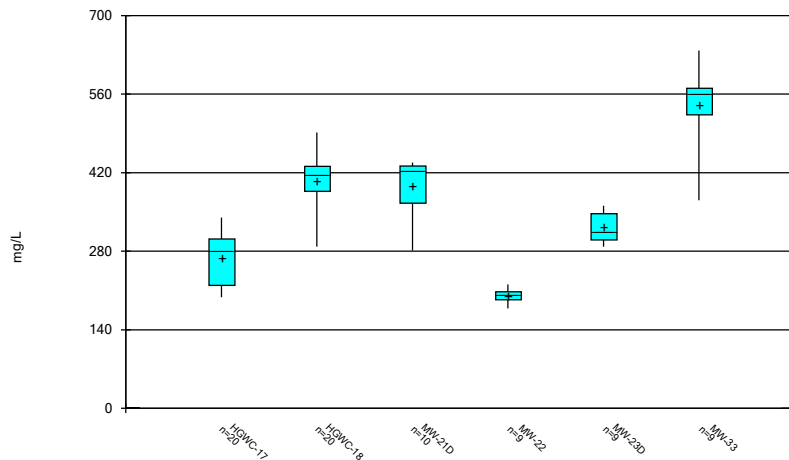
Constituent: Calcium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



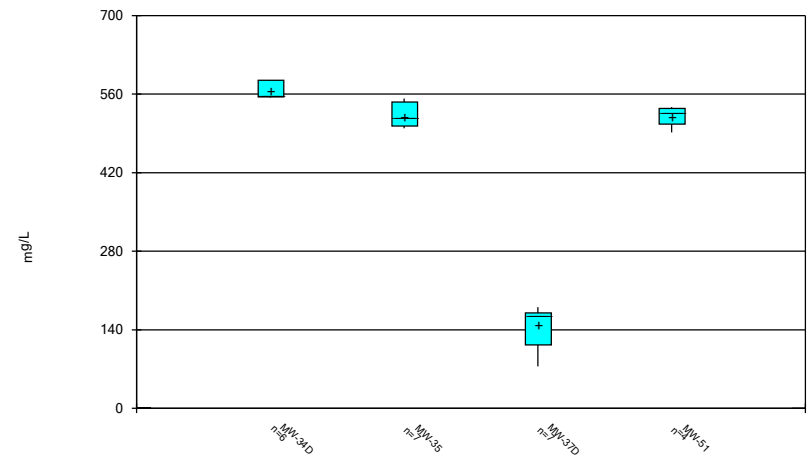
Constituent: Calcium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



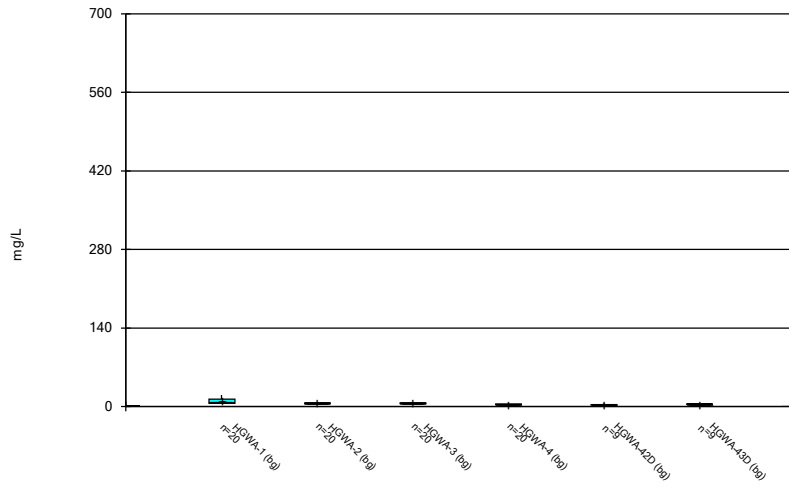
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



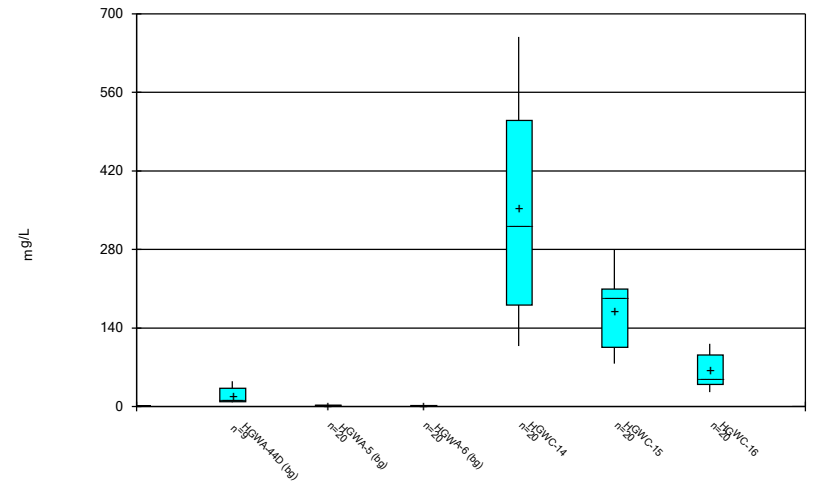
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



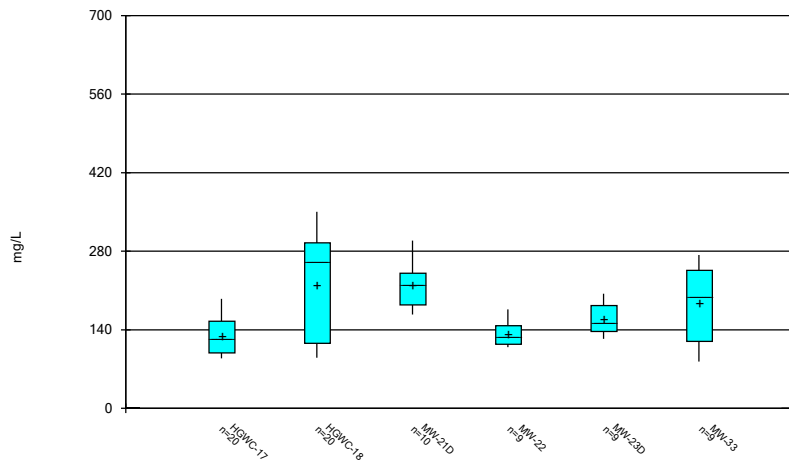
Constituent: Chloride Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



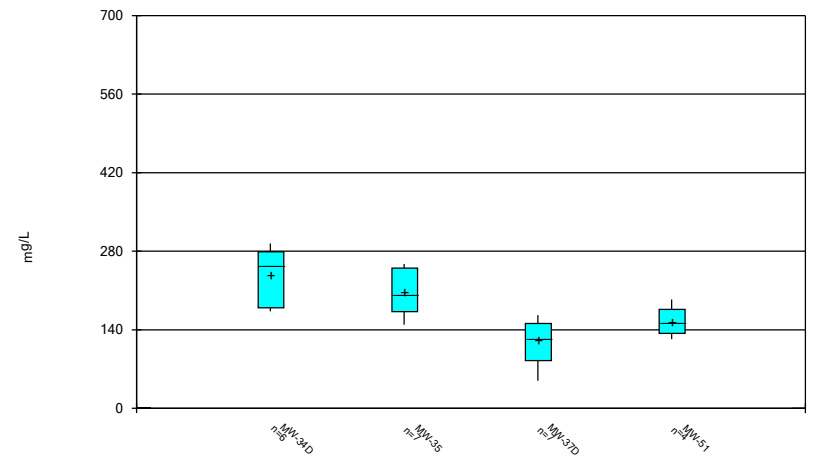
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



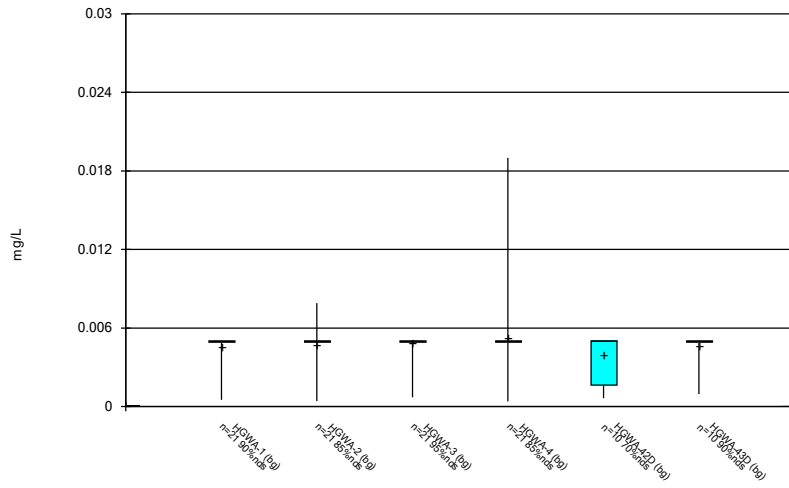
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



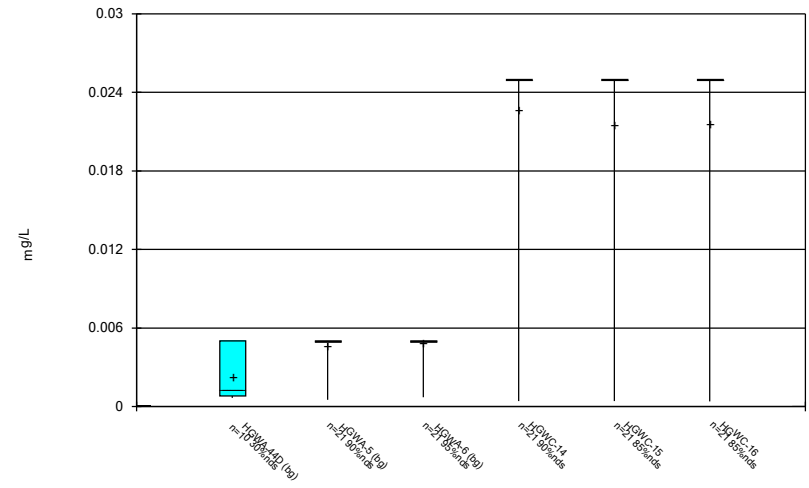
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



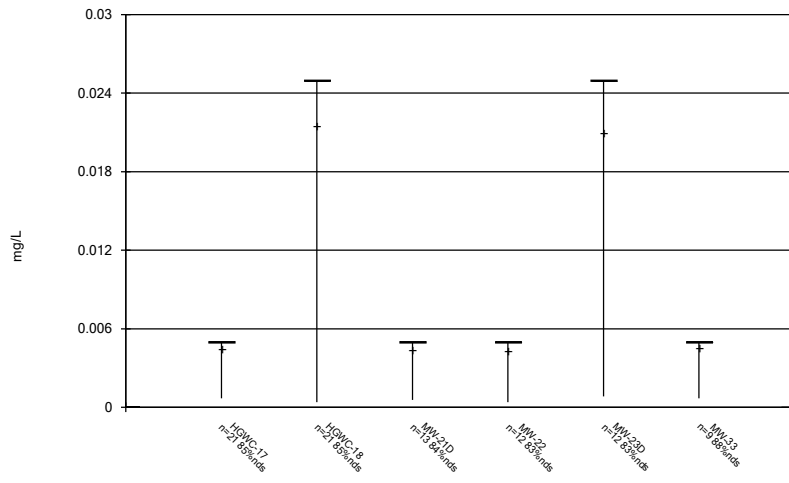
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



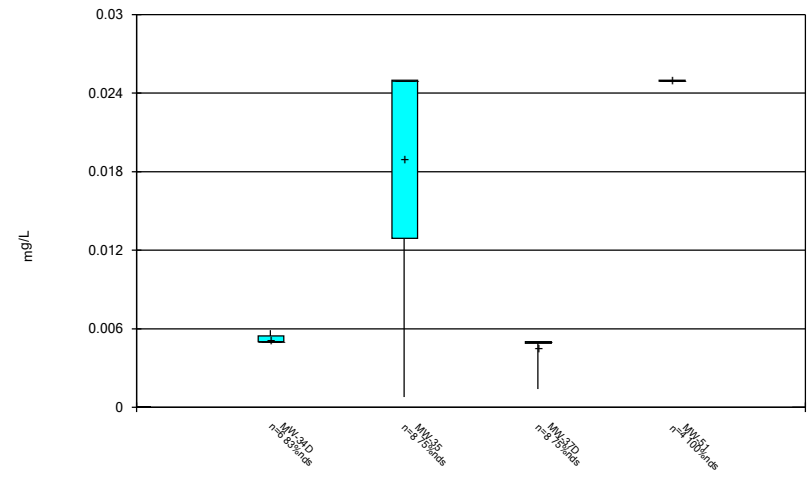
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



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 Plant Hammond Client: Southern Company Data: Hammond AP-2

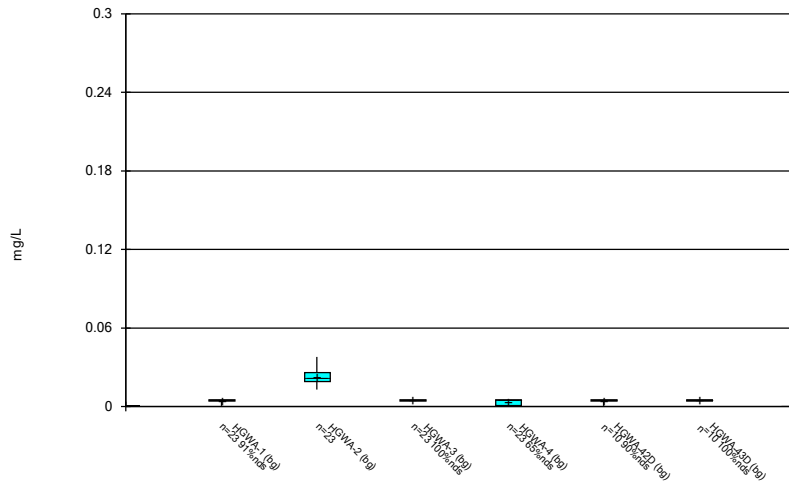
### Box & Whiskers Plot



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 Plant Hammond Client: Southern Company Data: Hammond AP-2

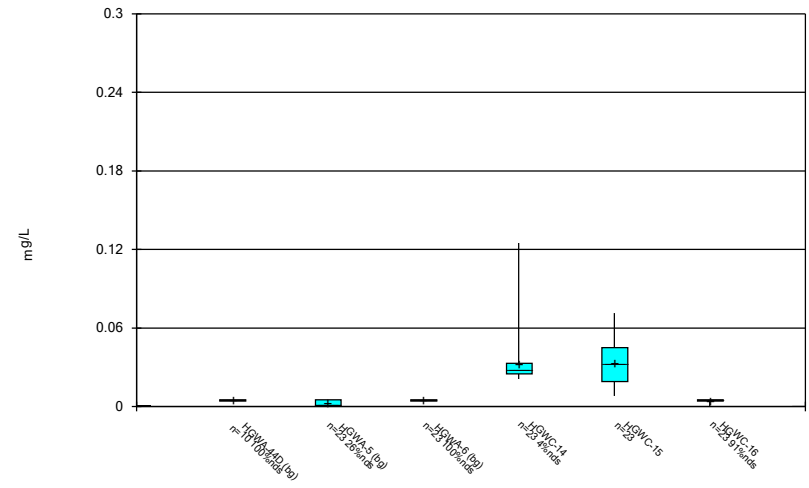


### Box & Whiskers Plot



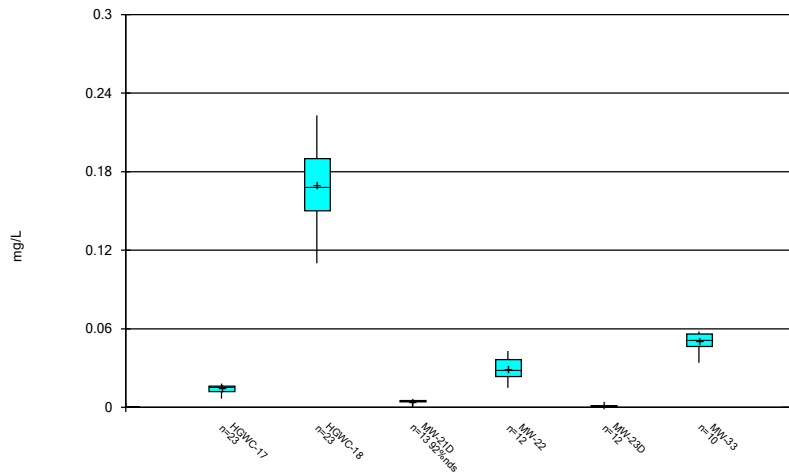
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



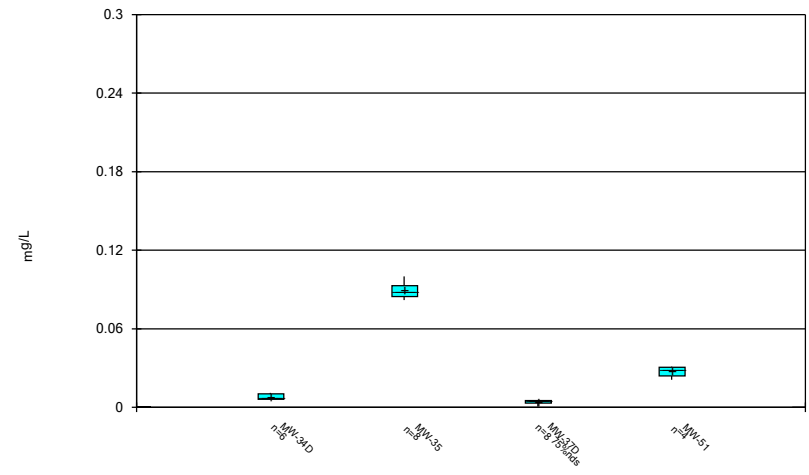
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



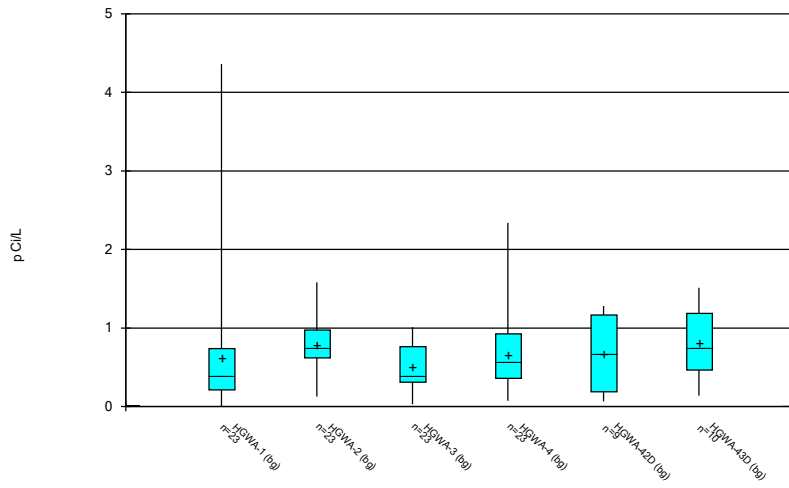
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### Box & Whiskers Plot



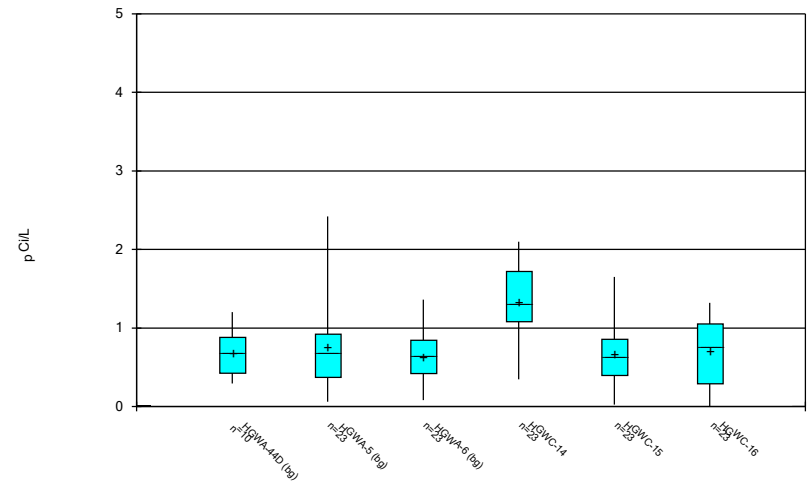
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



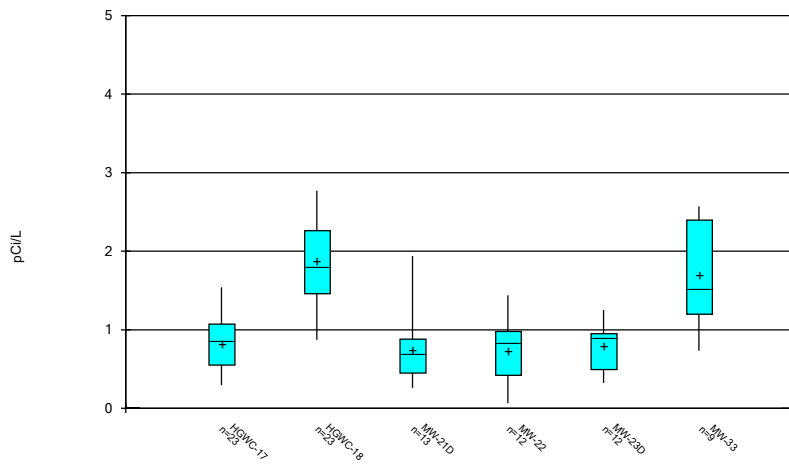
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



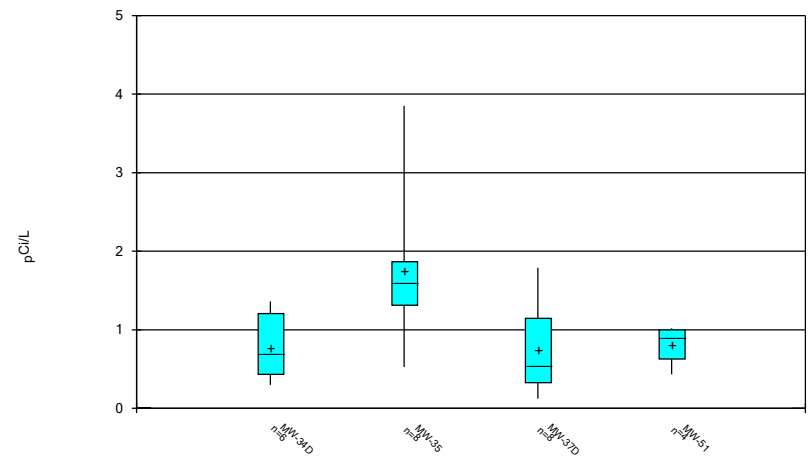
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



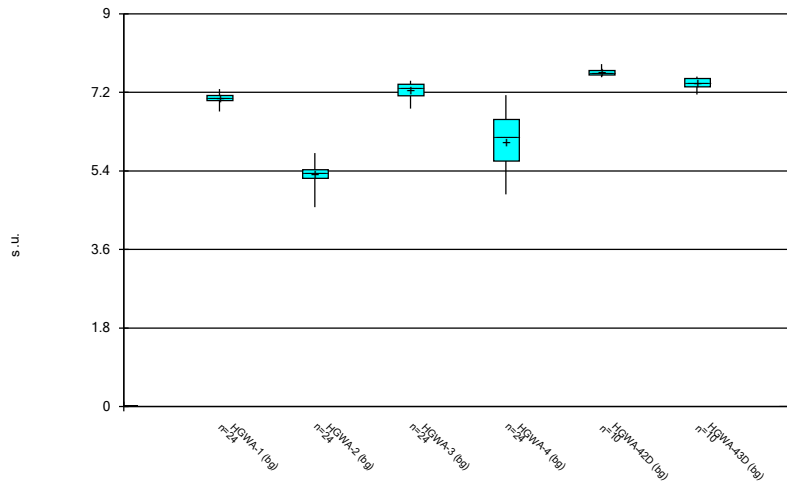
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



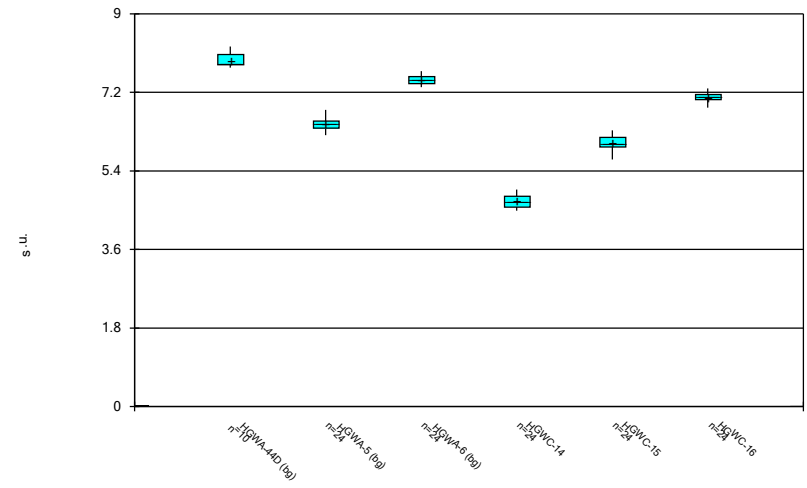
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



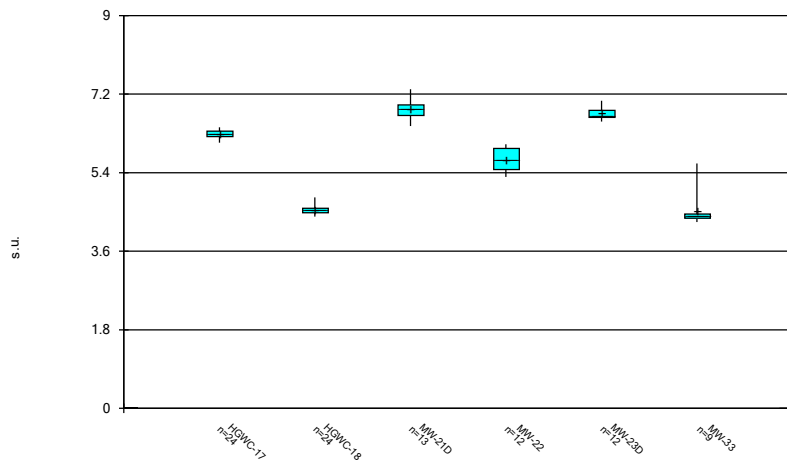
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



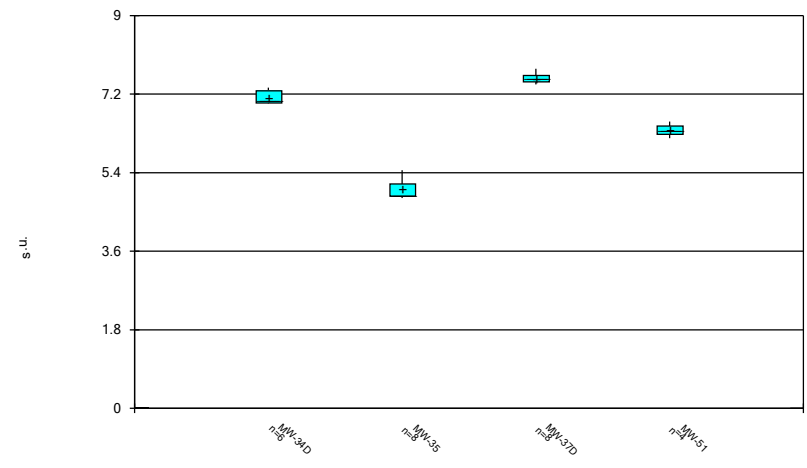
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



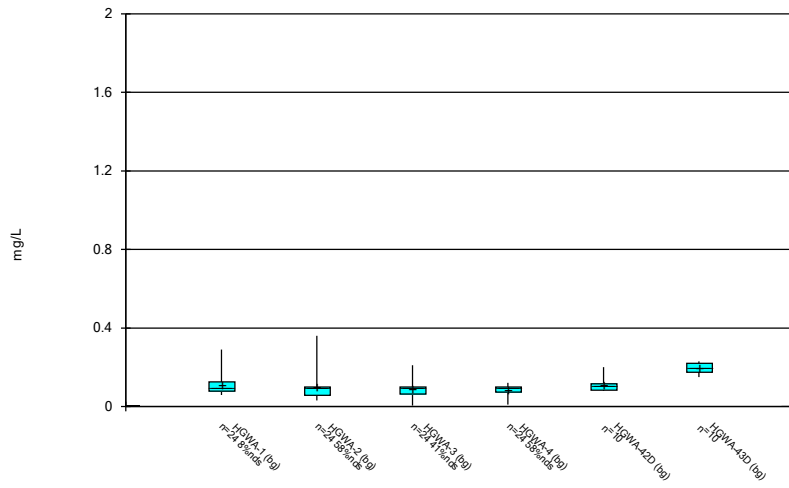
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



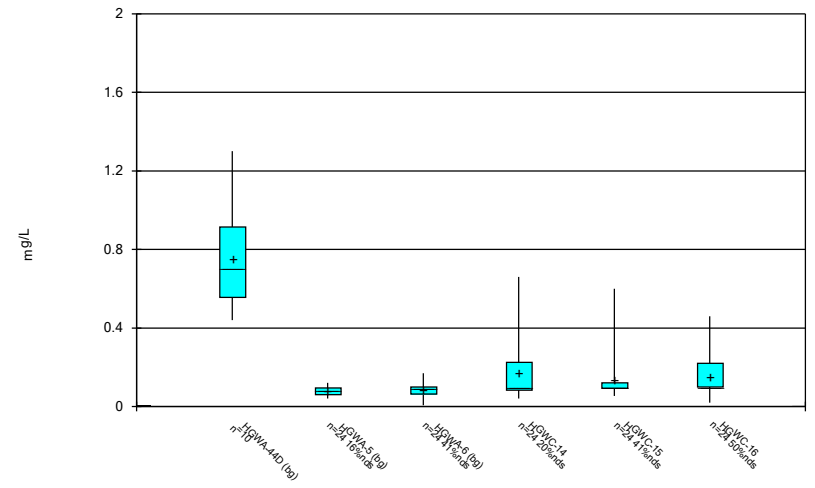
Constituent: Field pH Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



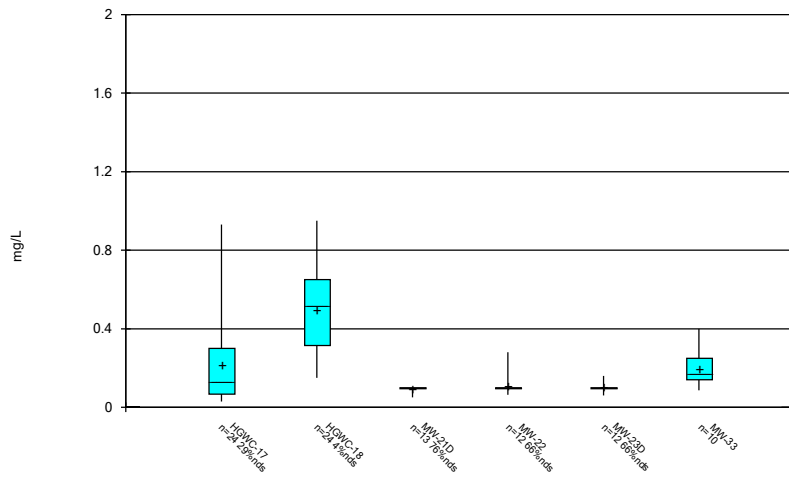
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



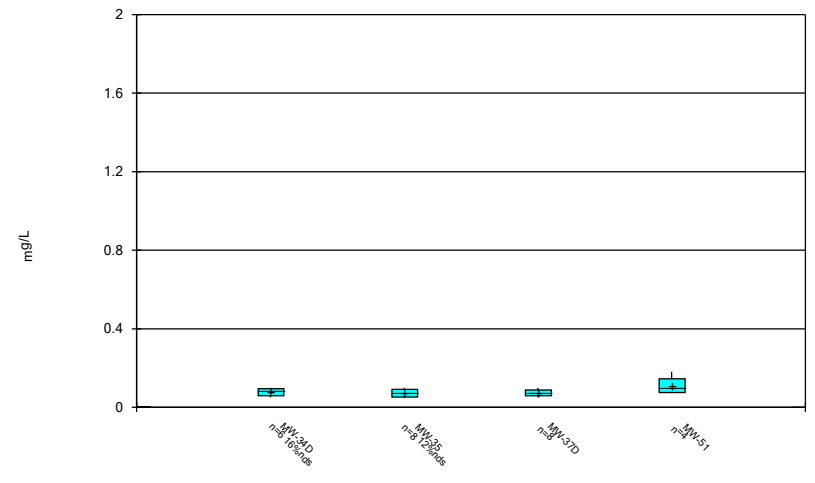
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



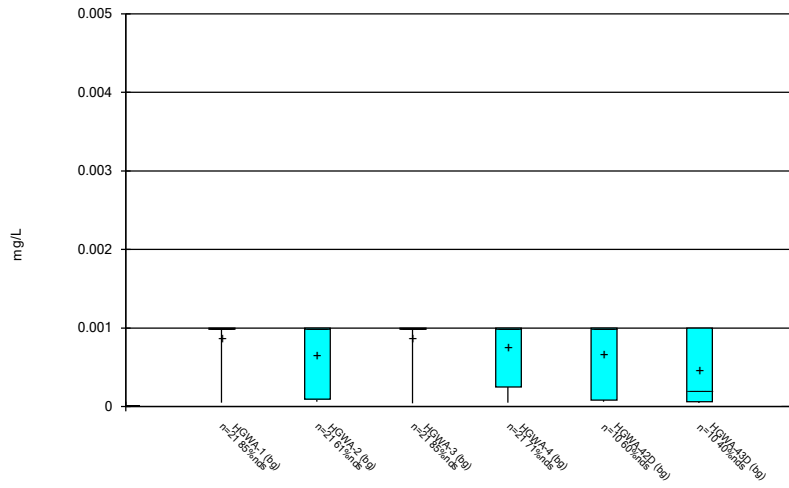
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



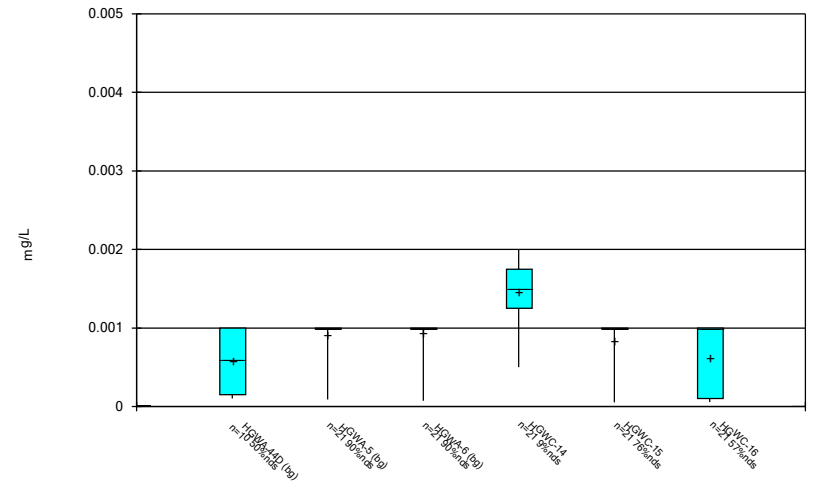
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Box & Whiskers Plot



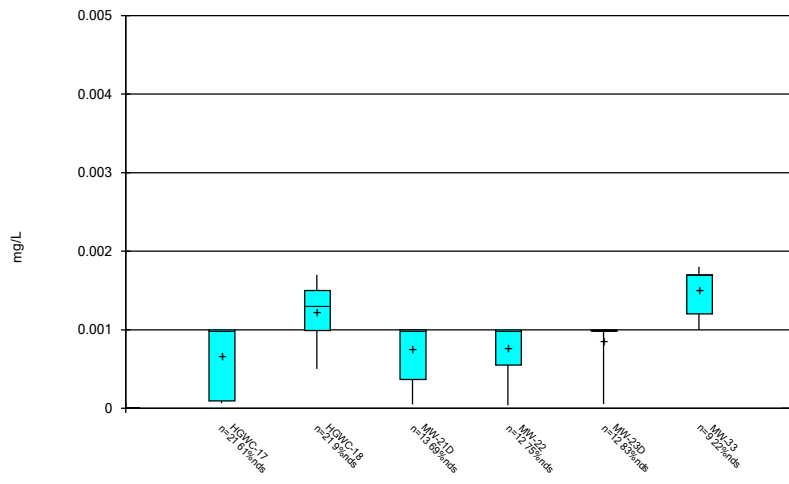
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Box & Whiskers Plot



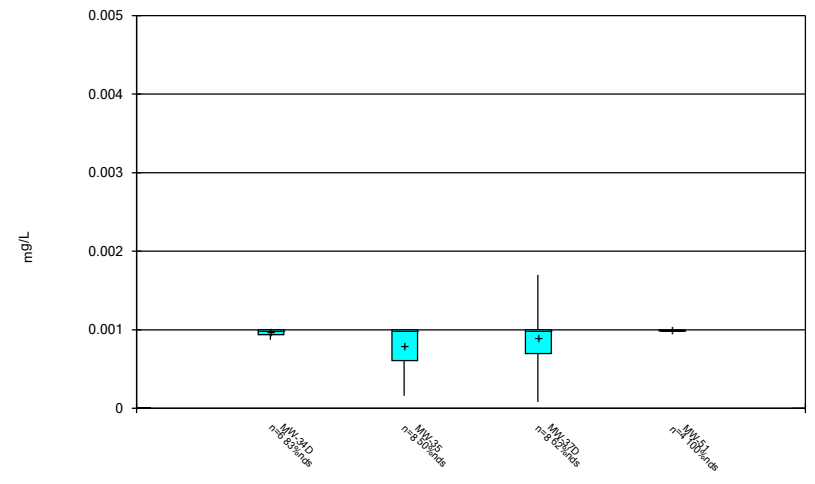
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Box & Whiskers Plot



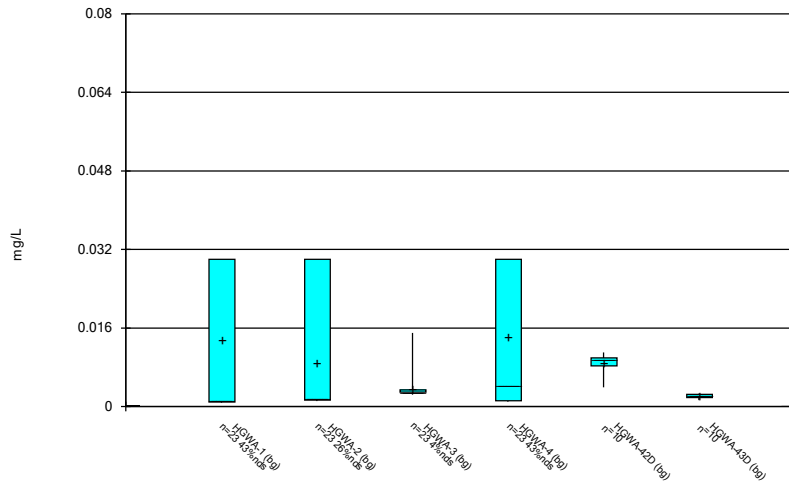
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Box & Whiskers Plot



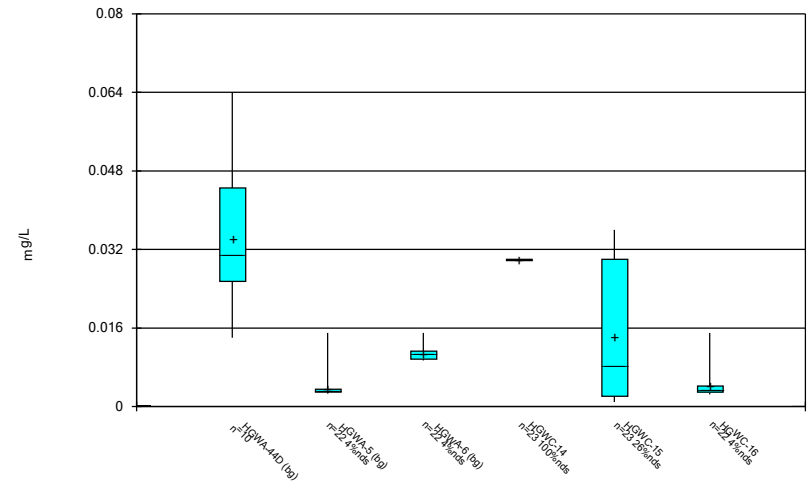
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Box & Whiskers Plot



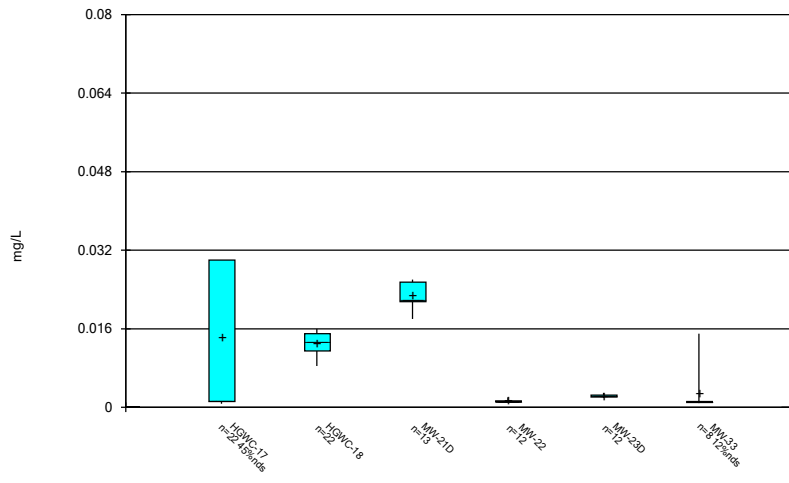
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



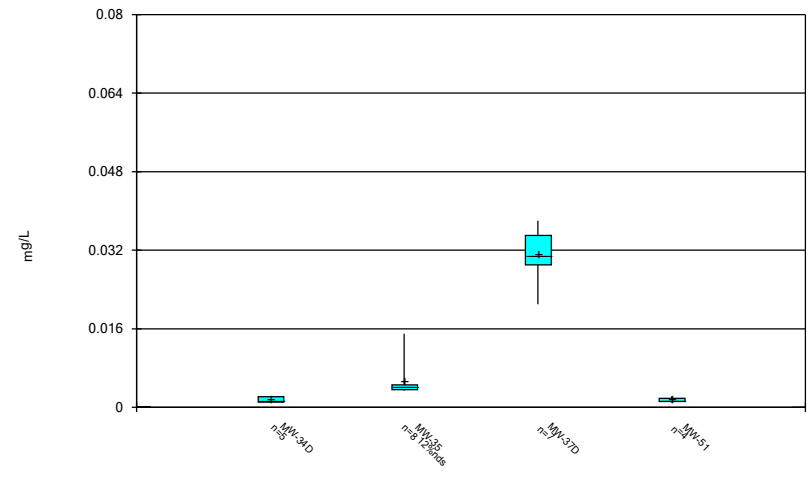
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Box & Whiskers Plot



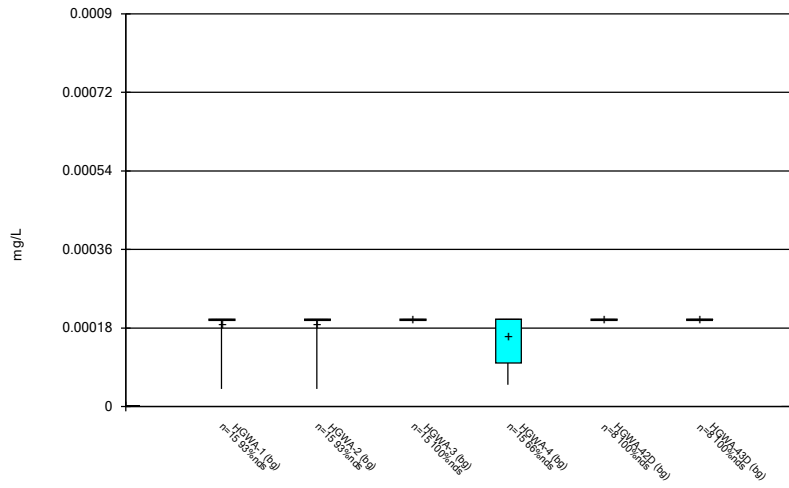
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Box & Whiskers Plot



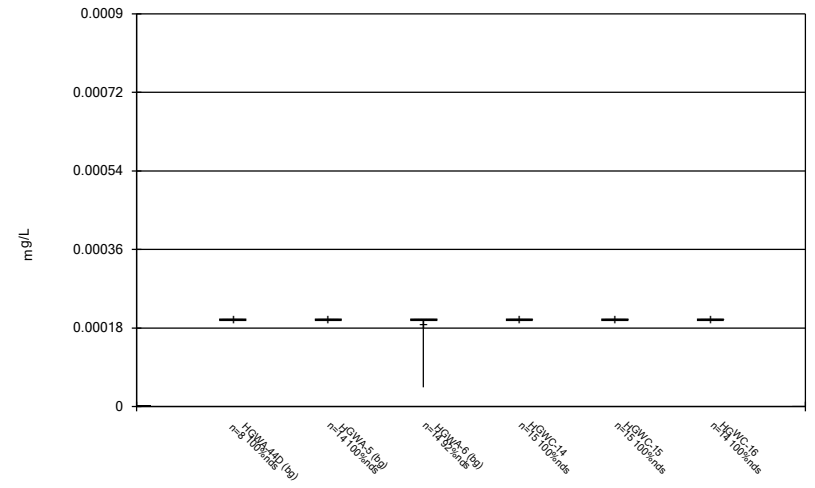
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



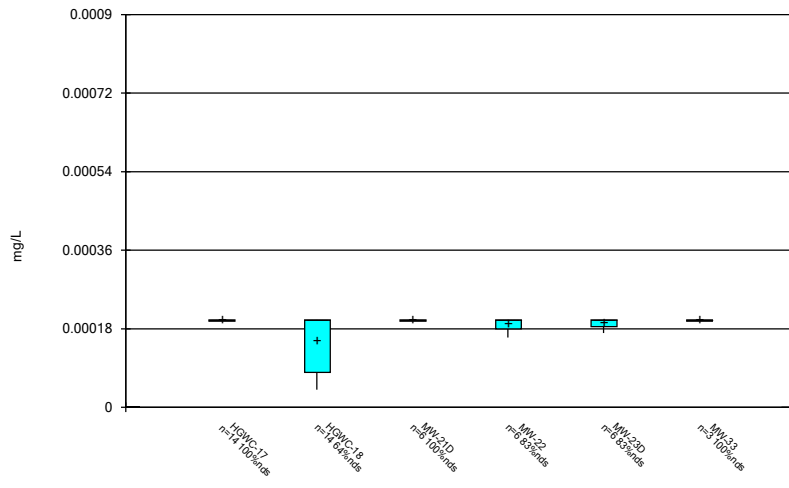
Constituent: Mercury Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



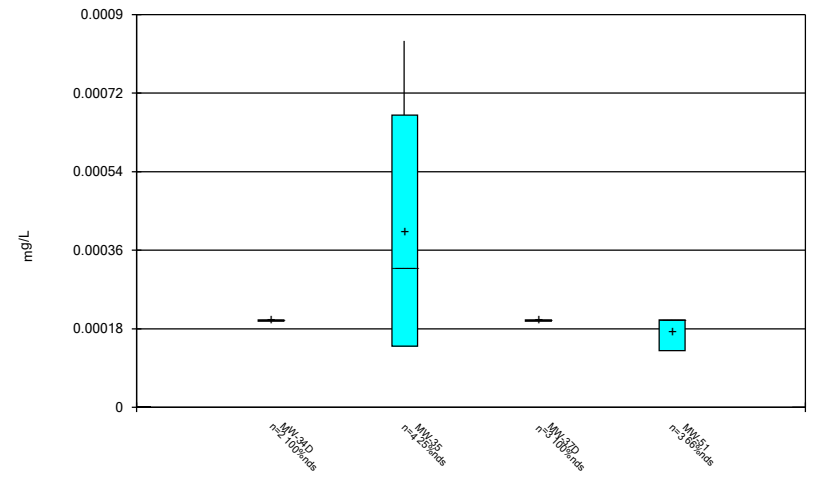
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



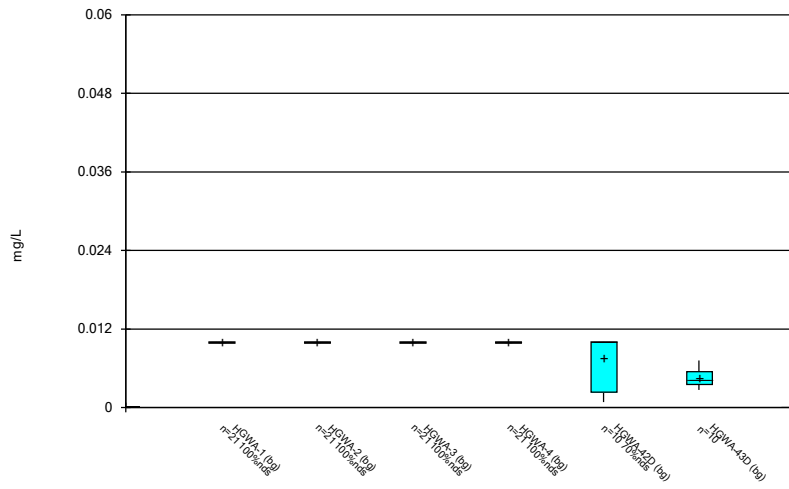
Constituent: Mercury Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



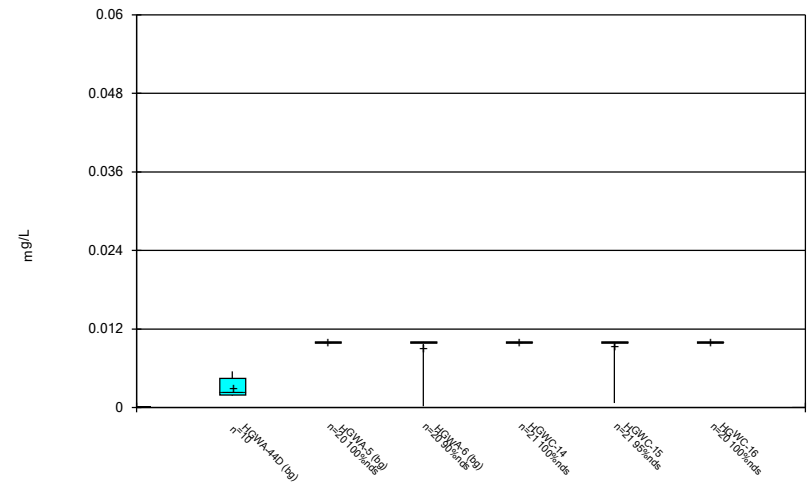
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



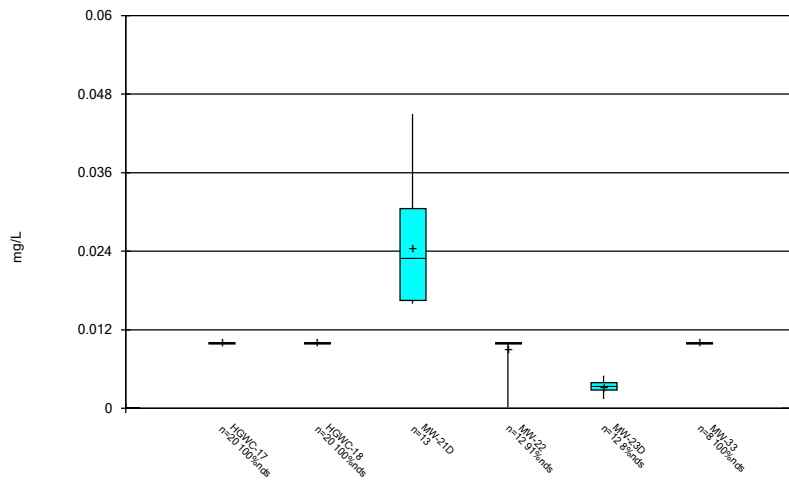
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



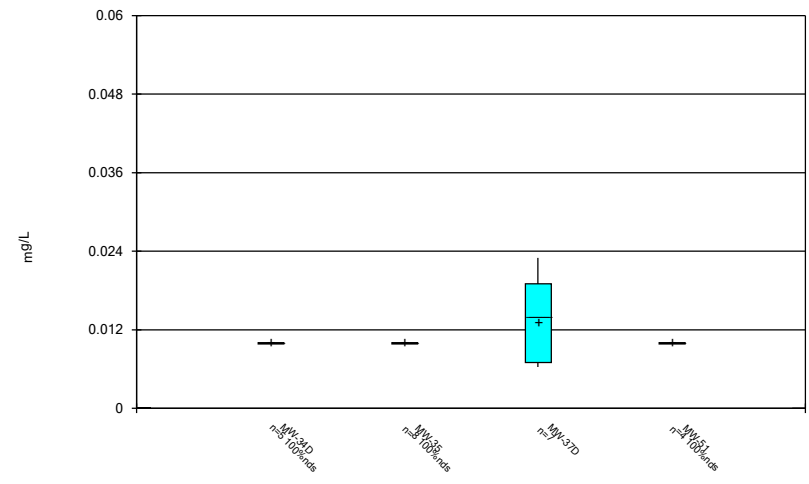
Constituent: Molybdenum Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

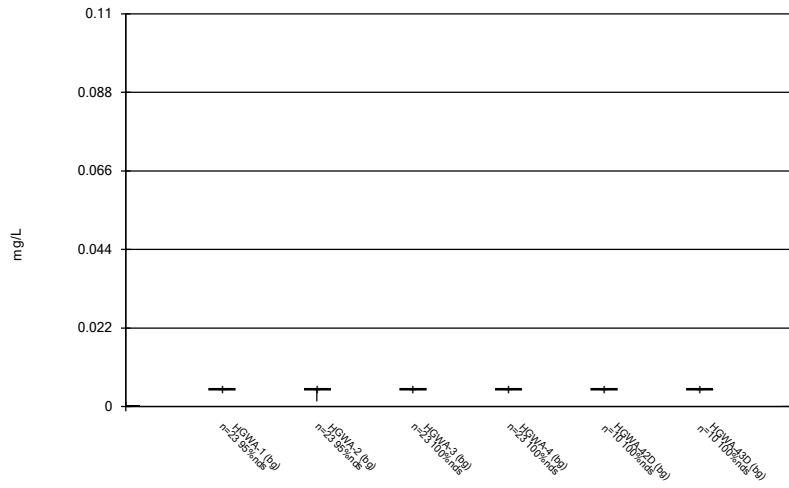
### Box & Whiskers Plot



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 Plant Hammond Client: Southern Company Data: Hammond AP-2

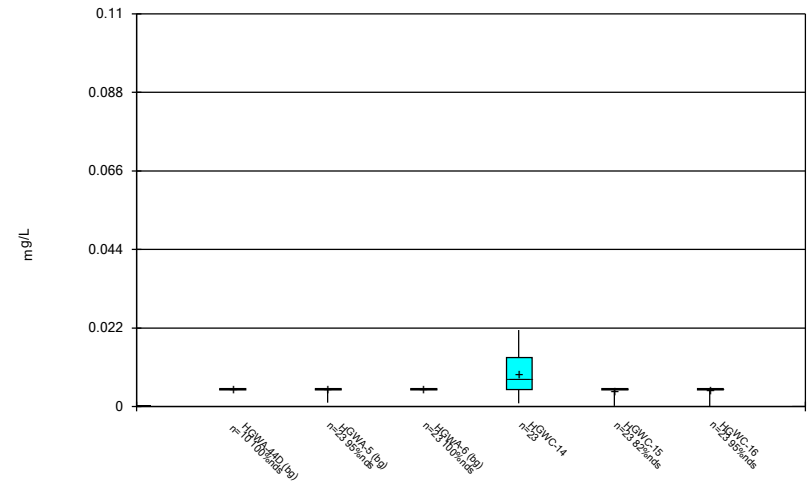


### Box & Whiskers Plot



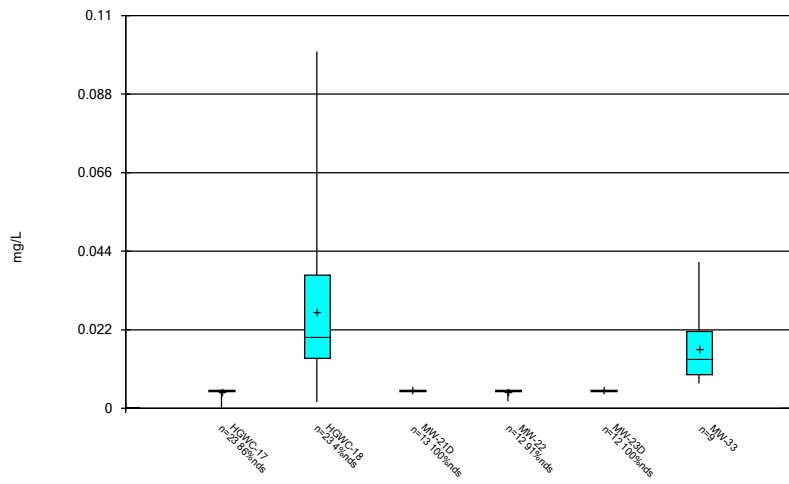
Constituent: Selenium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



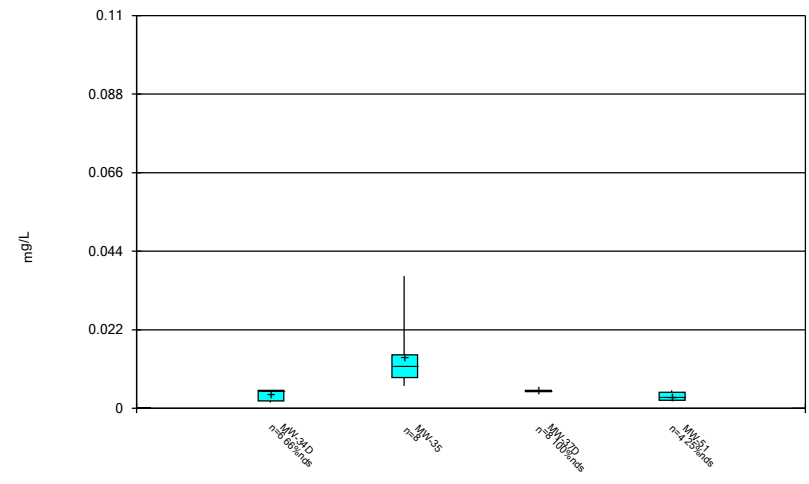
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



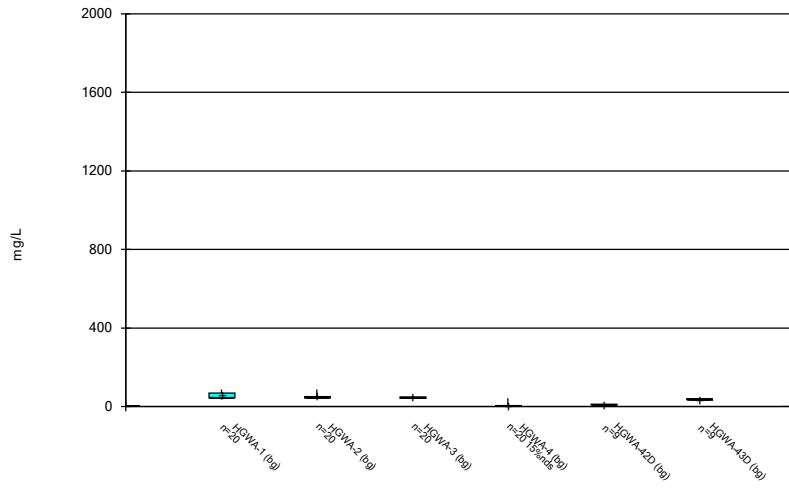
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



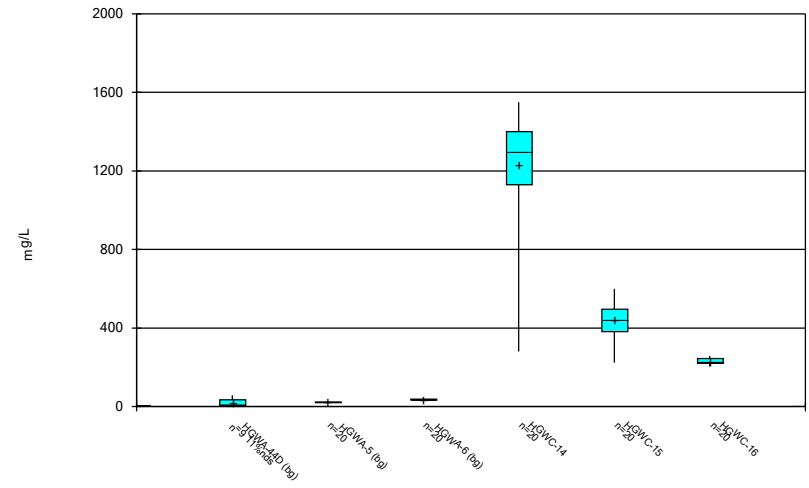
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



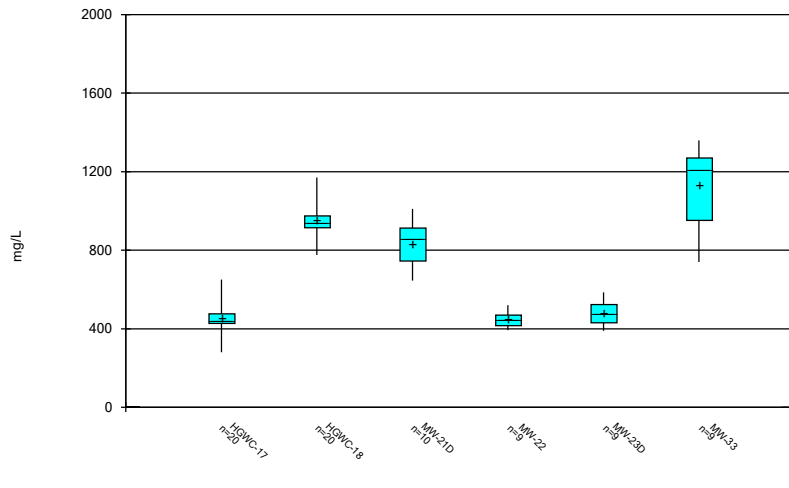
Constituent: Sulfate Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



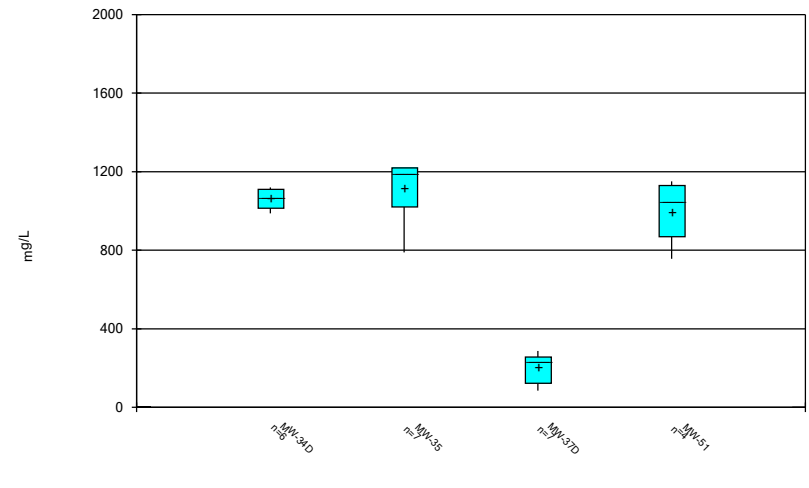
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



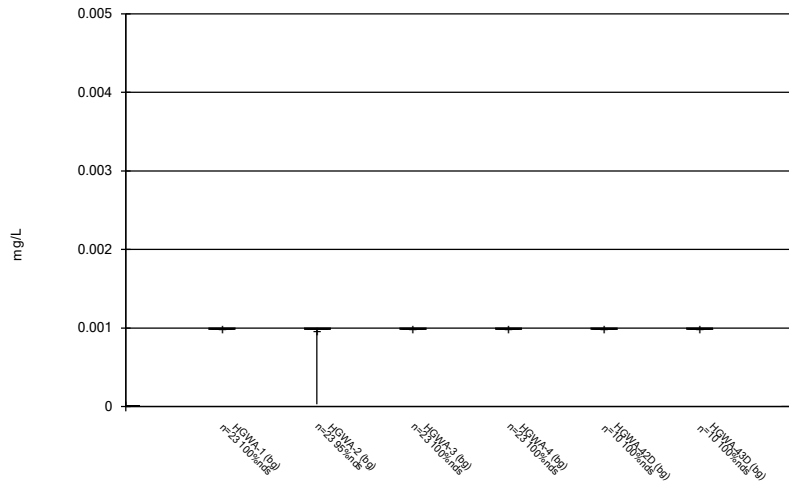
Constituent: Sulfate Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



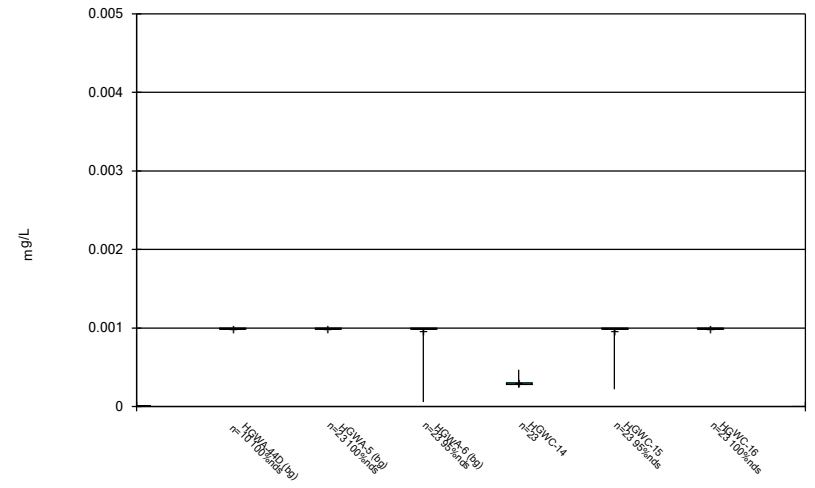
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



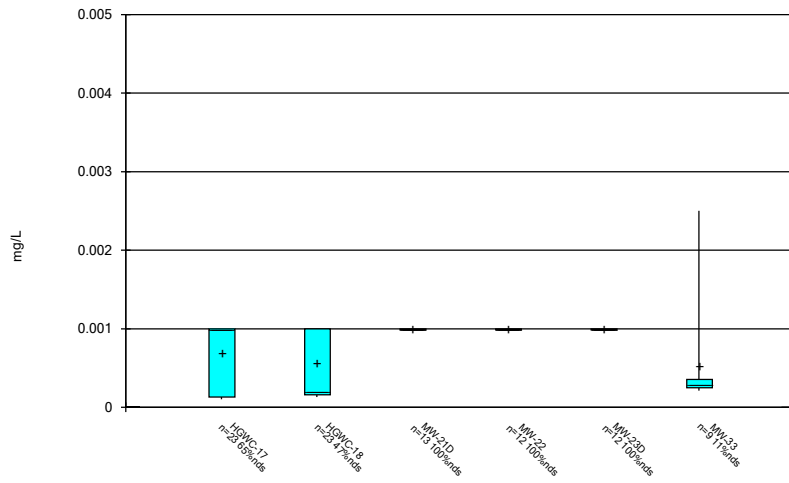
Constituent: Thallium Analysis Run 5/16/2023 2:07 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



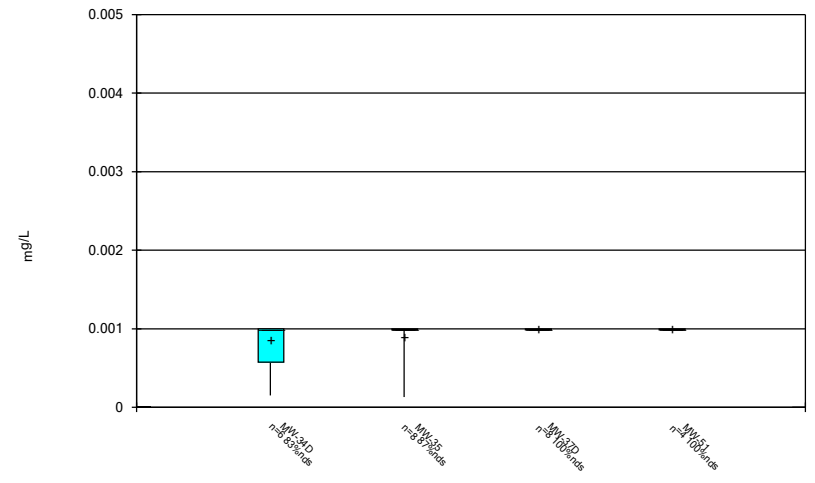
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



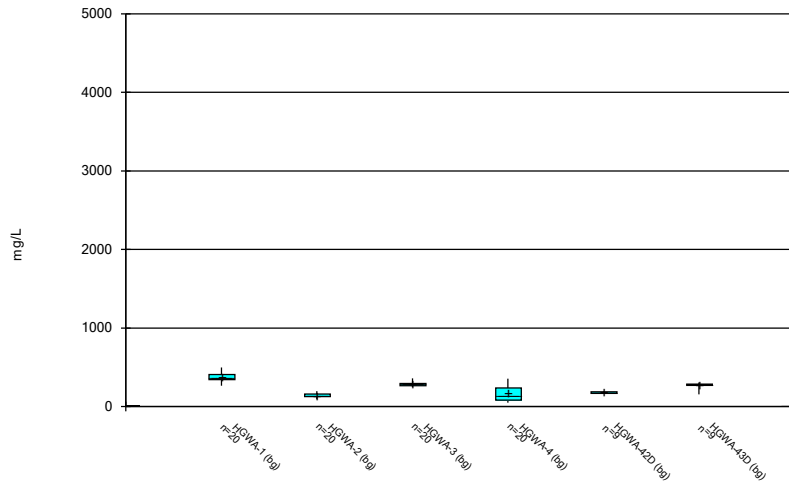
Constituent: Thallium Analysis Run 5/16/2023 2:08 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



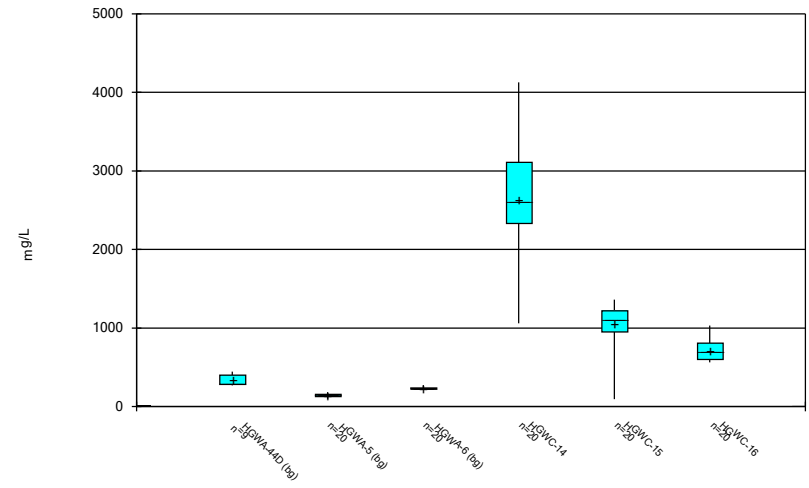
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



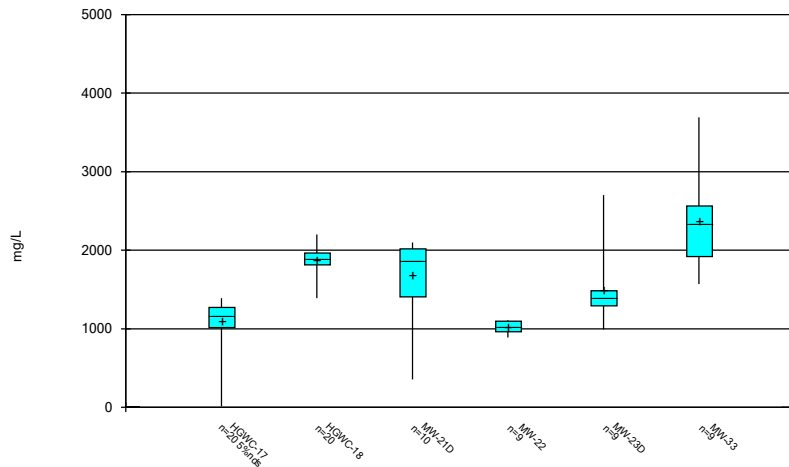
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



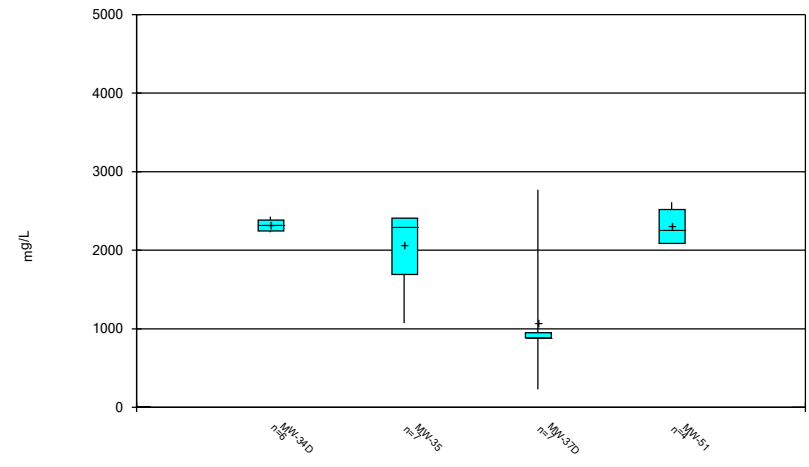
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/16/2023 2:08 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/16/2023 2:08 PM View: Time Series & Box Plot  
Plant Hammond Client: Southern Company Data: Hammond AP-2

FIGURE C.

# Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/12/2023, 1:08 PM

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No values were flagged as outliers.

FIGURE D.

# Interwell Prediction Limits - Significant Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 5/12/2023, 1:14 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Obsrv.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	HGWC-14	0.44	n/a	2/1/2023	7.7	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.44	n/a	2/1/2023	2	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.44	n/a	2/1/2023	2.8	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.44	n/a	1/30/2023	6.8	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.44	n/a	2/1/2023	5.9	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	2/1/2023	464	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	2/1/2023	174	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	2/1/2023	216	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	1/30/2023	286	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	2/1/2023	288	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	2/1/2023	108	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	2/1/2023	85	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	2/1/2023	112	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	1/30/2023	154	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	2/1/2023	92.7	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	86.9	n/a	2/1/2023	1060	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	86.9	n/a	2/1/2023	341	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	86.9	n/a	2/1/2023	257	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	86.9	n/a	1/30/2023	451	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	86.9	n/a	2/1/2023	776	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	2/1/2023	1950	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	2/1/2023	892	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	2/1/2023	1030	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	1/30/2023	1320	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	2/1/2023	1430	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2



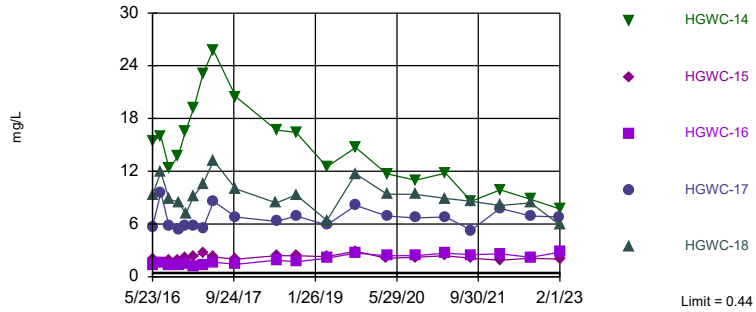
# Interwell Prediction Limits - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 5/12/2023, 1:14 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-14	0.44	n/a	2/1/2023	7.7	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.44	n/a	2/1/2023	2	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.44	n/a	2/1/2023	2.8	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.44	n/a	1/30/2023	6.8	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.44	n/a	2/1/2023	5.9	Yes	147	n/a	n/a	6.803	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	2/1/2023	464	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	2/1/2023	174	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	2/1/2023	216	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	1/30/2023	286	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	2/1/2023	288	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	2/1/2023	108	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	2/1/2023	85	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	2/1/2023	112	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	1/30/2023	154	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	2/1/2023	92.7	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-14	8.25	4.57	2/1/2023	4.93	No	174	n/a	n/a	0	n/a	n/a	0.0001308	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-15	8.25	4.57	2/1/2023	6.22	No	174	n/a	n/a	0	n/a	n/a	0.0001308	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-16	8.25	4.57	2/1/2023	7.15	No	174	n/a	n/a	0	n/a	n/a	0.0001308	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-17	8.25	4.57	1/30/2023	6.44	No	174	n/a	n/a	0	n/a	n/a	0.0001308	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-18	8.25	4.57	2/1/2023	4.66	No	174	n/a	n/a	0	n/a	n/a	0.0001308	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-14	1.3	n/a	2/1/2023	0.094J	No	174	n/a	n/a	31.03	n/a	n/a	0.00006541	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-15	1.3	n/a	2/1/2023	0.086J	No	174	n/a	n/a	31.03	n/a	n/a	0.00006541	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-16	1.3	n/a	2/1/2023	0.053J	No	174	n/a	n/a	31.03	n/a	n/a	0.00006541	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-17	1.3	n/a	1/30/2023	0.097J	No	174	n/a	n/a	31.03	n/a	n/a	0.00006541	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-18	1.3	n/a	2/1/2023	0.21	No	174	n/a	n/a	31.03	n/a	n/a	0.00006541	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	86.9	n/a	2/1/2023	1060	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	86.9	n/a	2/1/2023	341	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	86.9	n/a	2/1/2023	257	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	86.9	n/a	1/30/2023	451	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	86.9	n/a	2/1/2023	776	Yes	147	n/a	n/a	2.721	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	2/1/2023	1950	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	2/1/2023	892	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	2/1/2023	1030	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	1/30/2023	1320	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	2/1/2023	1430	Yes	147	n/a	n/a	0	n/a	n/a	0.00009158	NP Inter (normality) 1 of 2

Exceeds Limit: HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18

Prediction Limit  
Interwell Non-parametric

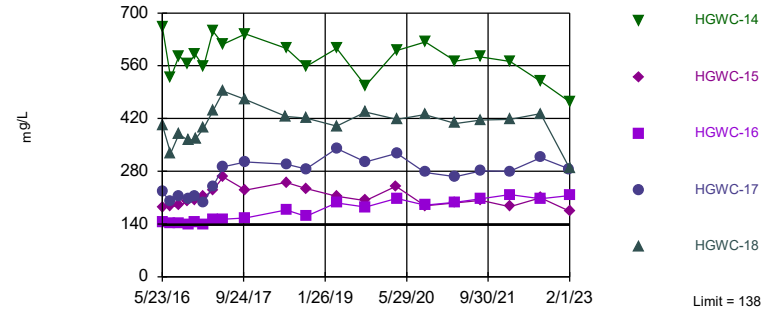


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 147 background values. 6.803% NDs. Annual per-constituent alpha = 0.0009155. Individual comparison alpha = 0.00009158 (1 of 2). Comparing 5 points to limit.

Constituent: Boron Analysis Run 5/12/2023 1:12 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18

Prediction Limit  
Interwell Non-parametric

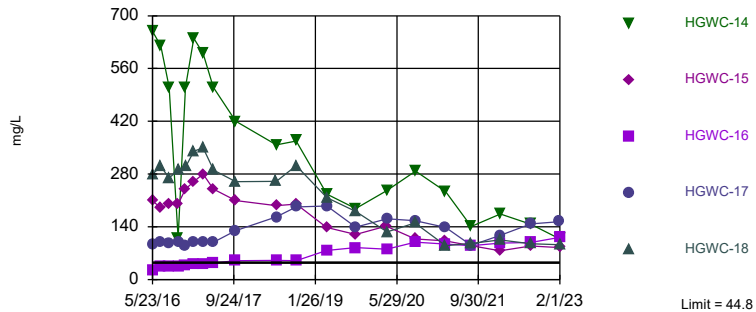


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 147 background values. Annual per-constituent alpha = 0.0009155. Individual comparison alpha = 0.00009158 (1 of 2). Comparing 5 points to limit.

Constituent: Calcium Analysis Run 5/12/2023 1:12 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18

Prediction Limit  
Interwell Non-parametric

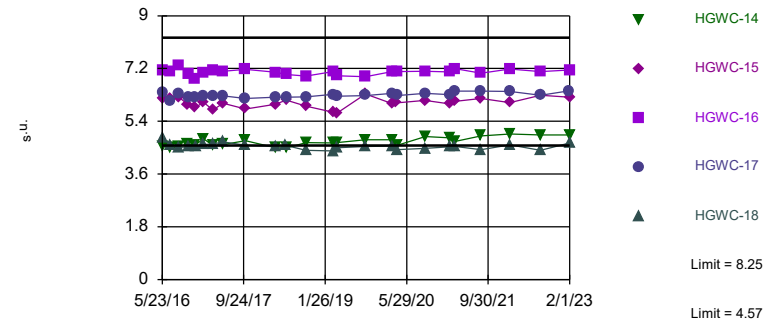


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 147 background values. Annual per-constituent alpha = 0.0009155. Individual comparison alpha = 0.00009158 (1 of 2). Comparing 5 points to limit.

Constituent: Chloride Analysis Run 5/12/2023 1:12 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Within Limits

Prediction Limit  
Interwell Non-parametric

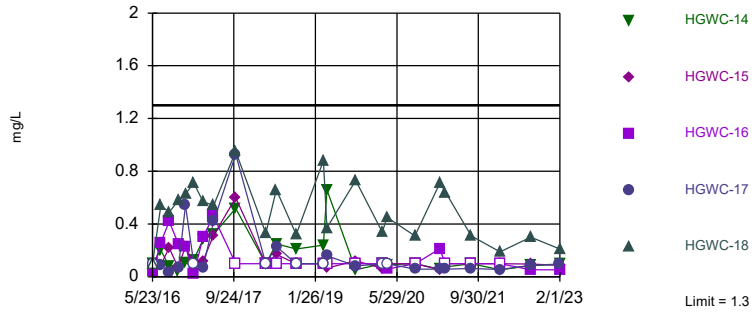


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 174 background values. Annual per-constituent alpha = 0.001308. Individual comparison alpha = 0.0001308 (1 of 2). Comparing 5 points to limit.

Constituent: Field pH Analysis Run 5/12/2023 1:12 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Within Limit

Prediction Limit  
 Interwell Non-parametric

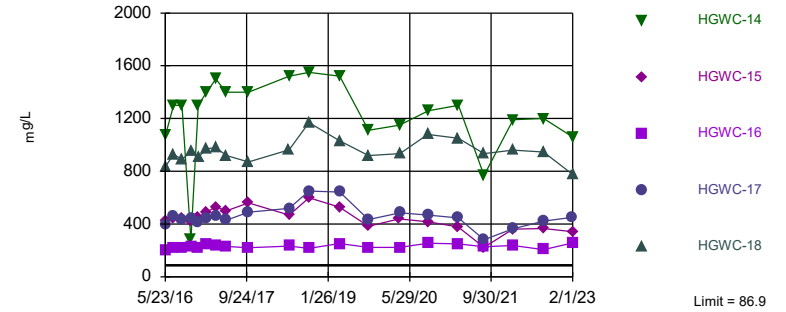


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 174 background values. 31.03% NDs. Annual per-constituent alpha = 0.0006539. Individual comparison alpha = 0.00006541 (1 of 2). Comparing 5 points to limit.

Constituent: Fluoride Analysis Run 5/12/2023 1:12 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15,  
 HGWC-16, HGWC-17, HGWC-18

Prediction Limit  
 Interwell Non-parametric

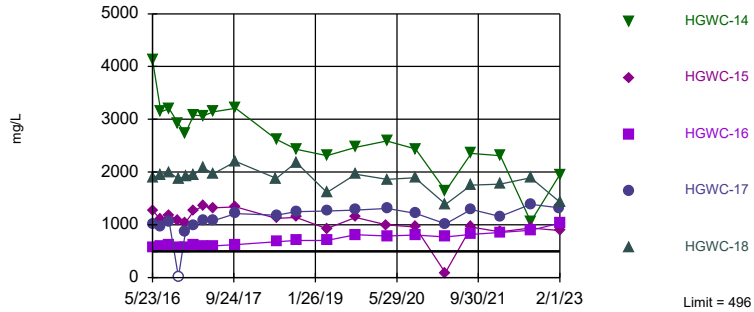


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 147 background values. 2.721% NDs. Annual per-constituent alpha = 0.0009155. Individual comparison alpha = 0.00009158 (1 of 2). Comparing 5 points to limit.

Constituent: Sulfate Analysis Run 5/12/2023 1:12 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15,  
 HGWC-16, HGWC-17, HGWC-18

Prediction Limit  
 Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 147 background values. Annual per-constituent alpha = 0.0009155. Individual comparison alpha = 0.00009158 (1 of 2). Comparing 5 points to limit.

Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:12 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016	0.0214 (J)	0.0321 (J)	<0.04	<0.04	<0.04				
5/20/2016						0.0363 (J)			
5/23/2016							15.4	2.02	1.36
5/24/2016									
7/11/2016	0.0142 (J)	0.0337 (J)		0.0175 (J)	0.0052 (J)	0.0179 (J)			
7/12/2016			0.0074 (J)				16	1.65	1.62
8/30/2016	0.0074 (J)	0.0173 (J)	<0.04	0.0072 (J)	0.0068 (J)	0.014 (J)			
9/1/2016							12.3	1.93	1.31
10/19/2016	0.0224 (J)	0.0341 (J)	0.0085 (J)	0.018 (J)					
10/20/2016					0.0135 (J)	0.0197 (J)			
10/24/2016							13.7	1.93	
10/25/2016									1.27
12/6/2016	0.0211 (J)	0.0326 (J)	0.0085 (J)	0.0158 (J)					
12/7/2016							16.5	2.23	1.42
12/8/2016					0.0083 (J)	0.0159 (J)			
1/24/2017	0.0165 (J)	0.0365 (J)	0.01 (J)	0.0145 (J)	0.0072 (J)	<0.04			
1/26/2017							19.2	2.31	1.19
3/21/2017	0.0187 (J)	0.0349 (J)	0.0079 (J)	0.0101 (J)	<0.04	0.0166 (J)			
3/22/2017									1.32
3/23/2017							23.1	2.72	
5/22/2017	0.0782	0.0475	0.0131 (J)						
5/23/2017				0.0159 (J)	0.0095 (J)	0.0167 (J)			
5/24/2017							25.8	2.26	1.67
5/25/2017									
10/3/2017	0.0198 (J)	0.0386 (J)	0.0097 (J)	0.0162 (J)	0.0071 (J)	0.017 (J)			
10/4/2017							20.5	2	1.43
6/4/2018	0.02 (J)	0.036 (J)	0.017 (J)	0.014 (J)					
6/5/2018					0.0066 (J)	0.016 (J)			
6/6/2018							16.7	2.4	1.9
10/1/2018	0.013 (J)	0.035 (J)	0.0061 (J)	0.0093 (J)					
10/2/2018					0.0081 (J)	0.014 (J)			
10/3/2018							16.4	2.4	1.7
4/1/2019			0.0066 (J)						
4/2/2019	0.016 (J)	0.034 (J)		0.01 (J)	0.0052 (J)	0.013 (J)			
4/4/2019								2.3	2.1
4/5/2019							12.5		
9/23/2019	0.021 (J)	0.04 (J)	0.0081 (J)						
9/24/2019				0.013 (J)	0.0088 (J)	0.016 (J)	14.7	2.9	
9/25/2019									2.7
3/25/2020	0.025 (J)	0.039 (J)	0.0096 (J)			0.021 (J)			
3/26/2020				0.012 (J)	0.0072 (J)			2.1	
3/30/2020							11.7		2.4
3/31/2020									
9/15/2020	0.017 (J)	0.044 (J)	0.0071 (J)	0.013 (J)	0.012 (J)	0.016 (J)			
9/16/2020									
9/17/2020								2.2	2.4
9/18/2020							11		
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/10/2021	0.015 (J)			0.012 (J)					
3/11/2021		0.056	0.015 (J)		0.0075 (J)	0.018 (J)			
3/16/2021								2.4	
3/17/2021							11.8		2.7
3/18/2021									
8/11/2021	0.02 (J)								
8/12/2021		0.044	<0.04	0.014 (J)	0.0092 (J)	0.014 (J)			
8/13/2021									
8/18/2021							8.6		
8/19/2021								2.1	2.5
2/1/2022	0.016 (J)	0.056	0.011 (J)						
2/7/2022				0.017 (J)	<0.04	0.019 (J)			
2/8/2022								1.9	2.6
2/9/2022							9.9		
8/2/2022	0.012 (J)	0.047	<0.04	0.02 (J)					
8/9/2022									
8/10/2022					0.011 (J)	0.015 (J)			2.2
8/11/2022							8.8	2.1	
1/23/2023			0.012 (J)	0.023 (J)					
1/24/2023	0.015 (J)	0.046							
1/27/2023					<0.04	0.013 (J)			
1/30/2023									
2/1/2023							7.7	2	2.8

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	5.7				
5/24/2016		9.33			
7/11/2016					
7/12/2016	9.58	11.9			
8/30/2016					
9/1/2016	5.76	8.8			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	5.38	8.5			
12/6/2016					
12/7/2016	5.74				
12/8/2016		7.15			
1/24/2017					
1/26/2017	5.78	9.17			
3/21/2017					
3/22/2017	5.52				
3/23/2017		10.6			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	8.58	13.2			
10/3/2017					
10/4/2017	6.8	10			
6/4/2018					
6/5/2018		8.4			
6/6/2018	6.3				
10/1/2018					
10/2/2018					
10/3/2018	6.9	9.3			
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	5.9	6.4			
9/23/2019					
9/24/2019					
9/25/2019	8.1	11.7			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	6.9	9.4			
9/15/2020		9.4			
9/16/2020	6.7		0.23	0.061 (J)	
9/17/2020					0.098 (J)
9/18/2020					
11/10/2020			0.29	0.057 (J)	
11/11/2020					0.058 (J)
12/15/2020			0.31	0.052 (J)	0.043 (J)
1/19/2021			0.4	0.049 (J)	
1/20/2021					0.045 (J)

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
3/10/2021			0.39		0.048
3/11/2021				0.06	
3/16/2021					
3/17/2021					
3/18/2021	6.8	8.9			
8/11/2021				0.042	
8/12/2021					0.044
8/13/2021			0.31		
8/18/2021	5.3				
8/19/2021		8.6			
2/1/2022			0.44	0.05	
2/7/2022					0.047
2/8/2022	7.8	8.1			
2/9/2022					
8/2/2022			0.31	0.043	
8/9/2022					0.055
8/10/2022	6.9	8.4			
8/11/2022					
1/23/2023					0.052
1/24/2023			0.44	0.037 (J)	
1/27/2023					
1/30/2023	6.8				
2/1/2023		5.9			





# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/10/2021	111			5.9					
3/11/2021		43.8	83.8		28.3	53.1			
3/16/2021								196	
3/17/2021							572		198
3/18/2021									
8/11/2021	113								
8/12/2021		21.9	84	5.4	32	54.7			
8/13/2021									
8/18/2021							583		
8/19/2021								203	207
2/1/2022	106	27.2	85.1						
2/7/2022				5.9	30	53.4			
2/8/2022								186	218
2/9/2022							571		
8/2/2022	117	31.2	84.6	6					
8/9/2022									
8/10/2022					27.4	55.7			207
8/11/2022							519	210	
1/23/2023			85	24					
1/24/2023	117	29.4							
1/27/2023					28.5	55.4			
1/30/2023									
2/1/2023							464	174	216

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	225				
5/24/2016		403			
7/11/2016					
7/12/2016	199	328			
8/30/2016					
9/1/2016	213	379			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	206	362			
12/6/2016					
12/7/2016	212				
12/8/2016		366			
1/24/2017					
1/26/2017	198	394			
3/21/2017					
3/22/2017	239				
3/23/2017		440			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	292	492			
10/3/2017					
10/4/2017	305	470			
6/4/2018					
6/5/2018		425			
6/6/2018	299				
10/1/2018					
10/2/2018					
10/3/2018	286	421			
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	340	400			
9/23/2019					
9/24/2019					
9/25/2019	305	437			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	328	418			
9/15/2020		430			
9/16/2020	277		30	56	
9/17/2020					43.8
9/18/2020					
11/10/2020			33.6	63.3	
11/11/2020					44.4
12/15/2020			28.7	62.6	47.3
1/19/2021			33	60.1	
1/20/2021					41.8

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
3/10/2021			18.3		43.4
3/11/2021				59.6	
3/16/2021					
3/17/2021					
3/18/2021	266	407			
8/11/2021				61	
8/12/2021					43.6
8/13/2021			28.9		
8/18/2021	281				
8/19/2021		416			
2/1/2022			24.8	55.9	
2/7/2022					48.7
2/8/2022	280	418			
2/9/2022					
8/2/2022			20.9	54.1	
8/9/2022					44.1
8/10/2022	316	433			
8/11/2022					
1/23/2023					43.7
1/24/2023			13.2	56.6	
1/27/2023					
1/30/2023	286				
2/1/2023		288			



# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/10/2021	7.4			2.9					
3/11/2021		5.1	5.9		1.4	1.2			
3/16/2021								103	
3/17/2021							233		93.8
3/18/2021									
8/11/2021	9.6								
8/12/2021		5.2	4.8	2.4	1.4	0.94 (J)			
8/13/2021									
8/18/2021							141		
8/19/2021								89.9	90.1
2/1/2022	7.5	7	5.7						
2/7/2022				2.4	1.4	1.1			
2/8/2022								76.6	96.4
2/9/2022							174		
8/2/2022	14.1	7.8	5.9	2.9					
8/9/2022									
8/10/2022					2.1	1.3			98.3
8/11/2022							147	89.2	
1/23/2023			5.6	1.6					
1/24/2023	9	7.1							
1/27/2023					1.6	1.4			
1/30/2023									
2/1/2023							108	85	112

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	94				
5/24/2016		280			
7/11/2016					
7/12/2016	100	300			
8/30/2016					
9/1/2016	95	270			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	98	290			
12/6/2016					
12/7/2016	89				
12/8/2016		300			
1/24/2017					
1/26/2017	99	340			
3/21/2017					
3/22/2017	100				
3/23/2017		350			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	99	290			
10/3/2017					
10/4/2017	130	260			
6/4/2018					
6/5/2018		261			
6/6/2018	166				
10/1/2018					
10/2/2018					
10/3/2018	193	302			
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	195	217			
9/23/2019					
9/24/2019					
9/25/2019	139	181			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	161	126			
9/15/2020		150			
9/16/2020	156		7.2	4.1	
9/17/2020					5.8
9/18/2020					
11/10/2020			7.8	4.4	
11/11/2020					3.1
12/15/2020			9.4	4.7	3.2
1/19/2021			9.5	4.1	
1/20/2021					2.8

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
3/10/2021			12.3		3
3/11/2021				4.5	
3/16/2021					
3/17/2021					
3/18/2021	138	90.2			
8/11/2021				3.5	
8/12/2021					2.6
8/13/2021			39.9		
8/18/2021	90.7				
8/19/2021		95.8			
2/1/2022			44.8	4.1	
2/7/2022					3.1
2/8/2022	117	105			
2/9/2022					
8/2/2022			19.8	4.3	
8/9/2022					3.7
8/10/2022	148	95.2			
8/11/2022					
1/23/2023					3.3
1/24/2023			24.9	4.3	
1/27/2023					
1/30/2023	154				
2/1/2023		92.7			





# Prediction Limit

Constituent: Field pH (s.u.) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-4 (bg)	HGWA-2 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
9/15/2020	7.15	5.75	5.22	6.33	7.29	7.37			
9/16/2020									
9/17/2020								6.11	7.11
9/18/2020							4.88		
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									
2/8/2021	7.11	4.94							
2/9/2021			5.42	6.35	7.23	7.4			
2/10/2021									7.08
2/11/2021							4.84		
2/12/2021								5.99	
3/10/2021	6.95	5.28							
3/11/2021			5.8	6.48	7.33	7.56			
3/16/2021								6.08	
3/17/2021							4.72		7.19
3/18/2021									
8/11/2021	6.98								
8/12/2021		5.26	5.05	6.46	7.31	7.47			
8/13/2021									
8/18/2021							4.9		
8/19/2021								6.18	7.04
2/1/2022	7.19		5.24		7.45				
2/7/2022		5.24		6.51		7.65			
2/8/2022								6.04	7.18
2/9/2022							4.97		
8/2/2022	7.03	4.86	4.57		7.02				
8/9/2022									
8/10/2022				6.22		7.53			7.09
8/11/2022							4.93	6.29	
1/23/2023		5.62			7.32				
1/24/2023	6.76		5.22						
1/27/2023				6.52		7.66			
1/30/2023									
2/1/2023							4.93	6.22	7.15

# Prediction Limit

Constituent: Field pH (s.u.) Analysis Run: 5/12/2023 1:14 PM View: Prediction Limits  
Plant: Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	6.4				
5/24/2016		4.83			
7/11/2016					
7/12/2016	6.09	4.58			
8/30/2016					
9/1/2016	6.35	4.51			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	6.23	4.53			
12/6/2016					
12/7/2016	6.23				
12/8/2016		4.56			
1/24/2017					
1/26/2017	6.24	4.61			
3/21/2017					
3/22/2017	6.25				
3/23/2017		4.63			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	6.27	4.69			
10/3/2017					
10/4/2017	6.18	4.58			
4/2/2018					
4/3/2018	6.22	4.54			
4/4/2018					
6/4/2018					
6/5/2018		4.57			
6/6/2018	6.22				
10/1/2018					
10/2/2018					
10/3/2018	6.23	4.41			
3/11/2019					
3/12/2019					
3/14/2019		4.39			
3/15/2019	6.32				
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	6.26	4.5			
9/23/2019					
9/24/2019					
9/25/2019	6.28	4.54			
3/2/2020					
3/3/2020	6.35	4.55			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	6.28	4.43			

# Prediction Limit

Constituent: Field pH (s.u.) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
9/15/2020		4.47			
9/16/2020	6.35		7.52	7.83	
9/17/2020					7.62
9/18/2020					
11/10/2020			7.27	7.84	
11/11/2020					7.68
12/15/2020			7.39	7.87	7.64
1/19/2021			7.39	7.86	
1/20/2021					7.68
2/8/2021					7.64
2/9/2021			7.44	7.84	
2/10/2021					
2/11/2021	6.31	4.53			
2/12/2021					
3/10/2021				7.92	7.7
3/11/2021			7.46		
3/16/2021					
3/17/2021					
3/18/2021	6.43	4.54			
8/11/2021			7.4		
8/12/2021					7.7
8/13/2021				7.77	
8/18/2021	6.43				
8/19/2021		4.43			
2/1/2022			7.52	8.25	
2/7/2022					7.85
2/8/2022	6.42	4.59			
2/9/2022					
8/2/2022			7.15	7.9	
8/9/2022					7.58
8/10/2022	6.29	4.41			
8/11/2022					
1/23/2023					7.55
1/24/2023			7.56	8.22	
1/27/2023					
1/30/2023	6.44				
2/1/2023		4.66			

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-4 (bg)	HGWA-2 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016	0.105 (J)	0.036 (J)	0.0303 (J)	0.08 (J)	0.0513 (J)				
5/20/2016						0.065 (J)			
5/23/2016							<0.1	<0.1	0.038 (J)
5/24/2016									
7/11/2016	0.16 (J)	0.09 (J)	0.05 (J)	0.09 (J)		0.13 (J)			
7/12/2016					0.12 (J)		0.2 (J)	0.09 (J)	0.26 (J)
8/30/2016	0.09 (J)	0.06 (J)	0.06 (J)	0.08 (J)	0.09 (J)	0.07 (J)			
9/1/2016							0.08 (J)	0.22 (J)	0.42
10/19/2016	0.1 (J)	0.07 (J)	0.04 (J)		0.1 (J)				
10/20/2016				0.1 (J)		0.06 (J)			
10/24/2016							0.04 (J)	0.07 (J)	
10/25/2016									0.25 (J)
12/6/2016	0.11 (J)	0.07 (J)	0.36		0.21 (J)				
12/7/2016							0.11 (J)	0.23 (J)	0.23 (J)
12/8/2016				0.08 (J)		0.06 (J)			
1/24/2017	0.09 (J)	<0.1	<0.1	0.09 (J)	0.06 (J)	0.02 (J)			
1/26/2017							0.13 (J)	<0.1	0.02 (J)
3/21/2017	0.13 (J)	<0.1	<0.1	0.04 (J)	0.005 (J)	0.08 (J)			
3/22/2017									0.3
3/23/2017							0.28 (J)	0.12 (J)	
5/22/2017	0.12 (J)		<0.1		0.05 (J)				
5/23/2017		0.01 (J)		0.04 (J)		0.006 (J)			
5/24/2017							0.32	0.31	0.46
5/25/2017									
10/3/2017	0.13 (J)	<0.1	<0.1	0.06 (J)	0.13 (J)	<0.1			
10/4/2017							0.52	0.6	<0.1
4/2/2018	<0.1	<0.1	<0.1						
4/3/2018				<0.1	<0.1	<0.1		<0.1	<0.1
4/4/2018							<0.1		
6/4/2018	0.074 (J)	0.097 (J)	<0.1		<0.1				
6/5/2018				0.083 (J)		0.055 (J)			
6/6/2018							0.25 (J)	0.17 (J)	<0.1
10/1/2018	<0.1	<0.1	<0.1		<0.1				
10/2/2018				<0.1		0.076 (J)			
10/3/2018							0.21 (J)	<0.1	<0.1
3/11/2019		0.035 (J)							
3/12/2019	0.29 (J)		0.038 (J)	0.079 (J)	0.072 (J)	0.061 (J)			
3/14/2019							0.24 (J)	<0.1	
3/15/2019									<0.1
4/1/2019					0.029 (J)				
4/2/2019	0.1 (J)	<0.1	0.071 (J)	0.12 (J)		<0.1			
4/4/2019								0.066 (J)	<0.1
4/5/2019							0.66		
9/23/2019	0.078 (J)		<0.1		<0.1				
9/24/2019		<0.1		0.058 (J)		<0.1	0.053 (J)	0.12 (J)	
9/25/2019									<0.1
3/2/2020	0.076 (J)	<0.1	<0.1	0.053 (J)	<0.1	<0.1			
3/3/2020							<0.1	0.064 (J)	<0.1
3/25/2020	0.098 (J)		<0.1		<0.1	<0.1			
3/26/2020		<0.1		0.066 (J)				<0.1	
3/30/2020							0.092 (J)		0.059 (J)
3/31/2020									

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-4 (bg)	HGWA-2 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
9/15/2020	0.082 (J)	<0.1	<0.1	0.061 (J)	<0.1	<0.1			
9/16/2020									
9/17/2020								<0.1	<0.1
9/18/2020							<0.1		
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									
2/8/2021	0.078 (J)	<0.1							
2/9/2021			<0.1	0.053 (J)	0.074 (J)	<0.1			
2/10/2021									0.21
2/11/2021							0.059 (J)		
2/12/2021								0.053 (J)	
3/10/2021	0.079 (J)	<0.1							
3/11/2021			0.1	0.06 (J)	<0.1	0.17			
3/16/2021								<0.1	
3/17/2021							0.076 (J)		<0.1
3/18/2021									
8/11/2021	0.058 (J)								
8/12/2021		<0.1	<0.1	<0.1	<0.1	<0.1			
8/13/2021									
8/18/2021							<0.1		
8/19/2021								<0.1	<0.1
2/1/2022	0.064 (J)		<0.1		<0.1				
2/7/2022		<0.1		<0.1		<0.1			
2/8/2022								<0.1	<0.1
2/9/2022							0.053 (J)		
8/2/2022	0.09 (J)	0.076 (J)	0.053 (J)		0.067 (J)				
8/9/2022									
8/10/2022				0.078 (J)		0.067 (J)			0.054 (J)
8/11/2022							0.085 (J)	0.097 (J)	
1/23/2023		0.12			0.061 (J)				
1/24/2023	0.089 (J)		0.053 (J)						
1/27/2023				0.088 (J)		0.067 (J)			
1/30/2023									
2/1/2023							0.094 (J)	0.086 (J)	0.053 (J)

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	<0.1				
5/24/2016		<0.1			
7/11/2016					
7/12/2016	0.09 (J)	0.54			
8/30/2016					
9/1/2016	0.03 (J)	0.49			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	0.07 (J)	0.58			
12/6/2016					
12/7/2016	0.54				
12/8/2016		0.63			
1/24/2017					
1/26/2017	<0.1	0.71			
3/21/2017					
3/22/2017	0.07 (J)				
3/23/2017		0.57			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	0.42	0.54			
10/3/2017					
10/4/2017	0.93	0.95			
4/2/2018					
4/3/2018	<0.1	0.33			
4/4/2018					
6/4/2018					
6/5/2018		0.66			
6/6/2018	0.23 (J)				
10/1/2018					
10/2/2018					
10/3/2018	<0.1	0.32			
3/11/2019					
3/12/2019					
3/14/2019		0.88			
3/15/2019	<0.1				
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	0.16 (J)	0.37			
9/23/2019					
9/24/2019					
9/25/2019	0.081 (J)	0.73			
3/2/2020					
3/3/2020	<0.1	0.34			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	<0.1	0.45			

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
9/15/2020		0.31			
9/16/2020	0.058 (J)		0.22	0.52	
9/17/2020					0.2
9/18/2020					
11/10/2020			0.19	0.59	
11/11/2020					0.1
12/15/2020			0.21	0.67	0.11
1/19/2021			0.16	0.74	
1/20/2021					0.082 (J)
2/8/2021					0.096 (J)
2/9/2021			0.19	0.44	
2/10/2021					
2/11/2021	0.058 (J)	0.71			
2/12/2021					
3/10/2021				0.65	0.11
3/11/2021			0.2		
3/16/2021					
3/17/2021					
3/18/2021	0.057 (J)	0.64			
8/11/2021			0.15		
8/12/2021					0.079 (J)
8/13/2021				0.87	
8/18/2021	0.062 (J)				
8/19/2021		0.31			
2/1/2022			0.19	0.96	
2/7/2022					0.085 (J)
2/8/2022	0.055 (J)	0.19			
2/9/2022					
8/2/2022			0.22	0.8	
8/9/2022					0.12
8/10/2022	0.086 (J)	0.3			
8/11/2022					
1/23/2023					0.11
1/24/2023			0.23	1.3	
1/27/2023					
1/30/2023	0.097 (J)				
2/1/2023		0.21			

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016	66.9	48.6	42.3	1.22	25				
5/20/2016						34.4			
5/23/2016							1070	424	203
5/24/2016									
7/11/2016	41	45		3.7	27	34			
7/12/2016			44				1300	440	220
8/30/2016	36	42	40	6.8	23	36			
9/1/2016							1300	440	220
10/19/2016	46	44	43	11					
10/20/2016					19	36			
10/24/2016							280	420	
10/25/2016									230
12/6/2016	59	44	43	13					
12/7/2016							1300	450	220
12/8/2016					20	36			
1/24/2017	46	46	48	5.7	20	37			
1/26/2017							1400	490	250
3/21/2017	63	46	45	1.7	23	37			
3/22/2017									240
3/23/2017							1500	530	
5/22/2017	77	48	46						
5/23/2017				1.5	21	38			
5/24/2017							1400	500	230
5/25/2017									
10/3/2017	42	47	48	1.3	21	38			
10/4/2017							1400	560	220
6/4/2018	71.8	47.8	46.6	4.9					
6/5/2018					22.9	38			
6/6/2018							1520	469	233
10/1/2018	49.1	48.1	48.6	0.59 (J)					
10/2/2018					20.3	38.5			
10/3/2018							1550	600	215
4/1/2019			50.4						
4/2/2019	84.3	48.7		4.9	23.8	35.5			
4/4/2019								528	251
4/5/2019							1520		
9/23/2019	70.2	47.2	43.9						
9/24/2019				<1	20.7	35.4	1110	382	
9/25/2019									223
3/25/2020	85.9	46.3	50.5			35.1			
3/26/2020				<1	21.6			438	
3/30/2020							1150		223
3/31/2020									
9/15/2020	47.3	51.5	44.7	<1	21.2	35.3			
9/16/2020									
9/17/2020								416	254
9/18/2020							1260		
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									



# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/10/2021	49.6			1.2					
3/11/2021		52.9	50.4		22.7	35.5			
3/16/2021								379	
3/17/2021							1300		250
3/18/2021									
8/11/2021	48.9								
8/12/2021		47.4	38.6	1.1	17.4	28.6			
8/13/2021									
8/18/2021							768		
8/19/2021								223	228
2/1/2022	43.7	67.1	46						
2/7/2022				2.9	20.6	33			
2/8/2022								360	238
2/9/2022							1190		
8/2/2022	58.1	86.9	43.5	4.9					
8/9/2022									
8/10/2022					19.7	34			206
8/11/2022							1200	365	
1/23/2023			39.5	42.5					
1/24/2023	48.3	79.7							
1/27/2023					22.7	35			
1/30/2023									
2/1/2023							1060	341	257

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	395				
5/24/2016		834			
7/11/2016					
7/12/2016	460	930			
8/30/2016					
9/1/2016	430	890			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	440	950			
12/6/2016					
12/7/2016	410				
12/8/2016		910			
1/24/2017					
1/26/2017	440	970			
3/21/2017					
3/22/2017	460				
3/23/2017		980			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	430	920			
10/3/2017					
10/4/2017	490	870			
6/4/2018					
6/5/2018		962			
6/6/2018	520				
10/1/2018					
10/2/2018					
10/3/2018	651	1170			
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	642	1030			
9/23/2019					
9/24/2019					
9/25/2019	434	920			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	484	934			
9/15/2020		1080			
9/16/2020	467		6.9	43	
9/17/2020					10.9
9/18/2020					
11/10/2020			6.3	39	
11/11/2020					9.4
12/15/2020			6.7	38.8	10.9
1/19/2021			7.4	37.3	
1/20/2021					9.8

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
3/10/2021			<1		10.8
3/11/2021				38.6	
3/16/2021					
3/17/2021					
3/18/2021	447	1050			
8/11/2021				30.5	
8/12/2021					7.8
8/13/2021			56.1		
8/18/2021	280				
8/19/2021		934			
2/1/2022			56.3	37.5	
2/7/2022					10.4
2/8/2022	364	960			
2/9/2022					
8/2/2022			13.2	37	
8/9/2022					11.2
8/10/2022	423	946			
8/11/2022					
1/23/2023					11.1
1/24/2023			10.1	34.7	
1/27/2023					
1/30/2023	451				
2/1/2023		776			



# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/10/2021	348			53					
3/11/2021		169	267		118	215			
3/16/2021								92	
3/17/2021							1640		768
3/18/2021									
8/11/2021	366								
8/12/2021		118	265	55	158	229			
8/13/2021									
8/18/2021							2350		
8/19/2021								958	816
2/1/2022	270	156	350						
2/7/2022				54	135	224			
2/8/2022								866	852
2/9/2022							2310		
8/2/2022	400	196	287	48					
8/9/2022									
8/10/2022					134	217			894
8/11/2022							1060	940	
1/23/2023			293	128					
1/24/2023	369	164							
1/27/2023					182	229			
1/30/2023									
2/1/2023							1950	892	1030

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	1010				
5/24/2016		1900			
7/11/2016					
7/12/2016	976	1950			
8/30/2016					
9/1/2016	1060	2000			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	<25	1870			
12/6/2016					
12/7/2016	866				
12/8/2016		1930			
1/24/2017					
1/26/2017	1000	1950			
3/21/2017					
3/22/2017	1080				
3/23/2017		2080			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	1080	1970			
10/3/2017					
10/4/2017	1210	2200			
6/4/2018					
6/5/2018		1880			
6/6/2018	1180				
10/1/2018					
10/2/2018					
10/3/2018	1250	2180			
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	1260	1610			
9/23/2019					
9/24/2019					
9/25/2019	1280	1960			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	1310	1860			
9/15/2020		1890			
9/16/2020	1220		270	272	
9/17/2020					188
9/18/2020					
11/10/2020			287	307	
11/11/2020					175
12/15/2020			295	289	193
1/19/2021			278	270	
1/20/2021					158

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/12/2023 1:14 PM View: Prediction Limits  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
3/10/2021			289		163
3/11/2021				279	
3/16/2021					
3/17/2021					
3/18/2021	1020	1390			
8/11/2021				277	
8/12/2021					179
8/13/2021			436		
8/18/2021	1290				
8/19/2021		1750			
2/1/2022			444	156	
2/7/2022					190
2/8/2022	1160	1770			
2/9/2022					
8/2/2022			311	278	
8/9/2022					182
8/10/2022	1390	1890			
8/11/2022					
1/23/2023					168
1/24/2023			363	271	
1/27/2023					
1/30/2023	1320				
2/1/2023		1430			

FIGURE E.



# Appendix III Trend Test - Prediction Limit Exceedances - Significant Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 5/12/2023, 1:20 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	HGWA-2 (bg)	0.002417	122	81	Yes	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-14	-1.327	-96	-81	Yes	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-16	0.2302	130	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	2.246	106	81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-4 (bg)	-8.577	-103	-81	Yes	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-16	12.23	150	81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-3 (bg)	-0.1264	-88	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-4 (bg)	-0.4126	-149	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-44D (bg)	8.893	28	25	Yes	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-14	-76.22	-127	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-15	-23.23	-122	-81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-16	12.44	172	81	Yes	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-18	-35.39	-120	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	1.847	118	81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-2.015	-26	-25	Yes	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-4 (bg)	-25.27	-113	-81	Yes	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-14	-209.1	-132	-81	Yes	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-15	-55.89	-95	-81	Yes	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-16	53.83	154	81	Yes	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-17	57.88	121	81	Yes	20	5	n/a	n/a	0.01	NP

# Appendix III Trend Test - Prediction Limit Exceedances - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 5/12/2023, 1:20 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.000535	-35	-81	No	20	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>0.002417</b>	<b>122</b>	<b>81</b>	<b>Yes</b>	<b>20</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)	0.0003333	19	81	No	20	20	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-4 (bg)	0	-1	-81	No	20	5	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-42D (bg)	-0.001407	-2	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-43D (bg)	-0.009889	-24	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-44D (bg)	0.06482	20	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-5 (bg)	0.0004577	38	81	No	20	20	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-6 (bg)	-0.0005014	-49	-81	No	20	5	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-14</b>	<b>-1.327</b>	<b>-96</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-15	0.01406	14	81	No	20	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-16</b>	<b>0.2302</b>	<b>130</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-17	0.171	42	81	No	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-18	-0.242	-54	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.181	64	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	0.8789	66	81	No	20	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>2.246</b>	<b>106</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-8.577</b>	<b>-103</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWA-42D (bg)	0.1137	2	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-43D (bg)	-3.051	-16	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-7.217	-22	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-5 (bg)	0.07208	5	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-6 (bg)	0.4785	53	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-14	-9.752	-50	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-15	0.4138	4	81	No	20	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWC-16</b>	<b>12.23</b>	<b>150</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWC-17	14.13	76	81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-18	4.792	29	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	0.5676	55	81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-2 (bg)	-0.02813	-10	-81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>-0.1264</b>	<b>-88</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-0.4126</b>	<b>-149</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	HGWA-42D (bg)	-0.04356	-1	-25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-43D (bg)	0	-2	-25	No	9	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWA-44D (bg)</b>	<b>8.893</b>	<b>28</b>	<b>25</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	HGWA-5 (bg)	-0.06171	-55	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-6 (bg)	-0.06887	-72	-81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWC-14</b>	<b>-76.22</b>	<b>-127</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWC-15</b>	<b>-23.23</b>	<b>-122</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWC-16</b>	<b>12.44</b>	<b>172</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	HGWC-17	8.913	72	81	No	20	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWC-18</b>	<b>-35.39</b>	<b>-120</b>	<b>-81</b>	<b>Yes</b>	<b>20</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)	0.7253	21	81	No	20	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>1.847</b>	<b>118</b>	<b>81</b>	<b>Yes</b>	<b>20</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)	0.4639	28	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-4 (bg)	-0.1234	-28	-81	No	20	15	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-42D (bg)	0.1593	7	25	No	9	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-43D (bg)</b>	<b>-2.015</b>	<b>-26</b>	<b>-25</b>	<b>Yes</b>	<b>9</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	HGWA-44D (bg)	3.569	14	25	No	9	11.11	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-5 (bg)	-0.2023	-36	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-6 (bg)	-0.1893	-43	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-14	-12.73	-18	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-15	-15.03	-65	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-16	2.285	55	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-17	1.633	7	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-18	8.948	36	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	1.455	8	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	2.559	17	81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	1.02	19	81	No	20	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-25.27</b>	<b>-113</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids (mg/L)	HGWA-42D (bg)	-2.891	-2	-25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	-6.294	-12	-25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	39.45	22	25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-5 (bg)	-1.947	-18	-81	No	20	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-6 (bg)	-1.109	-29	-81	No	20	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-14</b>	<b>-209.1</b>	<b>-132</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-15</b>	<b>-55.89</b>	<b>-95</b>	<b>-81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-16</b>	<b>53.83</b>	<b>154</b>	<b>81</b>	<b>Yes</b>	<b>20</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

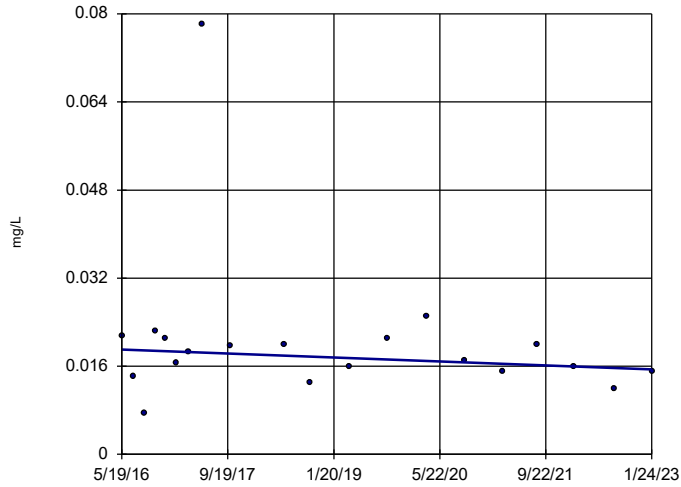
# Appendix III Trend Test - Prediction Limit Exceedances - All Results Page 2

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/12/2023, 1:20 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/L)	HGWC-17	57.88	121	81	Yes	20	5	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-18	-34.41	-64	-81	No	20	0	n/a	n/a	0.01	NP

### Sen's Slope Estimator

HGWA-1 (bg)

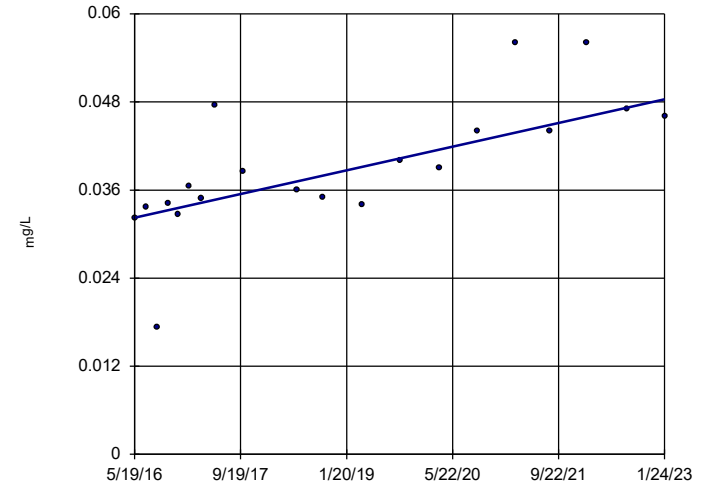


n = 20  
 Slope = -0.000535  
 units per year.  
 Mann-Kendall  
 statistic = -35  
 critical = -81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-2 (bg)

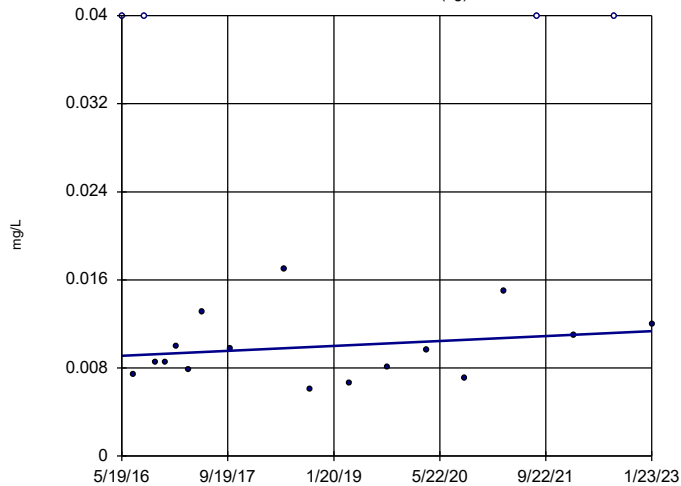


n = 20  
 Slope = 0.002417  
 units per year.  
 Mann-Kendall  
 statistic = 122  
 critical = 81  
 Increasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-3 (bg)

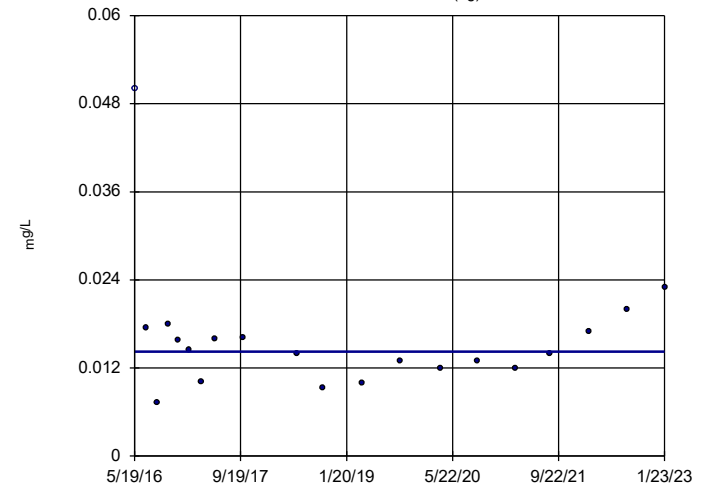


n = 20  
 Slope = 0.0003333  
 units per year.  
 Mann-Kendall  
 statistic = 19  
 critical = 81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-4 (bg)

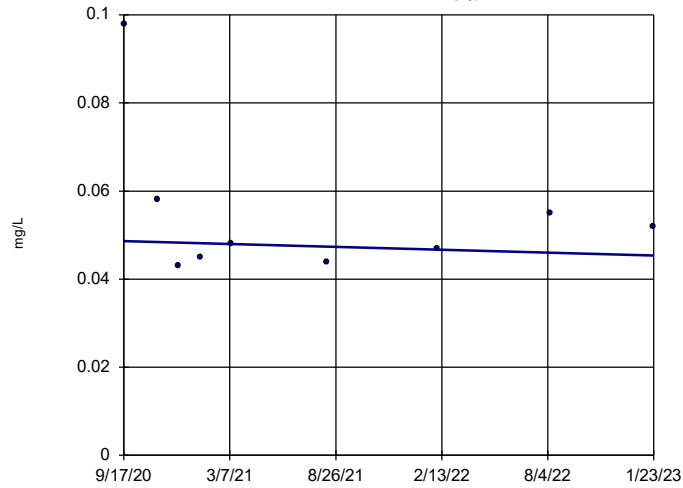


n = 20  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = -1  
 critical = -81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-42D (bg)

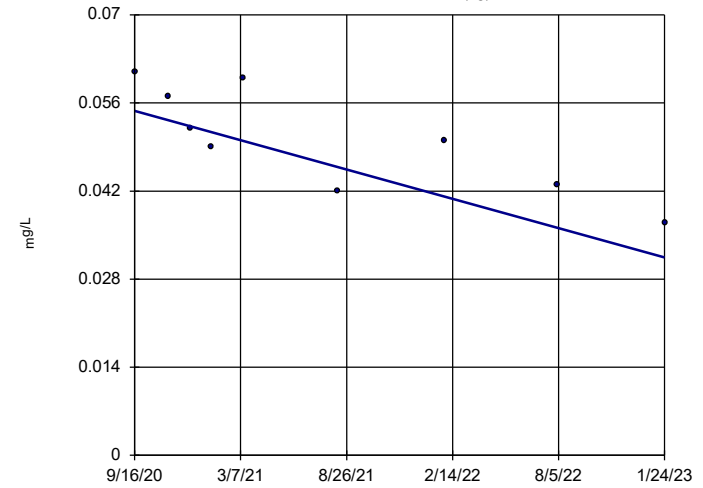


n = 9  
 Slope = -0.001407  
 units per year.  
 Mann-Kendall  
 statistic = -2  
 critical = -25  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-43D (bg)

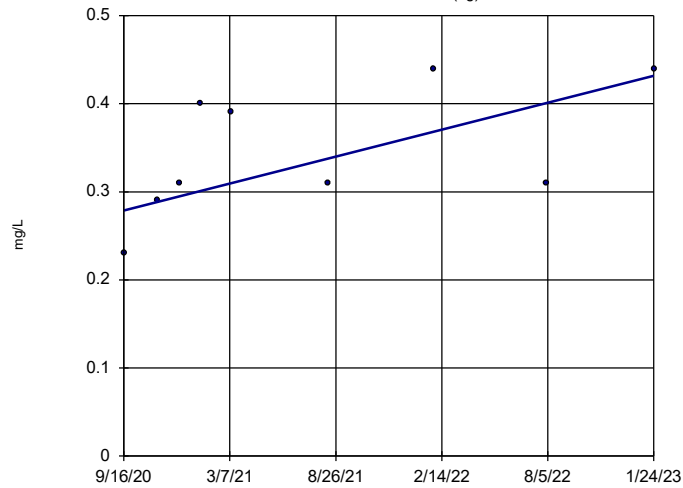


n = 9  
 Slope = -0.009889  
 units per year.  
 Mann-Kendall  
 statistic = -24  
 critical = -25  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-44D (bg)



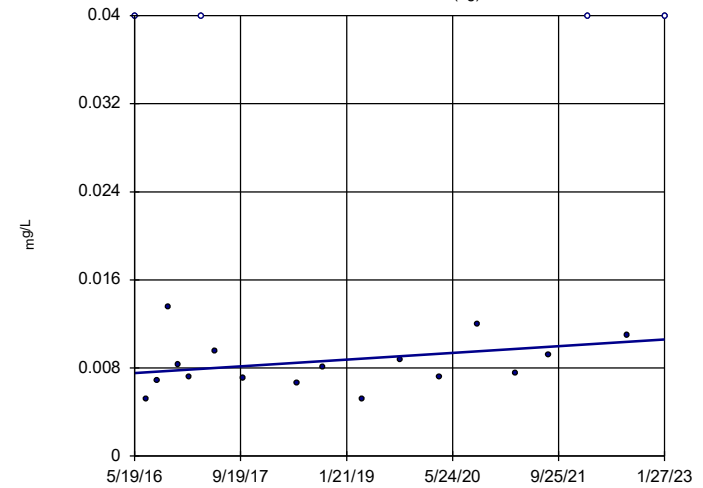
n = 9  
 Slope = 0.06482  
 units per year.  
 Mann-Kendall  
 statistic = 20  
 critical = 25  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Hollow symbols indicate censored values.

### Sen's Slope Estimator

HGWA-5 (bg)

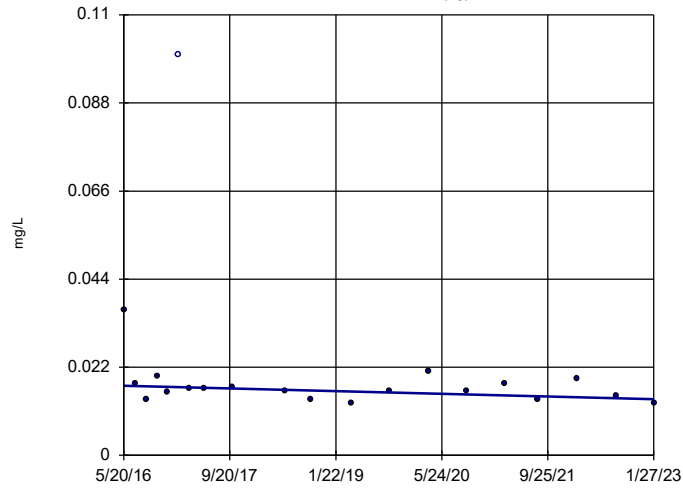


n = 20  
 Slope = 0.0004577  
 units per year.  
 Mann-Kendall  
 statistic = 38  
 critical = 81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-6 (bg)

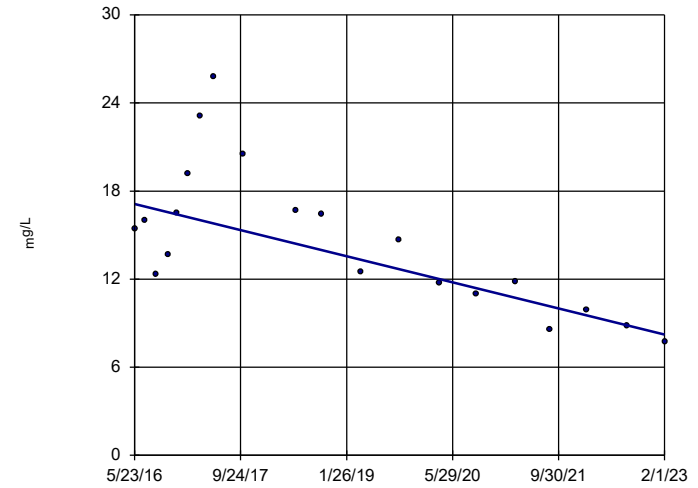


n = 20  
 Slope = -0.0005014  
 units per year.  
 Mann-Kendall  
 statistic = -49  
 critical = -81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-14

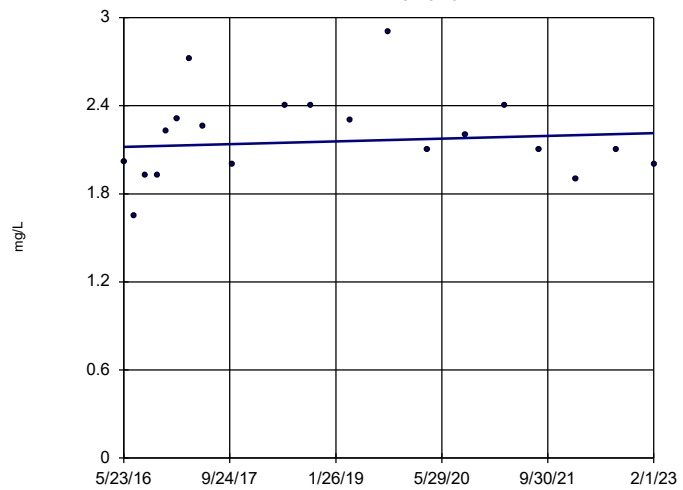


n = 20  
 Slope = -1.327  
 units per year.  
 Mann-Kendall  
 statistic = -96  
 critical = -81  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-15

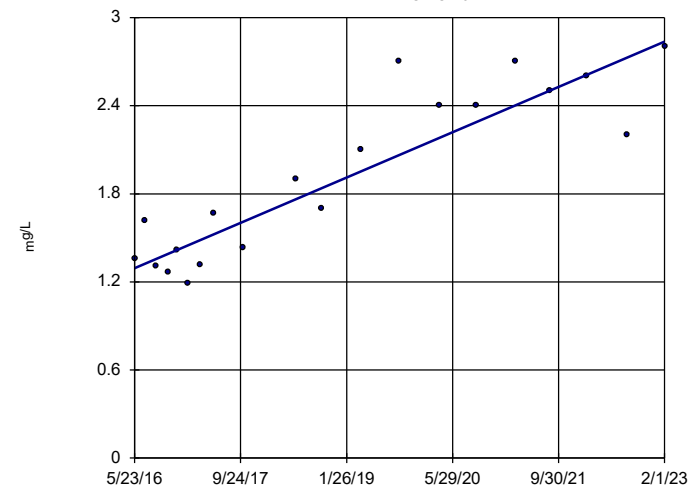


n = 20  
 Slope = 0.01406  
 units per year.  
 Mann-Kendall  
 statistic = 14  
 critical = 81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-16

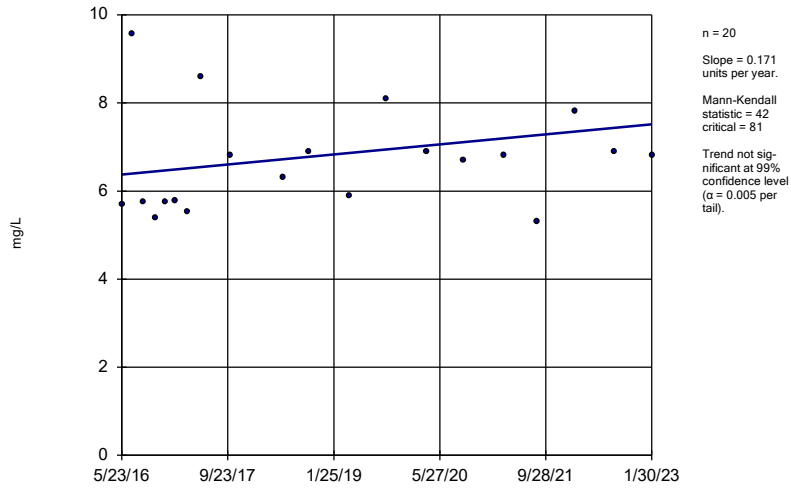


n = 20  
 Slope = 0.2302  
 units per year.  
 Mann-Kendall  
 statistic = 130  
 critical = 81  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

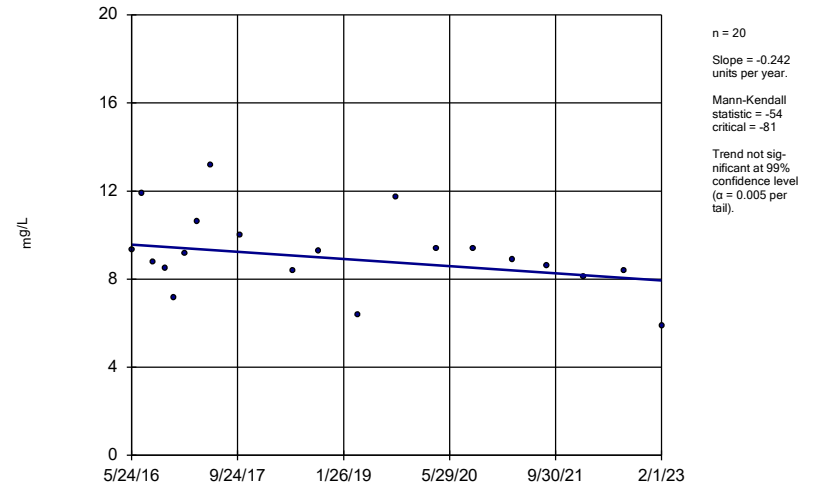
HGWC-17



Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

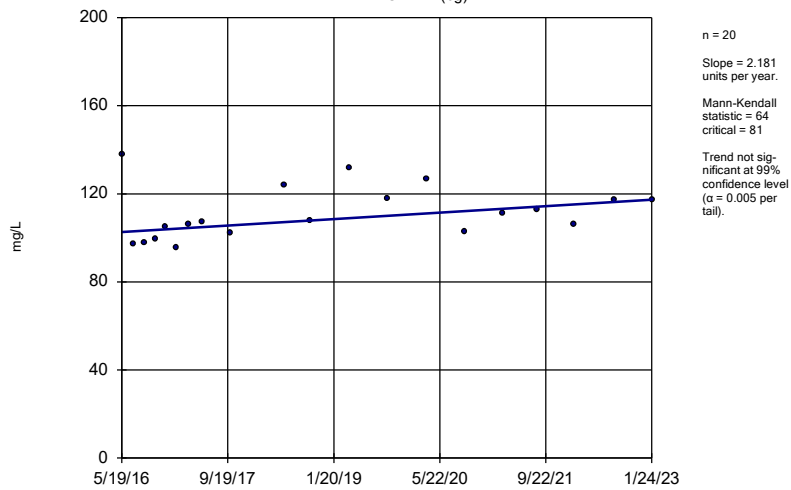
HGWC-18



Constituent: Boron Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

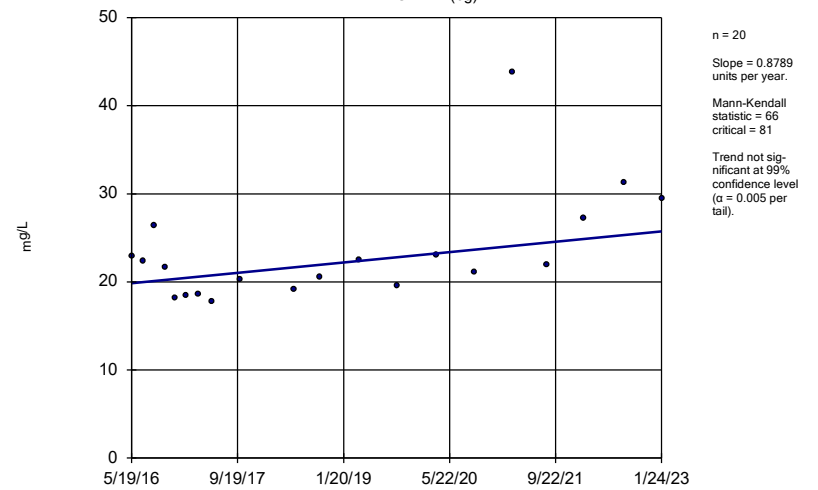
HGWA-1 (bg)



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

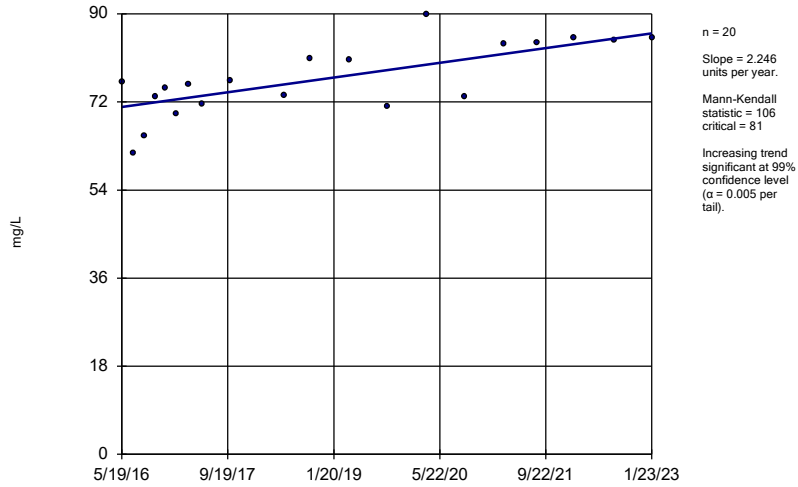
HGWA-2 (bg)



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

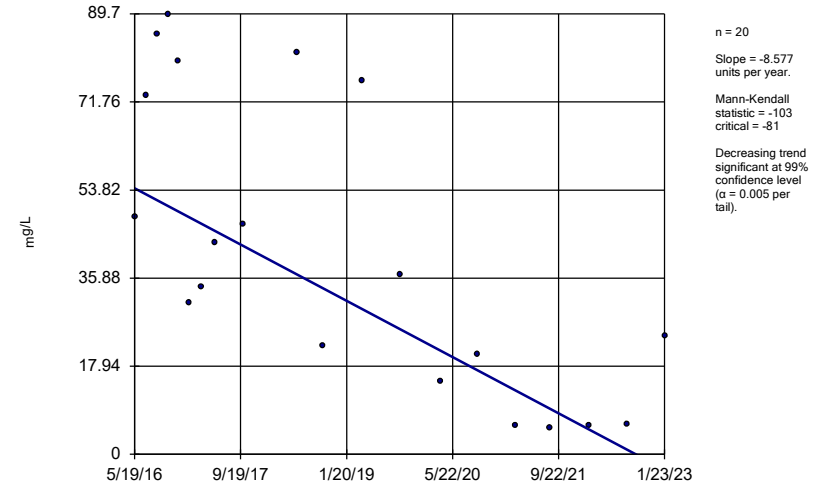
HGWA-3 (bg)



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

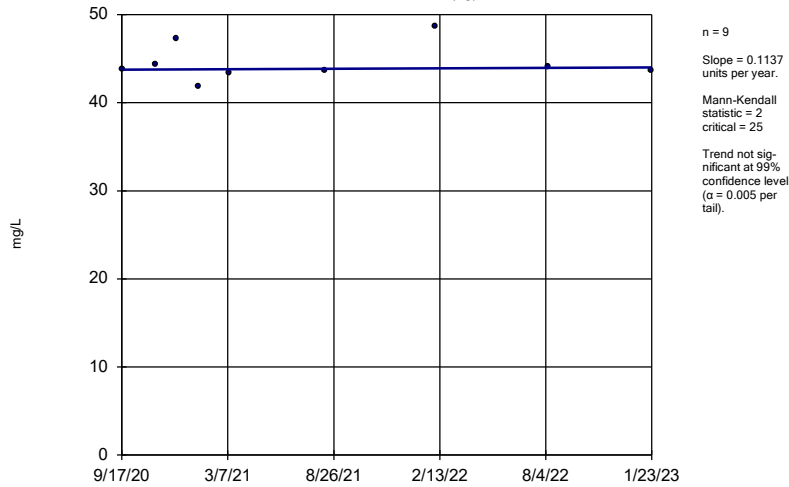
HGWA-4 (bg)



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

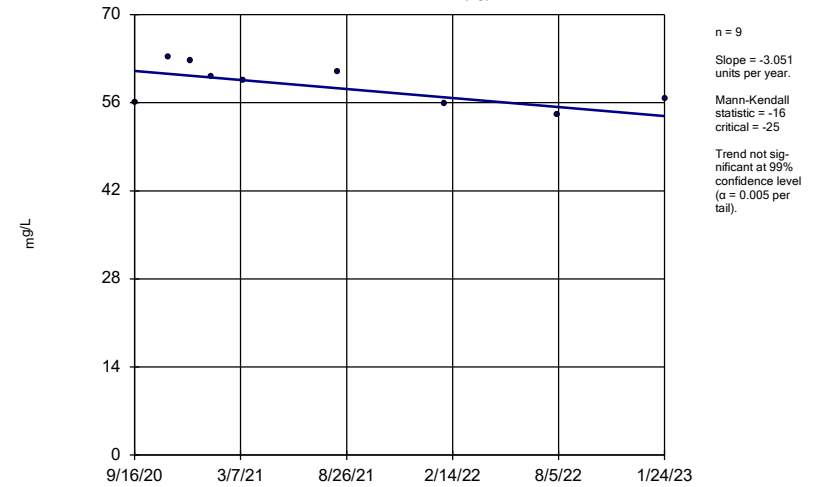
HGWA-42D (bg)



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-43D (bg)

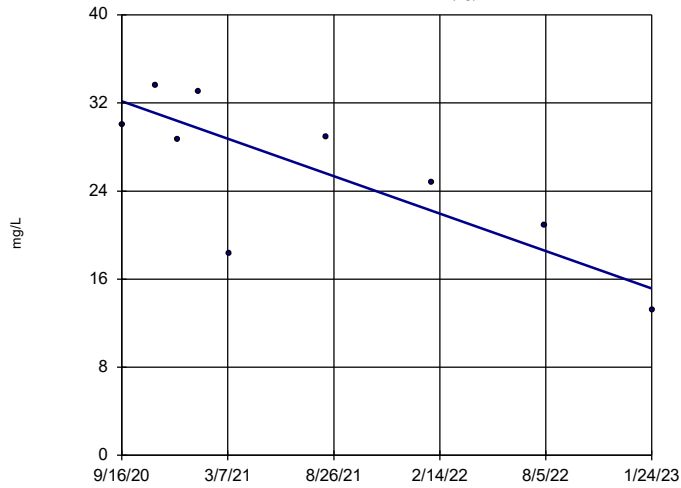


Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2



### Sen's Slope Estimator

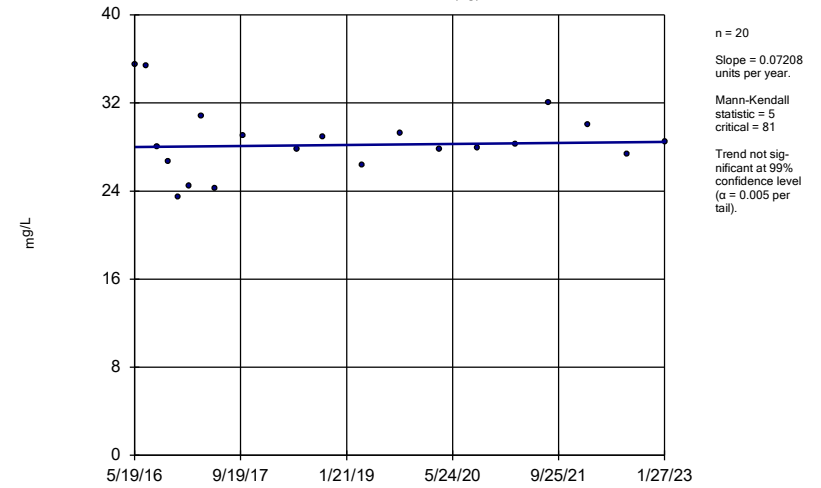
HGWA-44D (bg)



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

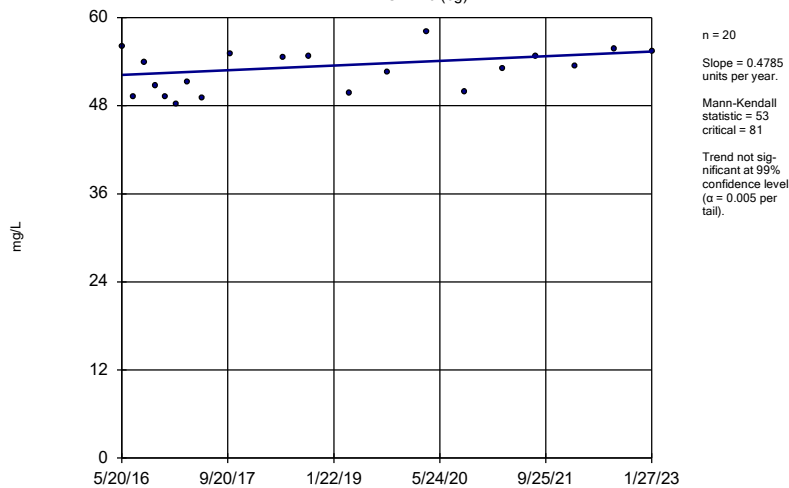
HGWA-5 (bg)



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

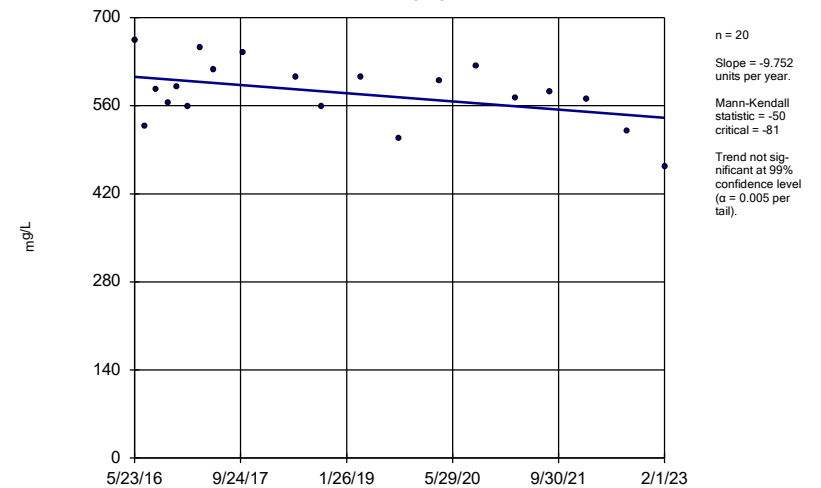
HGWA-6 (bg)



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

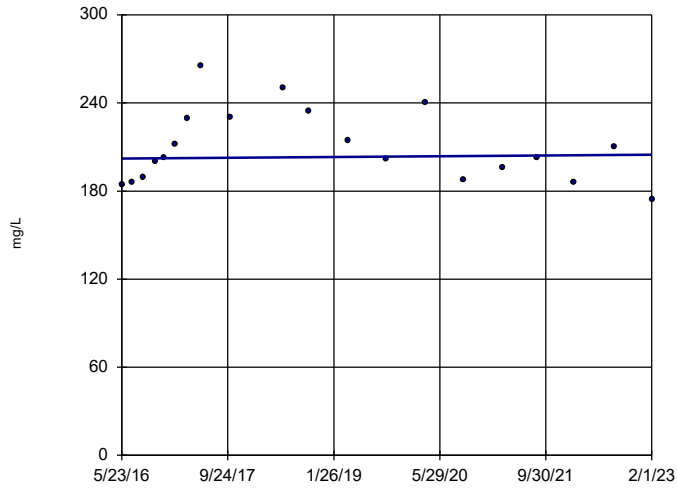
HGWC-14



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

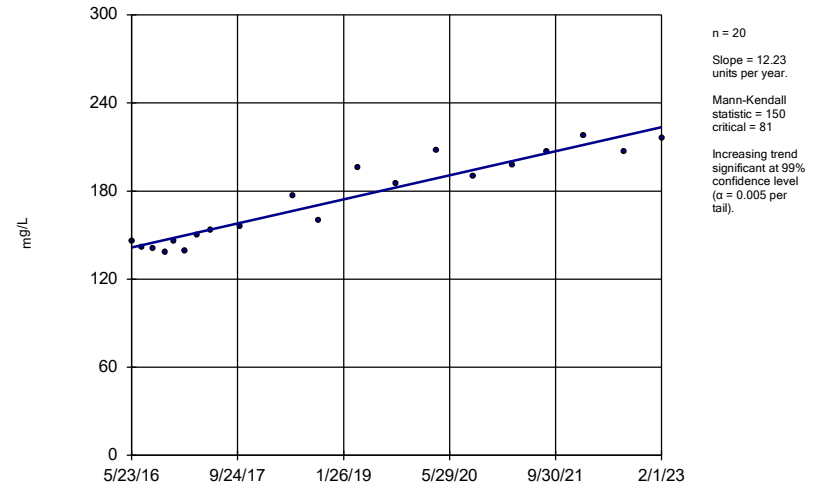
HGWC-15



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

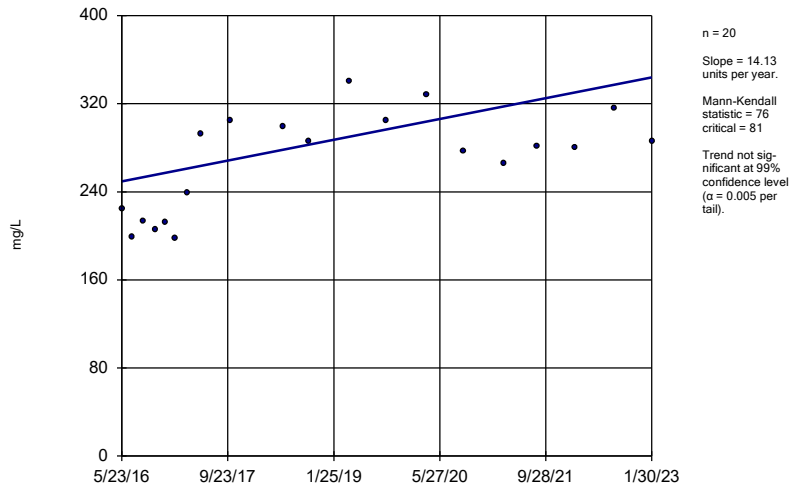
HGWC-16



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

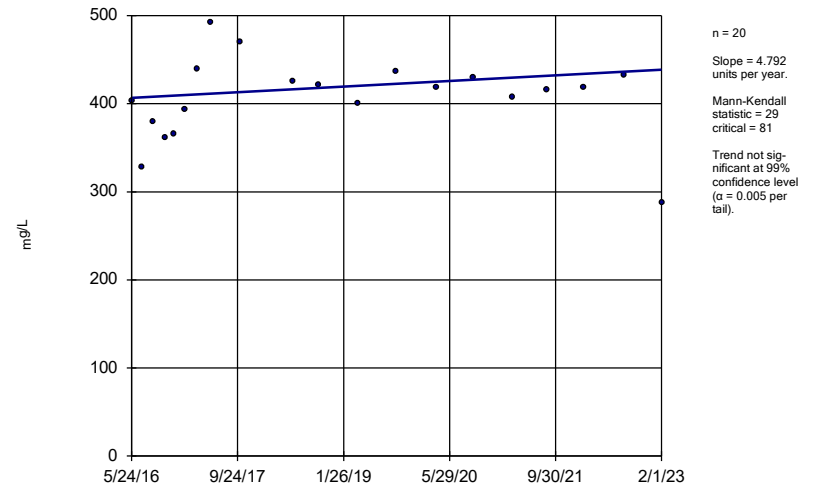
HGWC-17



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

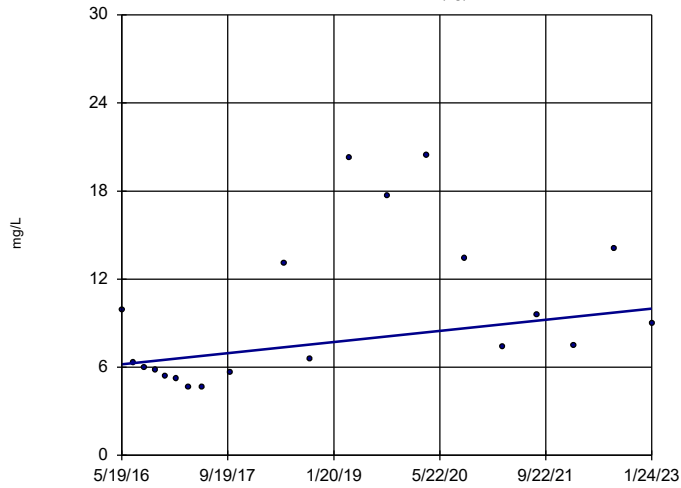
HGWC-18



Constituent: Calcium Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-1 (bg)

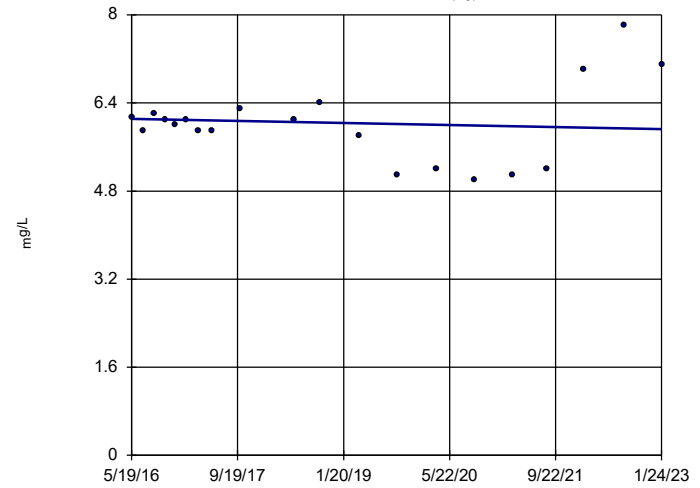


n = 20  
 Slope = 0.5676  
 units per year.  
 Mann-Kendall  
 statistic = 55  
 critical = 81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-2 (bg)

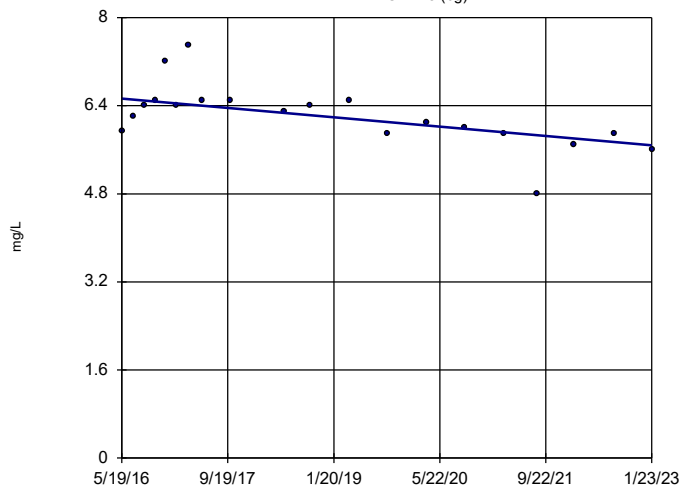


n = 20  
 Slope = -0.02813  
 units per year.  
 Mann-Kendall  
 statistic = -10  
 critical = -81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-3 (bg)

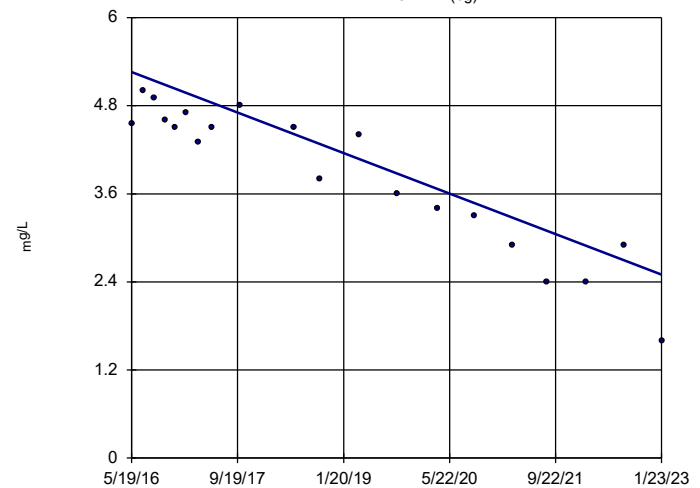


n = 20  
 Slope = -0.1264  
 units per year.  
 Mann-Kendall  
 statistic = -88  
 critical = -81  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-4 (bg)

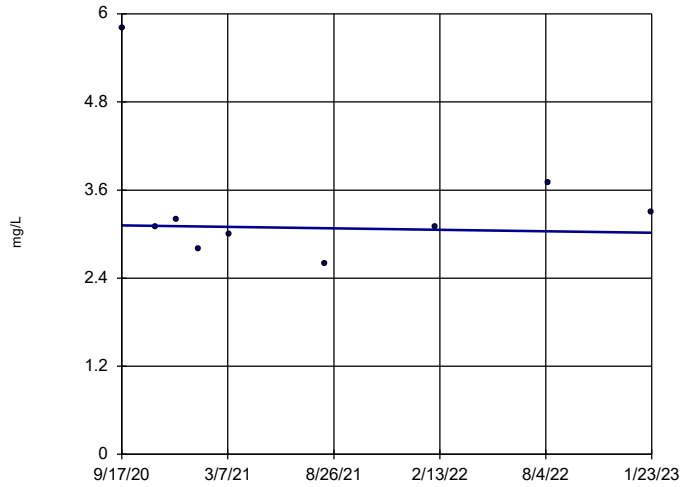


n = 20  
 Slope = -0.4126  
 units per year.  
 Mann-Kendall  
 statistic = -149  
 critical = -81  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-42D (bg)

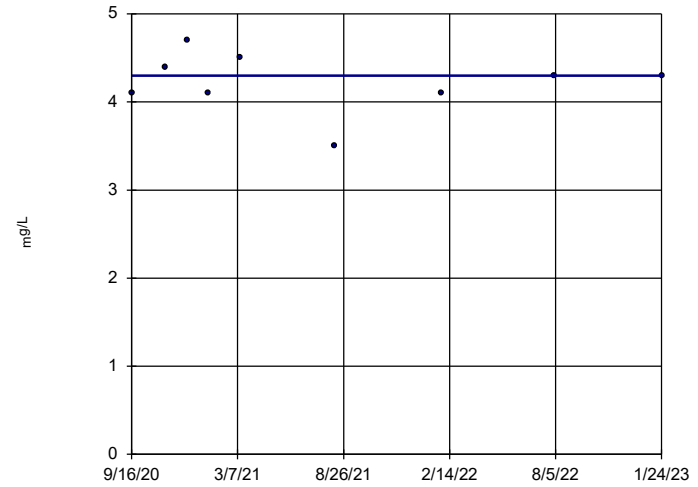


n = 9  
 Slope = -0.04356  
 units per year.  
 Mann-Kendall  
 statistic = -1  
 critical = -25  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-43D (bg)

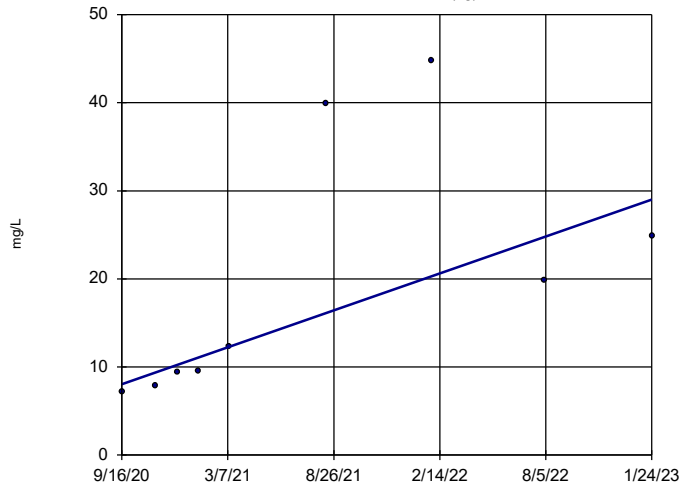


n = 9  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = -2  
 critical = -25  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-44D (bg)

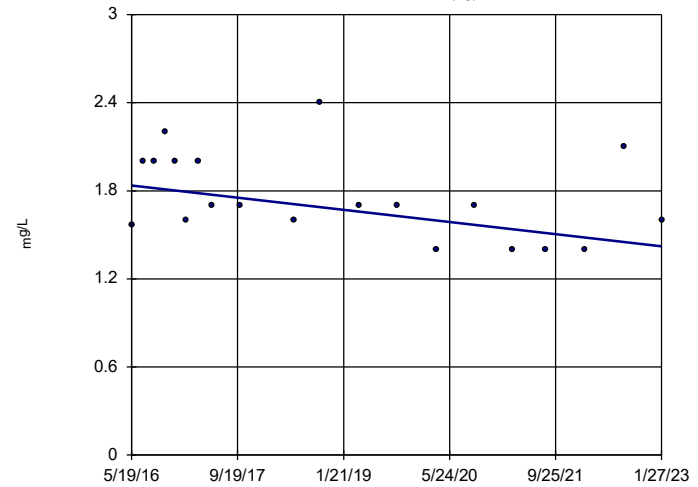


n = 9  
 Slope = 8.893  
 units per year.  
 Mann-Kendall  
 statistic = 28  
 critical = 25  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-5 (bg)

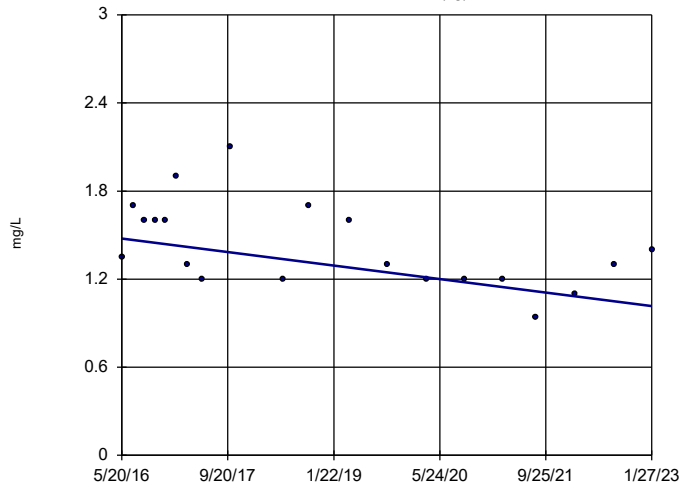


n = 20  
 Slope = -0.06171  
 units per year.  
 Mann-Kendall  
 statistic = -55  
 critical = -81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 5/12/2023 1:17 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

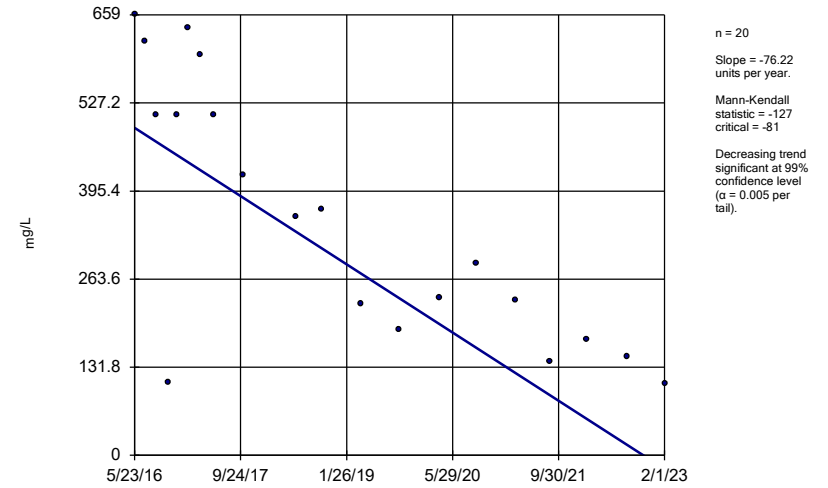
HGWA-6 (bg)



Constituent: Chloride Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

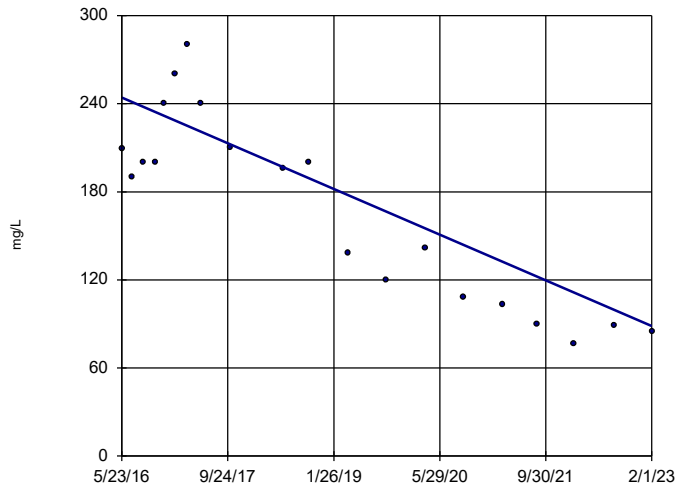
HGWC-14



Constituent: Chloride Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

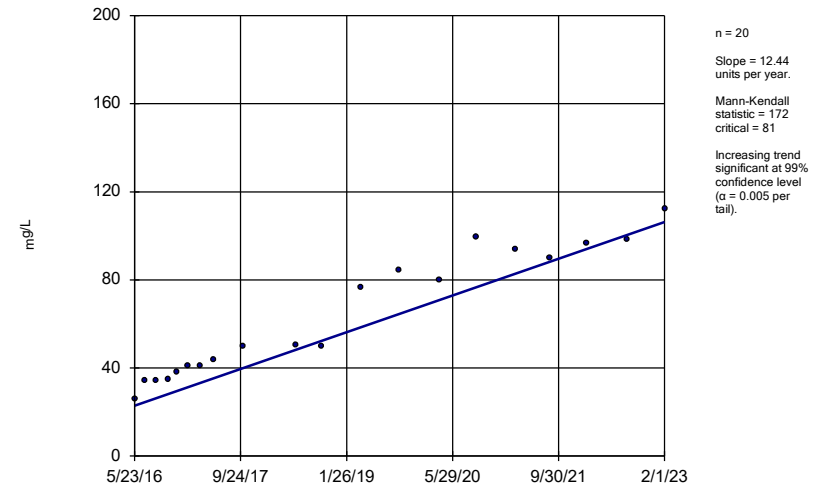
HGWC-15



Constituent: Chloride Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

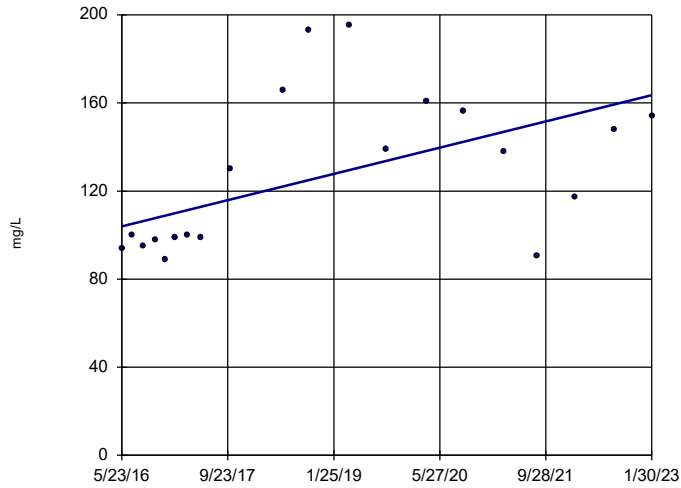
HGWC-16



Constituent: Chloride Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-17

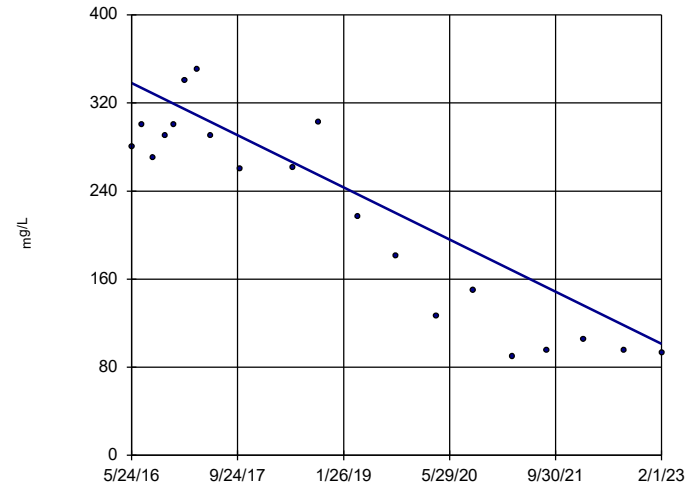


n = 20  
 Slope = 8.913  
 units per year.  
 Mann-Kendall  
 statistic = 72  
 critical = 81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-18

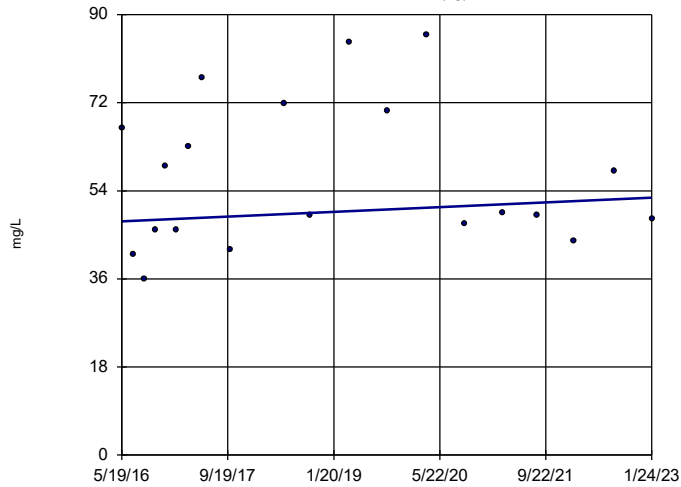


n = 20  
 Slope = -35.39  
 units per year.  
 Mann-Kendall  
 statistic = -120  
 critical = -81  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-1 (bg)

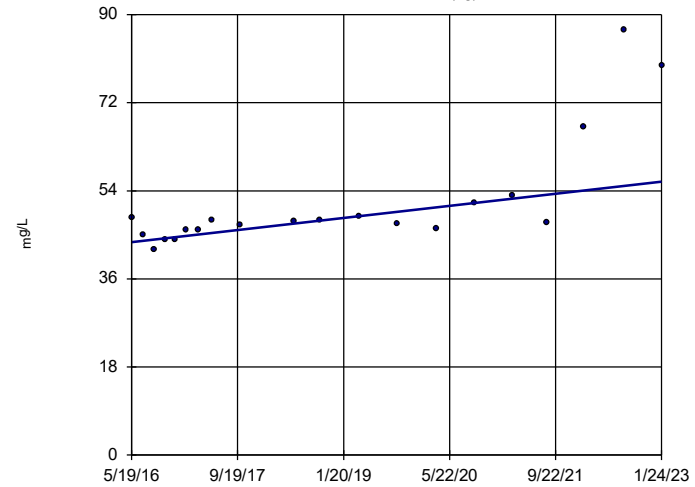


n = 20  
 Slope = 0.7253  
 units per year.  
 Mann-Kendall  
 statistic = 21  
 critical = 81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-2 (bg)

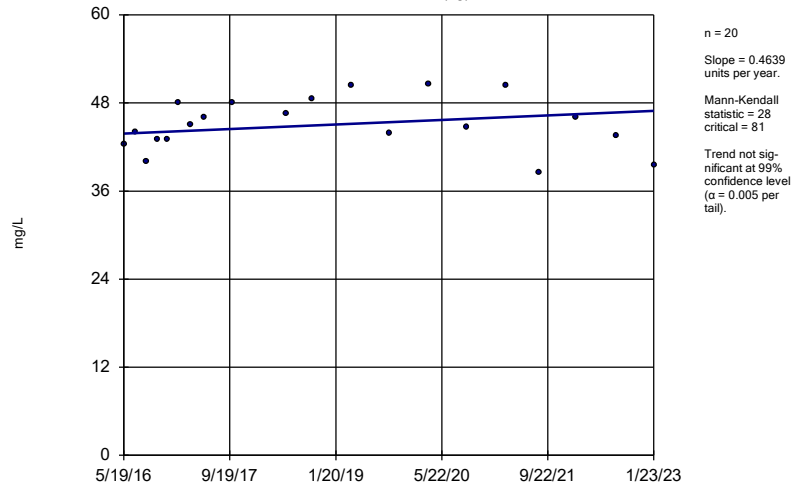


n = 20  
 Slope = 1.847  
 units per year.  
 Mann-Kendall  
 statistic = 118  
 critical = 81  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-3 (bg)

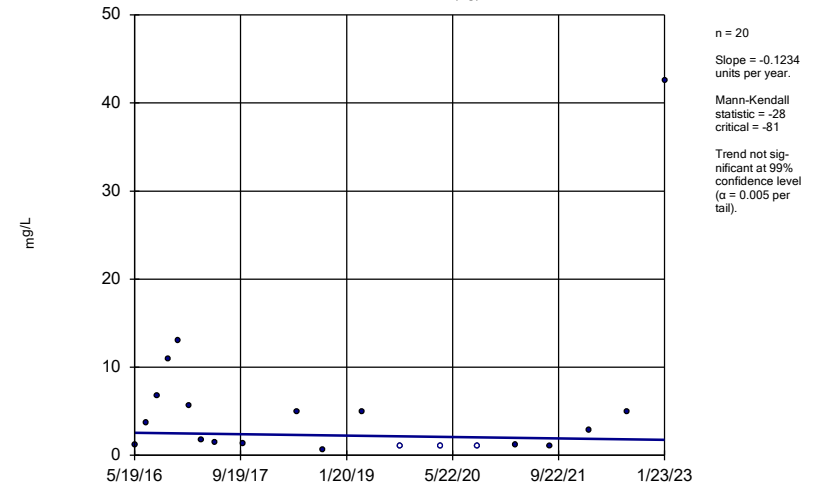


Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Hollow symbols indicate censored values.

### Sen's Slope Estimator

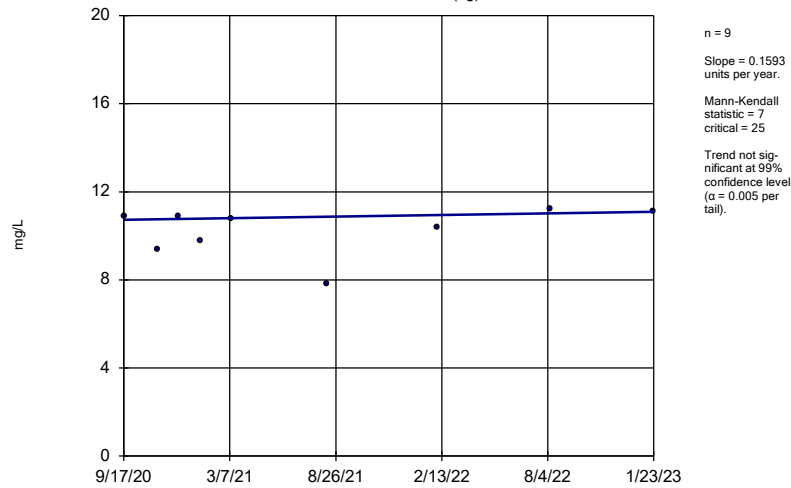
HGWA-4 (bg)



Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

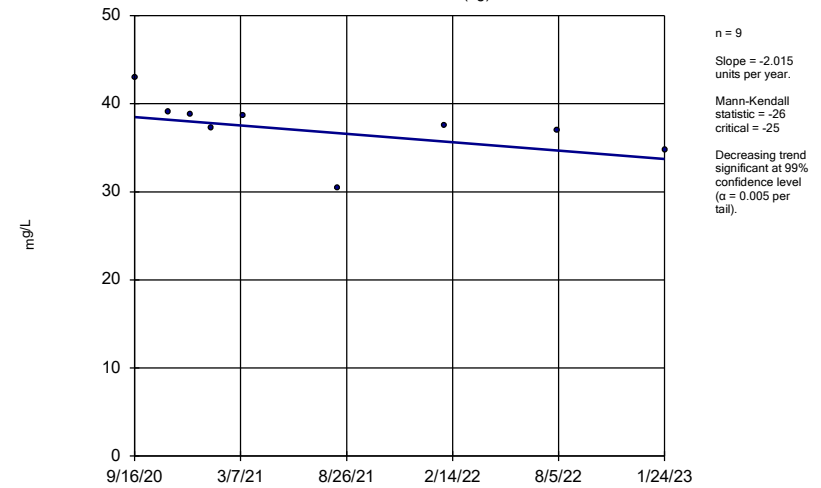
HGWA-42D (bg)



Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

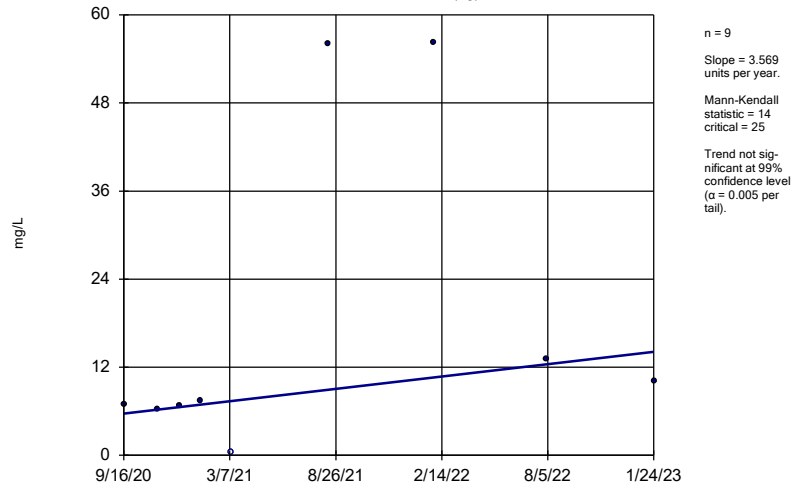
HGWA-43D (bg)



Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

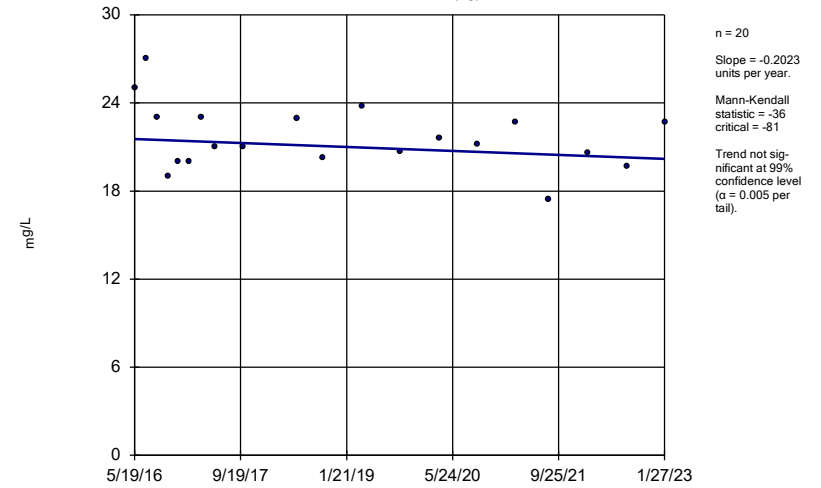
HGWA-44D (bg)



Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

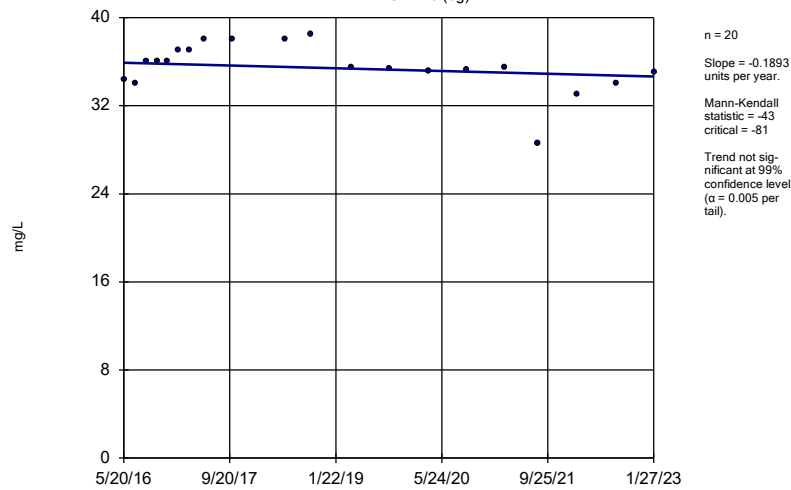
HGWA-5 (bg)



Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

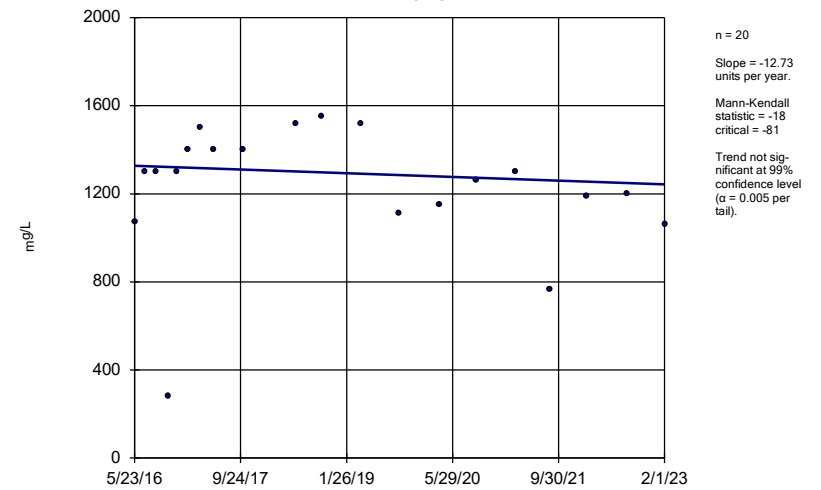
HGWA-6 (bg)



Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-14

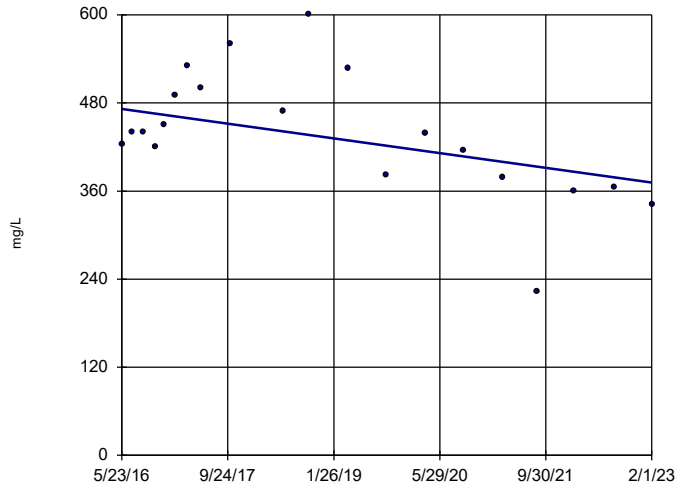


Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2



### Sen's Slope Estimator

HGWC-15

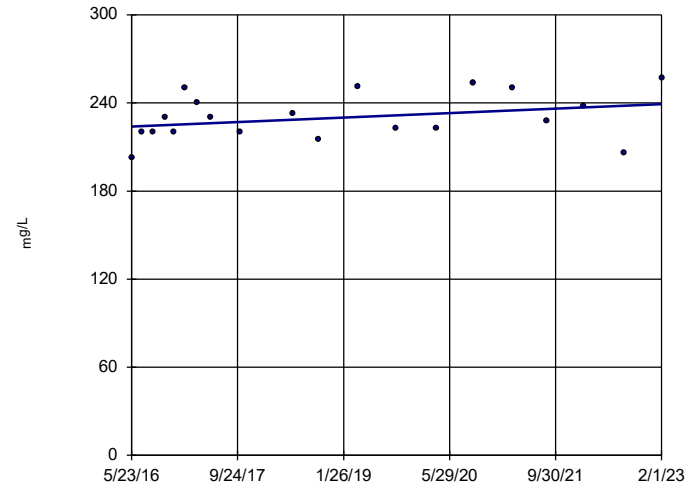


n = 20  
 Slope = -15.03  
 units per year.  
 Mann-Kendall  
 statistic = -65  
 critical = -81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-16

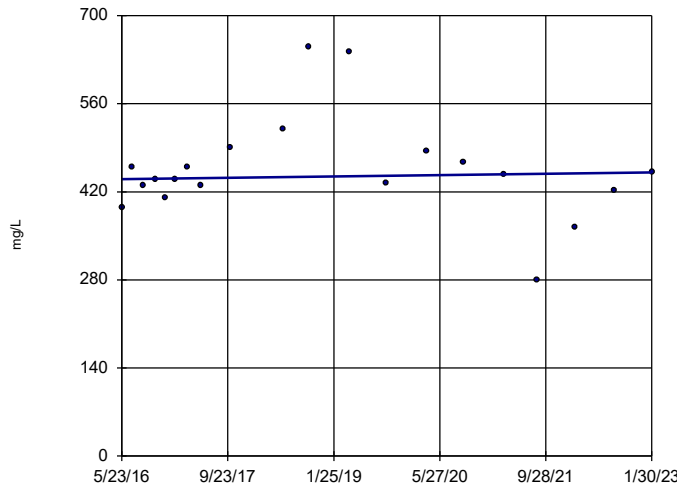


n = 20  
 Slope = 2.285  
 units per year.  
 Mann-Kendall  
 statistic = 55  
 critical = 81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-17

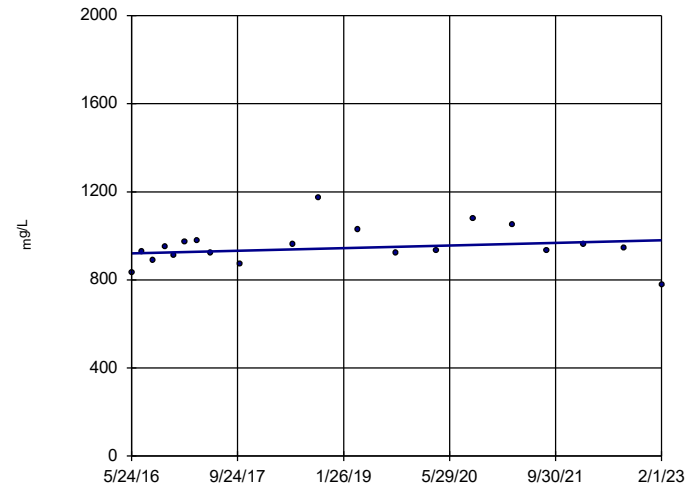


n = 20  
 Slope = 1.633  
 units per year.  
 Mann-Kendall  
 statistic = 7  
 critical = 81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-18

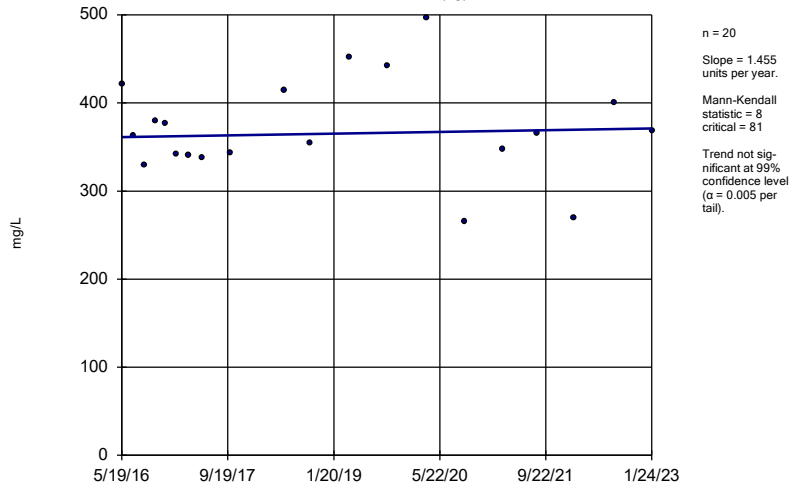


n = 20  
 Slope = 8.948  
 units per year.  
 Mann-Kendall  
 statistic = 36  
 critical = 81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

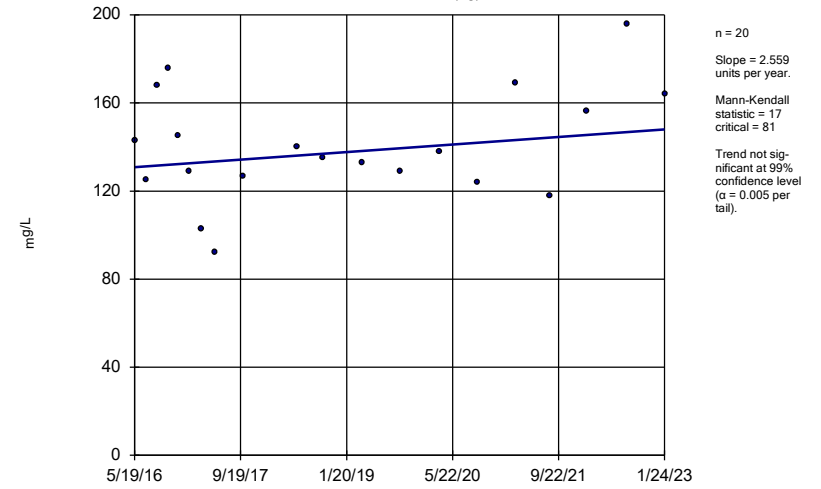
HGWA-1 (bg)



Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

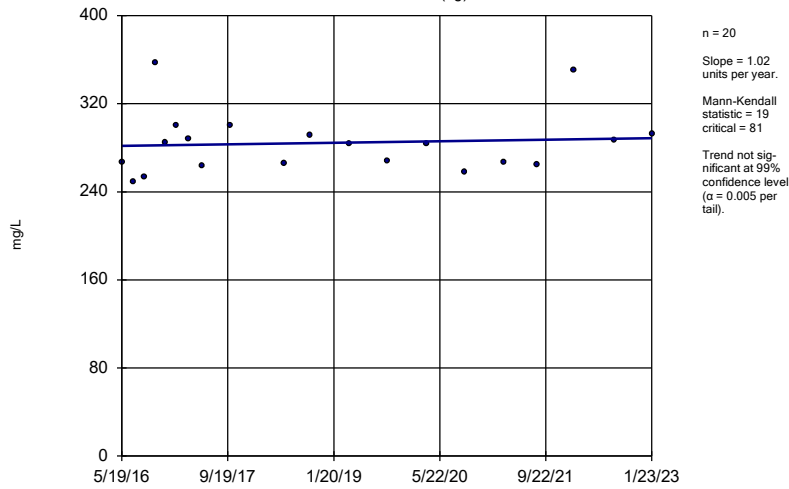
HGWA-2 (bg)



Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

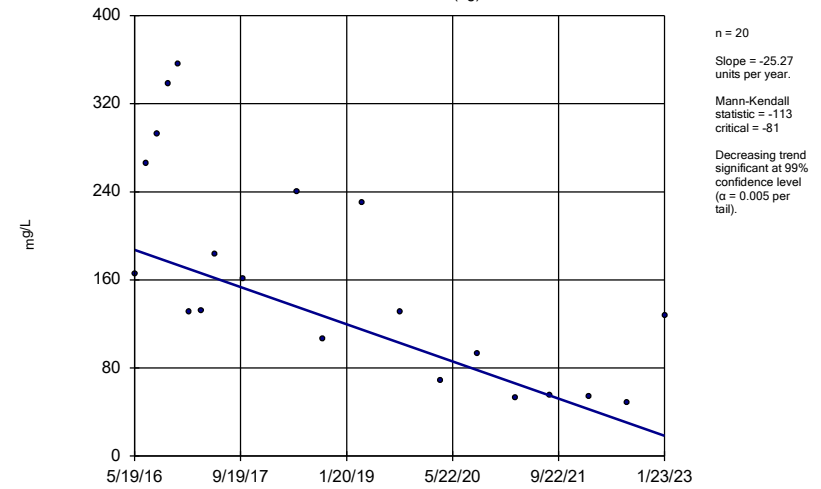
HGWA-3 (bg)



Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

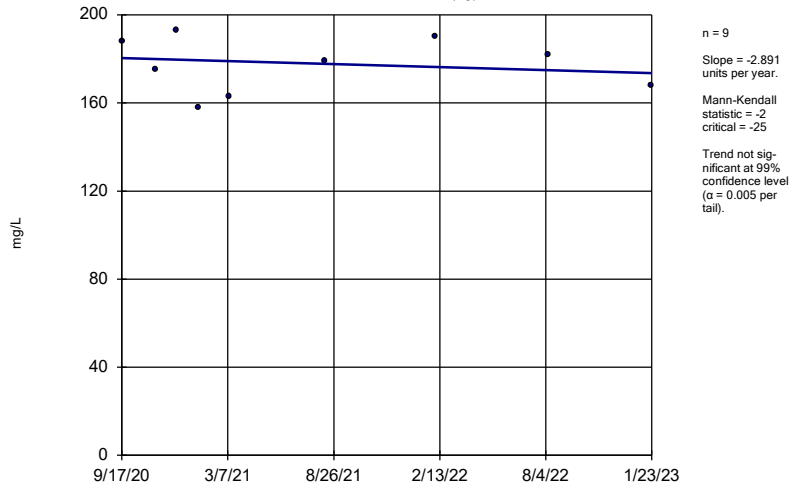
HGWA-4 (bg)



Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

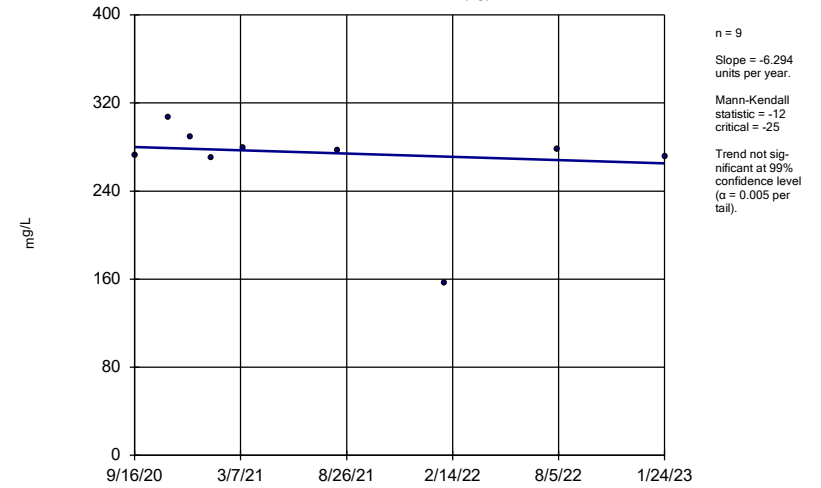
HGWA-42D (bg)



Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

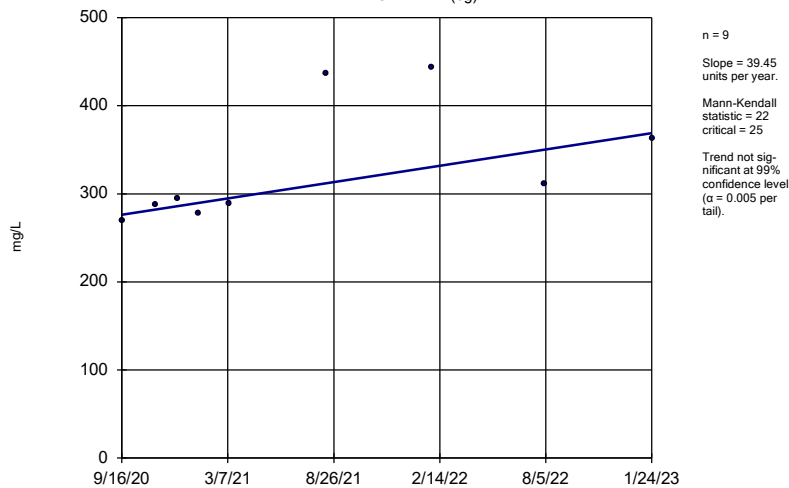
HGWA-43D (bg)



Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

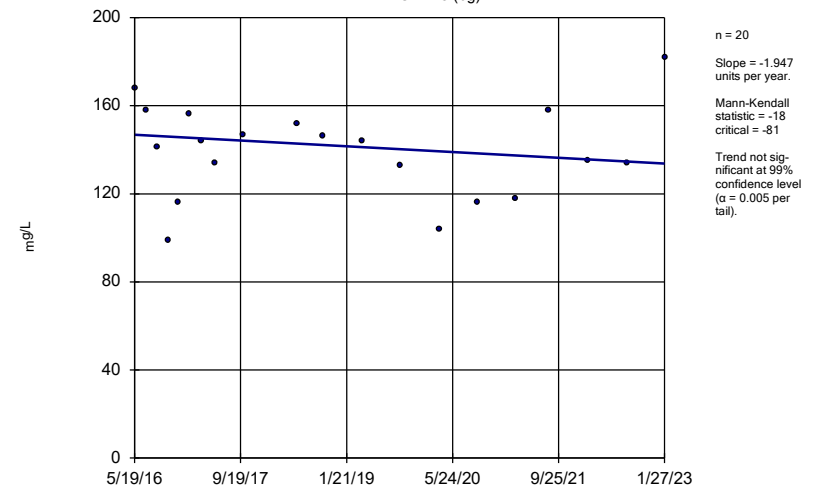
HGWA-44D (bg)



Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

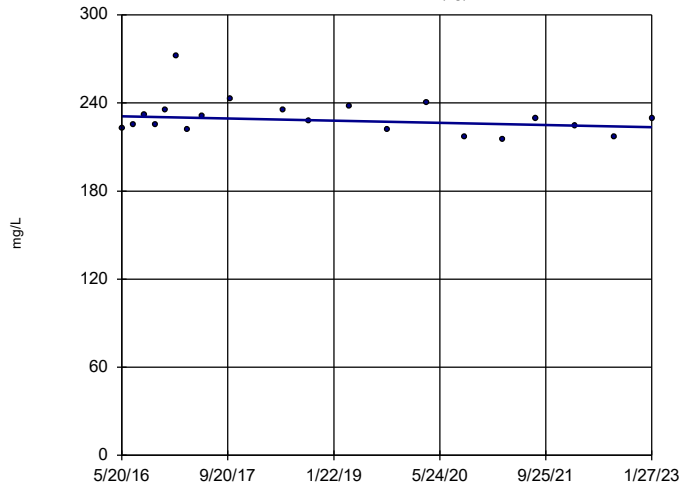
HGWA-5 (bg)



Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-6 (bg)

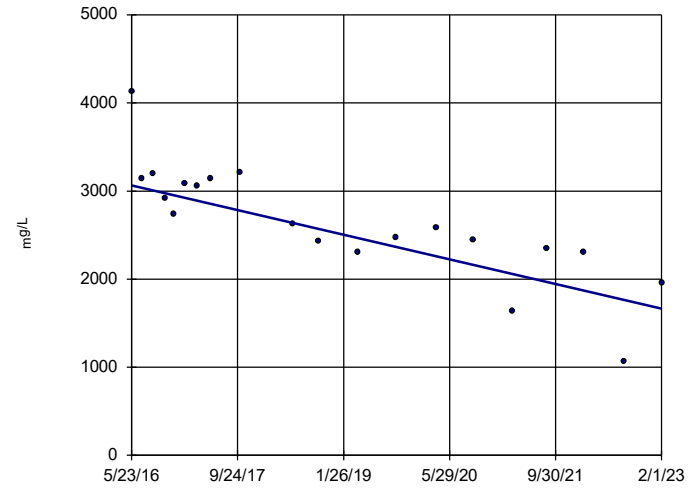


n = 20  
 Slope = -1.109  
 units per year.  
 Mann-Kendall  
 statistic = -29  
 critical = -81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-14

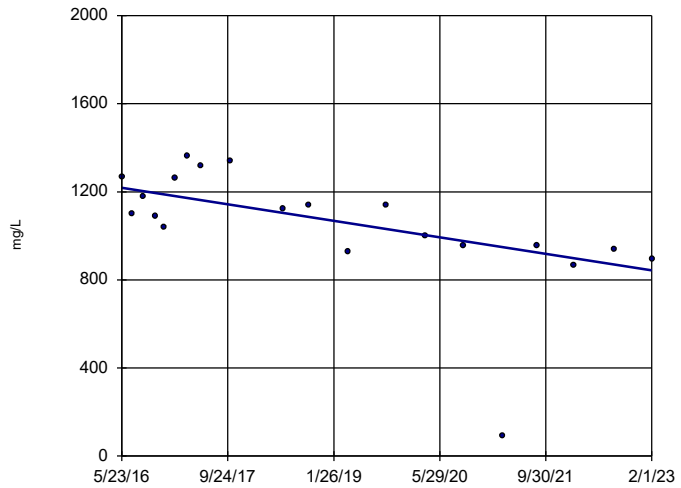


n = 20  
 Slope = -209.1  
 units per year.  
 Mann-Kendall  
 statistic = -132  
 critical = -81  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-15

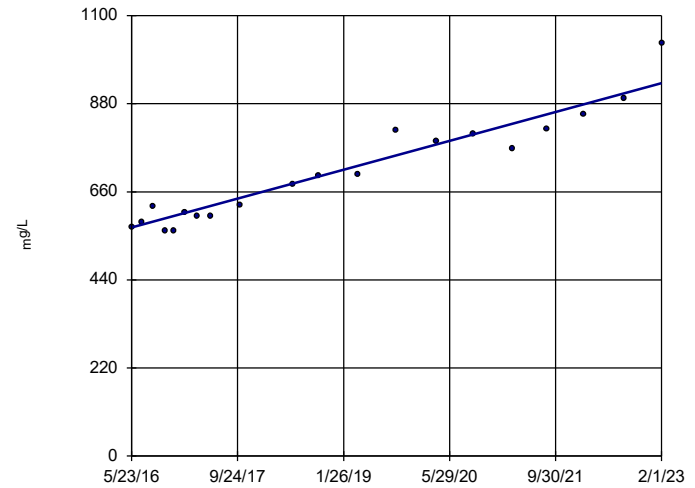


n = 20  
 Slope = -55.89  
 units per year.  
 Mann-Kendall  
 statistic = -95  
 critical = -81  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-16

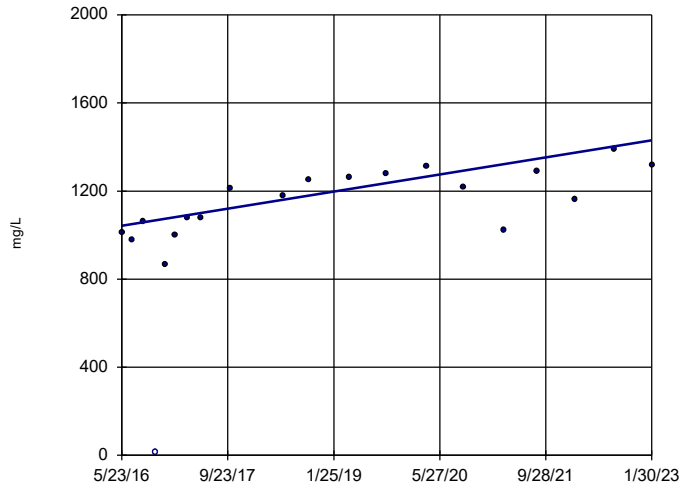


n = 20  
 Slope = 53.83  
 units per year.  
 Mann-Kendall  
 statistic = 154  
 critical = 81  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-17

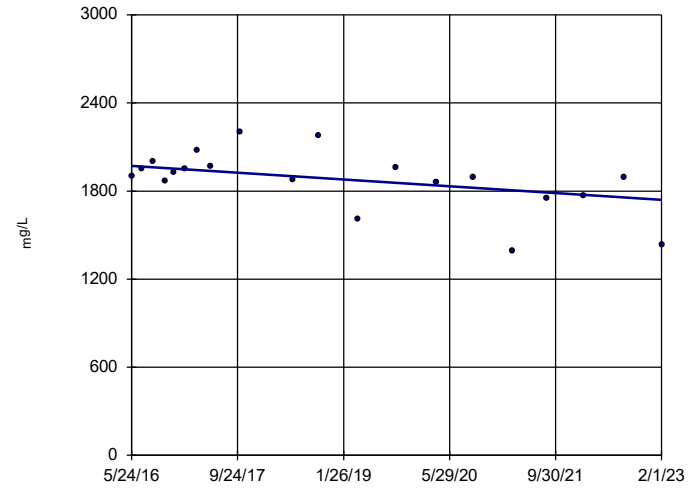


n = 20  
 Slope = 57.88  
 units per year.  
 Mann-Kendall  
 statistic = 121  
 critical = 81  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-18



n = 20  
 Slope = -34.41  
 units per year.  
 Mann-Kendall  
 statistic = -64  
 critical = -81  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 5/12/2023 1:18 PM View: A3 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

FIGURE F.

# Upper Tolerance Limit Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/16/2023, 2:09 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bq.N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.003	n/a	n/a	n/a	135	82.22	n/a	0.0009833	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	168	80.95	n/a	0.000181	NP Inter(NDs)
Barium (mg/L)	n/a	0.46	n/a	n/a	n/a	168	0	n/a	0.000181	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	156	82.69	n/a	0.0003349	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	168	92.26	n/a	0.000181	NP Inter(NDs)
Chromium (mg/L)	n/a	0.019	n/a	n/a	n/a	156	85.26	n/a	0.0003349	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.038	n/a	n/a	n/a	168	69.64	n/a	0.000181	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	4.36	n/a	n/a	n/a	167	0	n/a	0.0001905	NP Inter(n>table)
Fluoride (mg/L)	n/a	1.3	n/a	n/a	n/a	174	31.03	n/a	NaN	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	156	75	n/a	0.0003349	NP Inter(NDs)
Lithium (mg/L)	n/a	0.064	n/a	n/a	n/a	166	17.47	n/a	0.0002005	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	112	92.86	n/a	0.003199	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	154	83.77	n/a	0.0003711	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	168	98.21	n/a	0.000181	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	168	98.81	n/a	0.000181	NP Inter(NDs)

FIGURE G.



PLANT HAMMOND AP-2 GWPS				
Constituent Name	MCL	CCR-Rule Specified	Background Limit	GWPS
Antimony, Total (mg/L)	0.006		0.003	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01
Barium, Total (mg/L)	2		0.46	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.0019	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		1.3	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.064	0.064
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

\*Grey cell indicates background is higher than MCL or CCR-Rule

\*MCL = Maximum Contaminant Level

\*CCR = Coal Combustion Residuals

\*GWPS = Groundwater Protection Standard

FIGURE H.

# Confidence Intervals - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/22/2023, 4:01 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	HGWC-18	0.1843	0.1565	0.038	Yes	23	0.1704	0.02661	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-33	0.05671	0.04409	0.038	Yes	10	0.0504	0.007074	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-35	0.09573	0.08302	0.038	Yes	8	0.08938	0.005999	0	None	No	0.01	Param.

# Confidence Intervals - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 5/22/2023, 4:01 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-14	0.003	0.001	0.006	No	17	0.002572	0.0009613	82.35	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-15	0.003	0.0021	0.006	No	17	0.002806	0.0004423	82.35	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-18	0.003	0.0008	0.006	No	17	0.002871	0.0005336	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-22	0.003	0.0016	0.006	No	8	0.002825	0.000495	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	MW-33	0.003	0.00046	0.006	No	6	0.002577	0.001037	83.33	None	No	0.0155	NP (NDs)
Antimony (mg/L)	MW-34D	0.003	0.0018	0.006	No	4	0.0027	0.0006	75	None	No	0.0625	NP (NDs)
Antimony (mg/L)	MW-35	0.003	0.00041	0.006	No	6	0.002552	0.00105	66.67	None	No	0.0155	NP (NDs)
Antimony (mg/L)	MW-37D	0.003	0.00079	0.006	No	6	0.002632	0.0009022	83.33	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	HGWC-14	0.007215	0.004338	0.01	No	23	0.006003	0.003023	13.04	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	HGWC-15	0.005	0.0008	0.01	No	23	0.004406	0.001571	86.96	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-16	0.005	0.0012	0.01	No	23	0.004257	0.001668	82.61	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-17	0.005	0.0017	0.01	No	23	0.003864	0.001801	69.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-18	0.006689	0.004793	0.01	No	23	0.005741	0.001813	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-21D	0.005	0.001	0.01	No	13	0.003884	0.00184	69.23	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-22	0.005	0.00045	0.01	No	12	0.004621	0.001313	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-23D	0.005	0.001	0.01	No	12	0.004318	0.001592	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-33	0.009086	0.003603	0.01	No	9	0.006344	0.00284	11.11	None	No	0.01	Param.
Arsenic (mg/L)	MW-34D	0.005798	0.001268	0.01	No	6	0.003533	0.001649	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-35	0.025	0.0043	0.01	No	8	0.01043	0.009037	25	None	No	0.004	NP (normality)
Arsenic (mg/L)	MW-37D	0.005	0.00095	0.01	No	8	0.003794	0.00171	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-51	0.0046	0.002	0.01	No	4	0.00375	0.001185	0	None	No	0.0625	NP (selected)
Barium (mg/L)	HGWC-14	0.022	0.018	2	No	23	0.02474	0.02198	4.348	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-15	0.02674	0.018	2	No	23	0.02237	0.008352	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-16	0.1113	0.1006	2	No	23	0.1059	0.01019	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-17	0.02637	0.02358	2	No	23	0.02497	0.002661	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-18	0.0336	0.028	2	No	23	0.03231	0.01539	4.348	None	No	0.01	NP (normality)
Barium (mg/L)	MW-21D	0.06613	0.04033	2	No	13	0.05323	0.01735	0	None	No	0.01	Param.
Barium (mg/L)	MW-22	0.03037	0.01546	2	No	12	0.02292	0.009501	0	None	No	0.01	Param.
Barium (mg/L)	MW-23D	0.06578	0.05089	2	No	12	0.05833	0.00949	0	None	No	0.01	Param.
Barium (mg/L)	MW-33	0.02701	0.0201	2	No	9	0.02356	0.003575	0	None	No	0.01	Param.
Barium (mg/L)	MW-34D	0.04598	0.03502	2	No	6	0.0405	0.003987	0	None	No	0.01	Param.
Barium (mg/L)	MW-35	0.02969	0.02206	2	No	8	0.02588	0.003603	0	None	No	0.01	Param.
Barium (mg/L)	MW-37D	0.1578	0.108	2	No	8	0.1325	0.02605	0	None	ln(x)	0.01	Param.
Barium (mg/L)	MW-51	0.05247	0.01703	2	No	4	0.03475	0.007805	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-14	0.00058	0.00043	0.004	No	21	0.0005657	0.0003206	9.524	None	No	0.01	NP (normality)
Beryllium (mg/L)	HGWC-17	0.0005	0.000067	0.004	No	21	0.0004158	0.0001779	80.95	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-18	0.003365	0.002719	0.004	No	21	0.003042	0.0005857	4.762	None	No	0.01	Param.
Beryllium (mg/L)	MW-22	0.0005	0.000062	0.004	No	12	0.0002851	0.0002247	50	None	No	0.01	NP (normality)
Beryllium (mg/L)	MW-33	0.00109	0.0007052	0.004	No	9	0.00088	0.0002771	0	None	x^2	0.01	Param.
Beryllium (mg/L)	MW-34D	0.0005	0.000065	0.004	No	6	0.0003692	0.0002045	66.67	None	No	0.0155	NP (NDs)
Beryllium (mg/L)	MW-35	0.0006894	0.0004081	0.004	No	8	0.0005488	0.0001327	0	None	No	0.01	Param.
Beryllium (mg/L)	MW-37D	0.0005	0.00012	0.004	No	8	0.0004525	0.0001344	87.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	MW-51	0.00042	0.00011	0.004	No	4	0.0002725	0.0001269	0	None	No	0.0625	NP (selected)
Cadmium (mg/L)	HGWC-14	0.0005	0.00012	0.005	No	23	0.0003203	0.0001938	52.17	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-15	0.00216	0.001418	0.005	No	23	0.001789	0.0007095	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-17	0.0005	0.00007	0.005	No	23	0.0004813	0.00008966	95.65	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-18	0.0024	0.0016	0.005	No	23	0.002329	0.001747	4.348	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-22	0.0021	0.001547	0.005	No	12	0.001747	0.0005224	0	None	x^3	0.01	Param.
Cadmium (mg/L)	MW-23D	0.0025	0.00012	0.005	No	12	0.001234	0.001128	41.67	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-33	0.00125	0.00013	0.005	No	9	0.0002967	0.0003585	11.11	None	No	0.002	NP (normality)
Cadmium (mg/L)	MW-34D	0.0007197	0.0002366	0.005	No	6	0.001138	0.001066	33.33	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	MW-35	0.001833	0.0009249	0.005	No	8	0.001379	0.0004282	0	None	No	0.01	Param.
Cadmium (mg/L)	MW-51	0.0016	0.00024	0.005	No	4	0.0008075	0.0006043	0	None	No	0.0625	NP (selected)
Chromium (mg/L)	HGWC-14	0.025	0.00066	0.1	No	21	0.02267	0.007357	90.48	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-15	0.025	0.0012	0.1	No	21	0.02153	0.008713	85.71	None	No	0.01	NP (NDs)

# Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/22/2023, 4:01 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	HGWC-16	0.025	0.0021	0.1	No	21	0.02158	0.008585	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-17	0.005	0.0018	0.1	No	21	0.00444	0.001421	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-18	0.025	0.00063	0.1	No	21	0.0215	0.008781	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-21D	0.005	0.00074	0.1	No	13	0.004332	0.001632	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-22	0.005	0.00075	0.1	No	12	0.004262	0.001724	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-23D	0.025	0.00086	0.1	No	12	0.02097	0.009402	83.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-33	0.005	0.00069	0.1	No	9	0.004521	0.001437	88.89	None	No	0.002	NP (NDs)
Chromium (mg/L)	MW-34D	0.0059	0.005	0.1	No	6	0.00515	0.0003674	83.33	None	No	0.0155	NP (NDs)
Chromium (mg/L)	MW-35	0.025	0.00079	0.1	No	8	0.01895	0.0112	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-37D	0.005	0.0014	0.1	No	8	0.004525	0.001265	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	HGWC-14	0.033	0.025	0.038	No	23	0.03281	0.02061	4.348	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-15	0.0425	0.02433	0.038	No	23	0.03342	0.01737	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-16	0.005	0.00037	0.038	No	23	0.004593	0.001347	91.3	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-17	0.01571	0.01282	0.038	No	23	0.01427	0.00276	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>HGWC-18</b>	<b>0.1843</b>	<b>0.1565</b>	<b>0.038</b>	<b>Yes</b>	<b>23</b>	<b>0.1704</b>	<b>0.02661</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-21D	0.005	0.00034	0.038	No	13	0.004642	0.001292	92.31	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-22	0.03621	0.02329	0.038	No	12	0.02975	0.008237	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-23D	0.001137	0.0009167	0.038	No	12	0.001027	0.0001402	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>MW-33</b>	<b>0.05671</b>	<b>0.04409</b>	<b>0.038</b>	<b>Yes</b>	<b>10</b>	<b>0.0504</b>	<b>0.007074</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-34D	0.01049	0.004877	0.038	No	6	0.007683	0.002043	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>MW-35</b>	<b>0.09573</b>	<b>0.08302</b>	<b>0.038</b>	<b>Yes</b>	<b>8</b>	<b>0.08938</b>	<b>0.005999</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-37D	0.005	0.00048	0.038	No	8	0.003997	0.001876	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-51	0.03747	0.01703	0.038	No	4	0.02725	0.0045	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-14	1.561	1.096	5	No	23	1.329	0.4443	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-15	0.8756	0.4627	5	No	23	0.6692	0.3947	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-16	0.9267	0.5097	5	No	23	0.7182	0.3987	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-17	0.9865	0.6461	5	No	23	0.8163	0.3254	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-18	2.152	1.575	5	No	23	1.864	0.5525	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-21D	1.019	0.4388	5	No	13	0.7489	0.4402	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-22	1.06	0.3998	5	No	12	0.7298	0.4206	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-23D	1.031	0.5436	5	No	12	0.7872	0.3104	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-33	2.321	1.061	5	No	9	1.691	0.6528	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-34D	1.291	0.2594	5	No	6	0.7753	0.3756	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-35	2.706	0.832	5	No	8	1.739	0.9594	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-37D	1.349	0.1355	5	No	8	0.7421	0.5723	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-51	1.418	0.2041	5	No	4	0.811	0.2673	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-14	0.1721	0.07713	4	No	24	0.1688	0.1523	20.83	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	HGWC-15	0.12	0.09	4	No	24	0.1373	0.1149	41.67	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-16	0.1407	0.04851	4	No	24	0.1481	0.1161	50	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	HGWC-17	0.1743	0.06167	4	No	24	0.2164	0.206	29.17	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	HGWC-18	0.6071	0.3854	4	No	24	0.4963	0.2173	4.167	None	No	0.01	Param.
Fluoride (mg/L)	MW-21D	0.1	0.056	4	No	13	0.09277	0.01769	76.92	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-22	0.13	0.064	4	No	12	0.1114	0.05592	66.67	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-23D	0.14	0.074	4	No	12	0.1028	0.0259	66.67	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-33	0.2751	0.1183	4	No	10	0.1967	0.08785	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-34D	0.09254	0.05506	4	No	6	0.07817	0.01734	16.67	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	MW-35	0.09433	0.05142	4	No	8	0.07288	0.02024	12.5	None	No	0.01	Param.
Fluoride (mg/L)	MW-37D	0.09216	0.05384	4	No	8	0.073	0.01808	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-51	0.18	0.072	4	No	4	0.11	0.04956	0	None	No	0.0625	NP (selected)
Lead (mg/L)	HGWC-14	0.001674	0.001233	0.015	No	21	0.001453	0.0003992	9.524	None	No	0.01	Param.
Lead (mg/L)	HGWC-15	0.001	0.001	0.015	No	21	0.0008298	0.0003605	76.19	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-16	0.001	0.0001	0.015	No	21	0.0006201	0.0004505	57.14	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-17	0.001	0.000089	0.015	No	21	0.0006574	0.0004481	61.9	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-18	0.001401	0.001045	0.015	No	21	0.001223	0.0003233	9.524	None	No	0.01	Param.
Lead (mg/L)	MW-21D	0.001	0.000048	0.015	No	13	0.000756	0.0004098	69.23	None	No	0.01	NP (NDs)

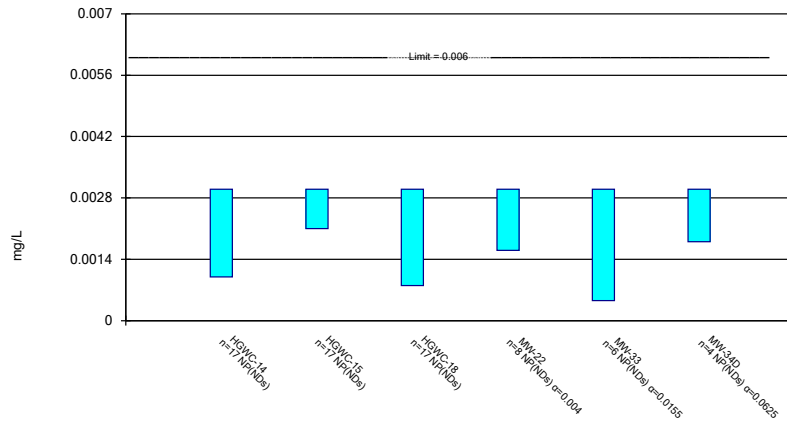
# Confidence Intervals - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/22/2023, 4:01 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	MW-22	0.001	0.000094	0.015	No	12	0.0007692	0.0004179	75	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-23D	0.001	0.00016	0.015	No	12	0.0008509	0.000349	83.33	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-33	0.001674	0.001032	0.015	No	9	0.001511	0.00031	22.22	Kaplan-Meier	x*5	0.01	Param.
Lead (mg/L)	MW-34D	0.001	0.00087	0.015	No	6	0.0009783	0.00005307	83.33	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	MW-35	0.001	0.00016	0.015	No	8	0.000795	0.0003134	50	None	No	0.004	NP (normality)
Lead (mg/L)	MW-37D	0.0017	0.000082	0.015	No	8	0.0008965	0.0004809	62.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	HGWC-15	0.03	0.0021	0.064	No	23	0.01411	0.01324	26.09	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-16	0.0042	0.0029	0.064	No	22	0.004023	0.002541	4.545	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-17	0.03	0.0012	0.064	No	22	0.01427	0.01469	45.45	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-18	0.01424	0.01197	0.064	No	22	0.0131	0.002122	0	None	No	0.01	Param.
Lithium (mg/L)	MW-21D	0.02469	0.02085	0.064	No	13	0.02277	0.002587	0	None	No	0.01	Param.
Lithium (mg/L)	MW-22	0.0015	0.0011	0.064	No	12	0.001275	0.0002598	0	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-23D	0.002562	0.002088	0.064	No	12	0.002325	0.0003019	0	None	No	0.01	Param.
Lithium (mg/L)	MW-33	0.015	0.00086	0.064	No	8	0.002775	0.004941	12.5	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-34D	0.002492	0.0005877	0.064	No	5	0.00154	0.0005683	0	None	No	0.01	Param.
Lithium (mg/L)	MW-35	0.015	0.0034	0.064	No	8	0.005362	0.00392	12.5	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-37D	0.03763	0.02466	0.064	No	7	0.03114	0.00546	0	None	No	0.01	Param.
Lithium (mg/L)	MW-51	0.002658	0.0003917	0.064	No	4	0.001525	0.0004992	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-18	0.0002	0.00006	0.002	No	14	0.0001536	0.00006559	64.29	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-22	0.0002	0.00016	0.002	No	6	0.0001933	0.00001633	83.33	None	No	0.0155	NP (NDs)
Mercury (mg/L)	MW-23D	0.0002	0.00017	0.002	No	6	0.000195	0.00001225	83.33	None	No	0.0155	NP (NDs)
Mercury (mg/L)	MW-35	0.00084	0.00014	0.002	No	4	0.000405	0.000336	25	None	No	0.0625	NP (selected)
Molybdenum (mg/L)	HGWC-15	0.01	0.0007	0.1	No	21	0.009557	0.002029	95.24	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-21D	0.03062	0.01772	0.1	No	13	0.02446	0.009288	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-22	0.01	0.00013	0.1	No	12	0.009177	0.002849	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-23D	0.004031	0.002602	0.1	No	12	0.003317	0.0009104	8.333	None	No	0.01	Param.
Molybdenum (mg/L)	MW-37D	0.0208	0.00566	0.1	No	7	0.01323	0.006372	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-14	0.01191	0.006327	0.05	No	23	0.009118	0.005336	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-15	0.005	0.0041	0.05	No	23	0.00444	0.00139	82.61	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-16	0.005	0.000089	0.05	No	23	0.004786	0.001024	95.65	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-17	0.005	0.0023	0.05	No	23	0.004513	0.001329	86.96	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-18	0.03429	0.0152	0.05	No	23	0.02713	0.02106	4.348	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	MW-22	0.005	0.002	0.05	No	12	0.00475	0.000866	91.67	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-33	0.02526	0.007766	0.05	No	9	0.01653	0.01103	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	MW-34D	0.005	0.0016	0.05	No	6	0.004017	0.00155	66.67	None	No	0.0155	NP (NDs)
Selenium (mg/L)	MW-35	0.02273	0.006433	0.05	No	8	0.01431	0.009754	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	MW-51	0.004735	0.0008646	0.05	No	4	0.00335	0.001392	25	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	HGWC-14	0.000306	0.00027	0.002	No	23	0.000299	0.00004904	0	None	No	0.01	NP (normality)
Thallium (mg/L)	HGWC-15	0.001	0.00022	0.002	No	23	0.0009661	0.0001626	95.65	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-17	0.001	0.00013	0.002	No	23	0.0006978	0.000424	65.22	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-18	0.001	0.00016	0.002	No	23	0.0005665	0.0004248	47.83	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-33	0.0025	0.00021	0.002	No	9	0.0005311	0.0007402	11.11	None	No	0.002	NP (normality)
Thallium (mg/L)	MW-34D	0.001	0.00015	0.002	No	6	0.0008583	0.000347	83.33	None	No	0.0155	NP (NDs)
Thallium (mg/L)	MW-35	0.001	0.00013	0.002	No	8	0.0008913	0.0003076	87.5	None	No	0.004	NP (NDs)

### Non-Parametric Confidence Interval

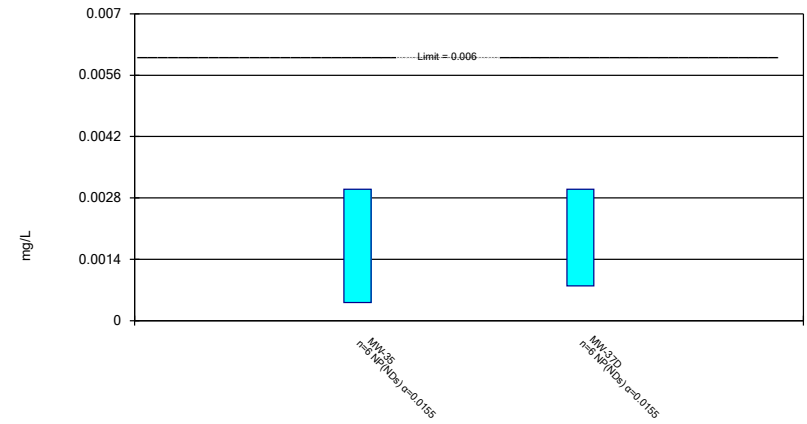
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Antimony Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

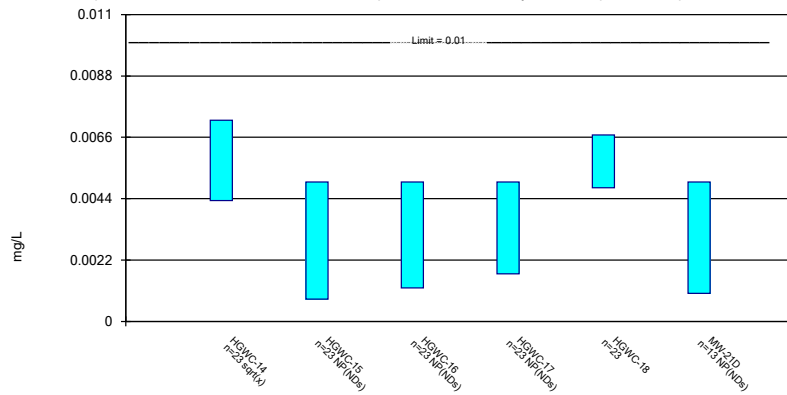
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

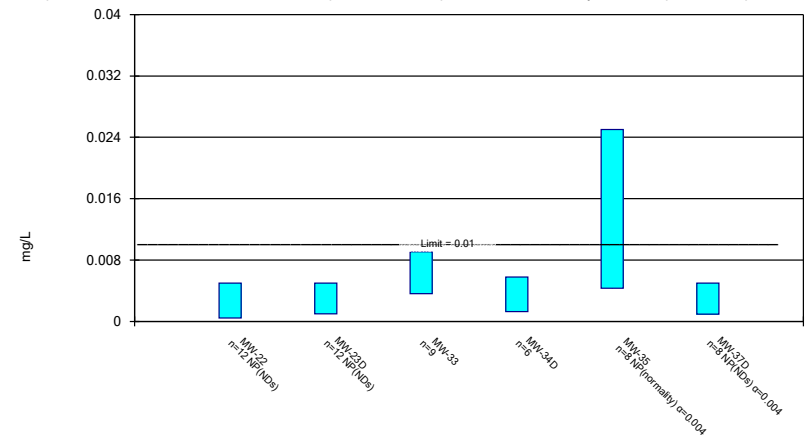
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Constituent: Arsenic Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

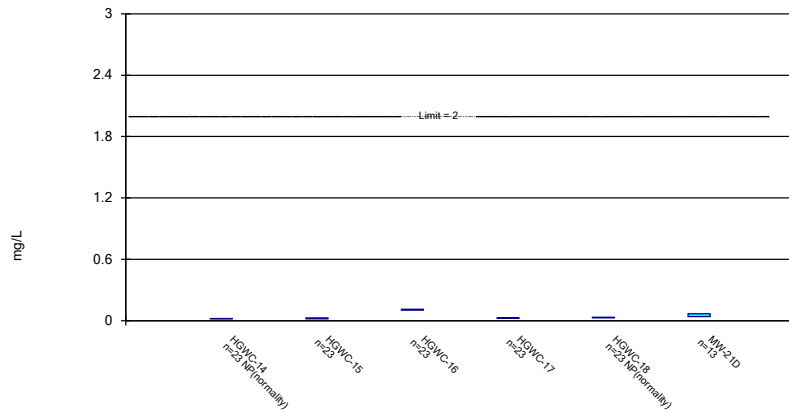
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

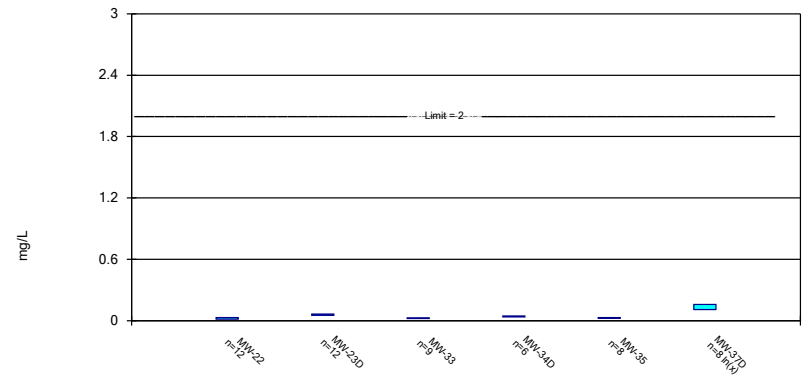
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Constituent: Barium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric Confidence Interval

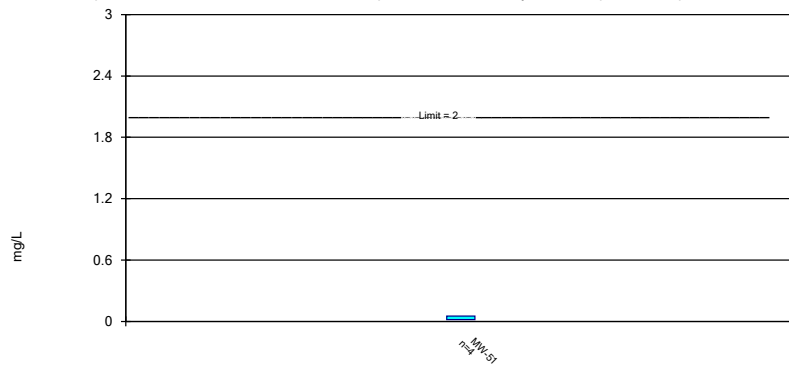
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric Confidence Interval

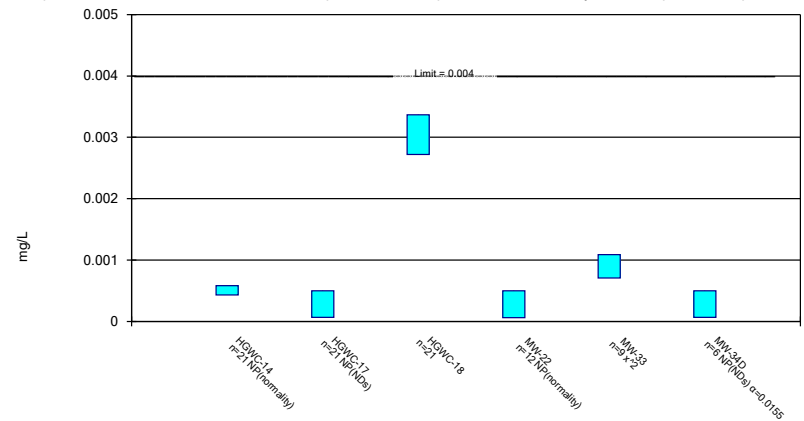
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

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

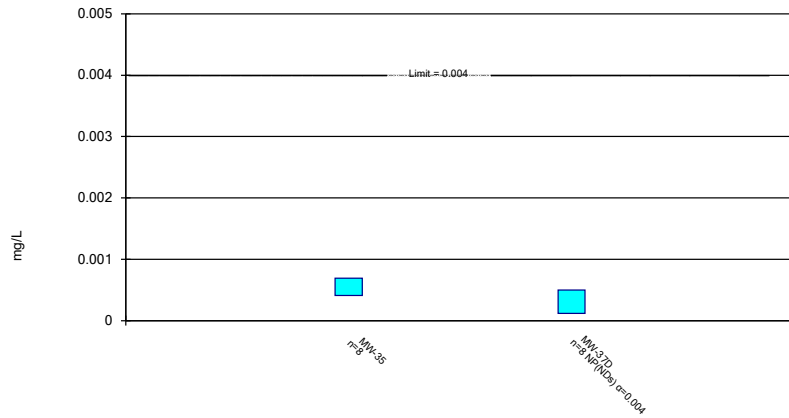


Constituent: Beryllium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2



### Parametric and Non-Parametric (NP) Confidence Interval

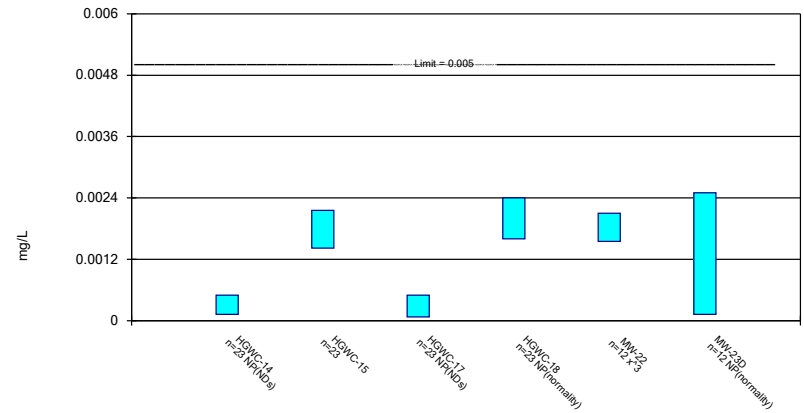
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

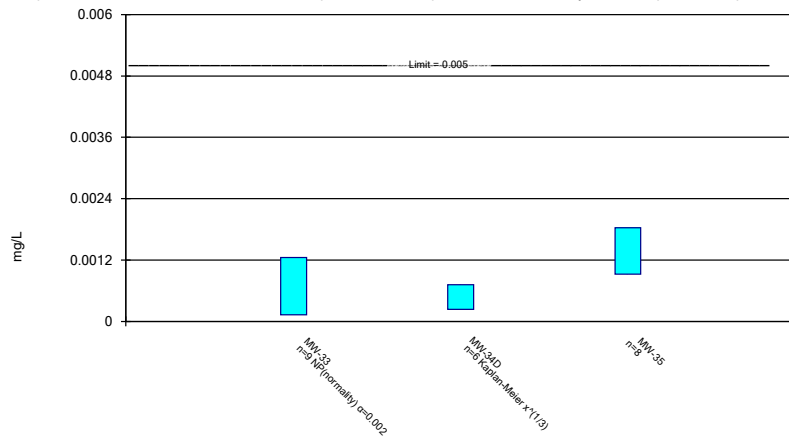
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

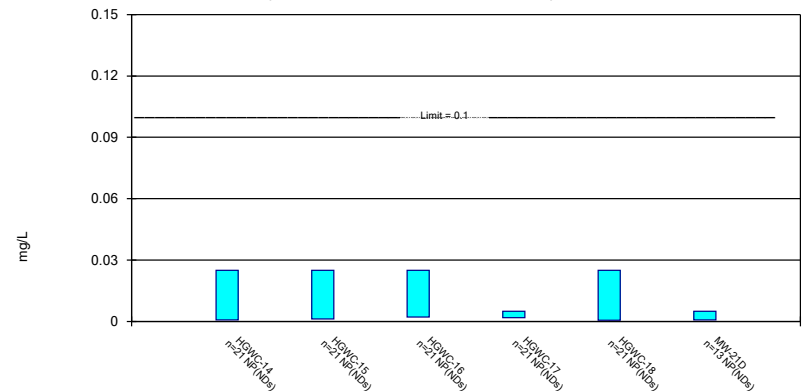
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

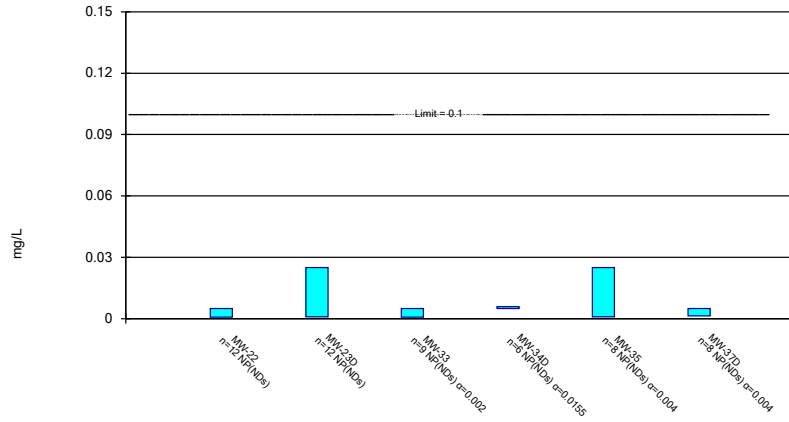
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

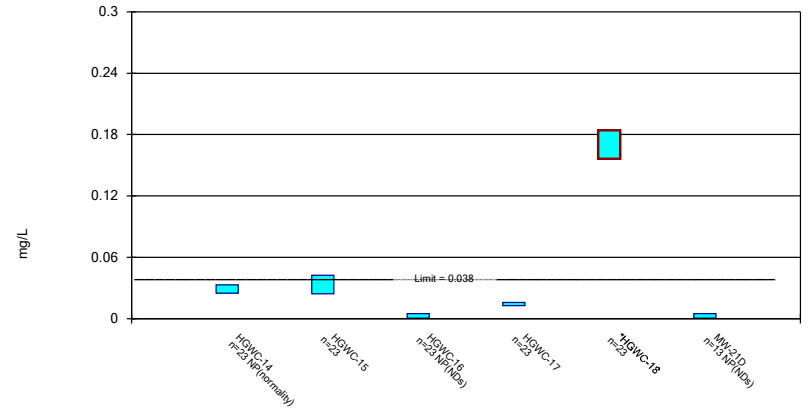
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

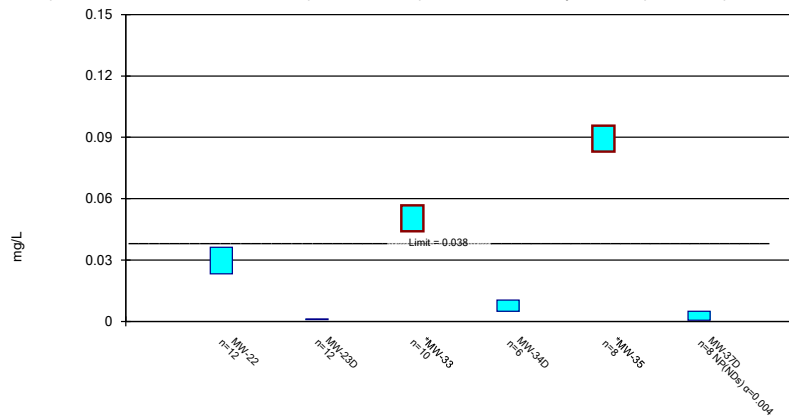
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

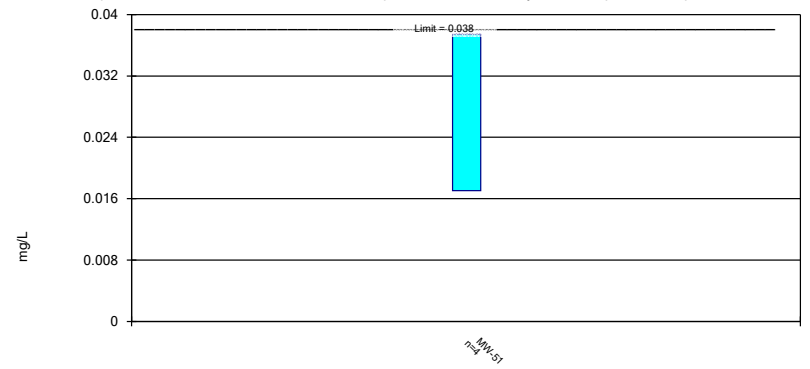
Compliance limit is exceeded.\* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric Confidence Interval

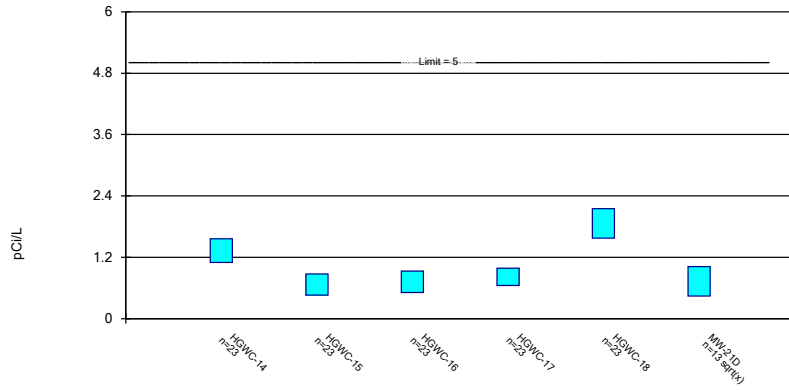
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Constituent: Cobalt Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric Confidence Interval

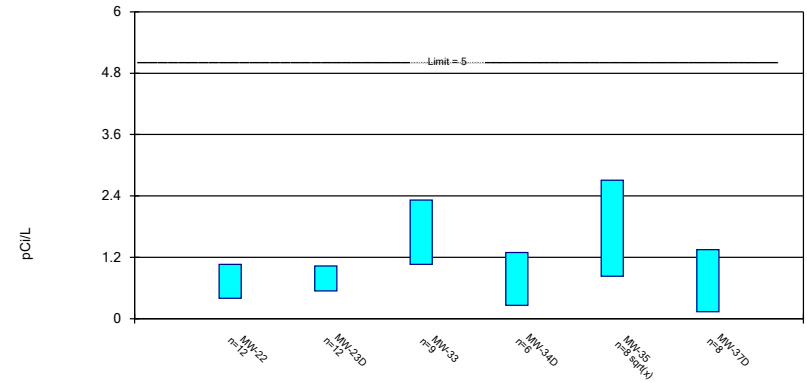
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confiden  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric Confidence Interval

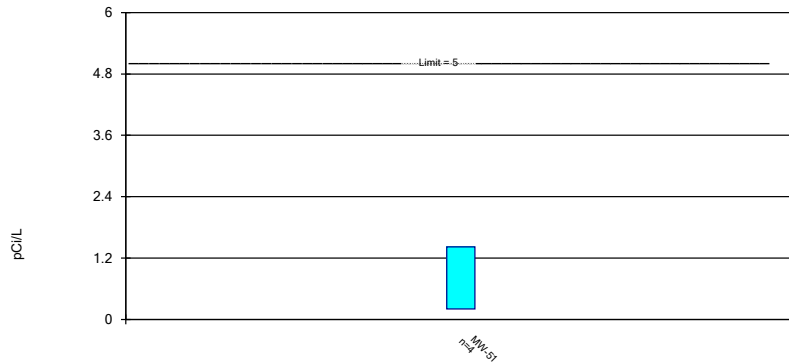
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Constituent: Combined Radium 226 + 228 Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confiden  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric Confidence Interval

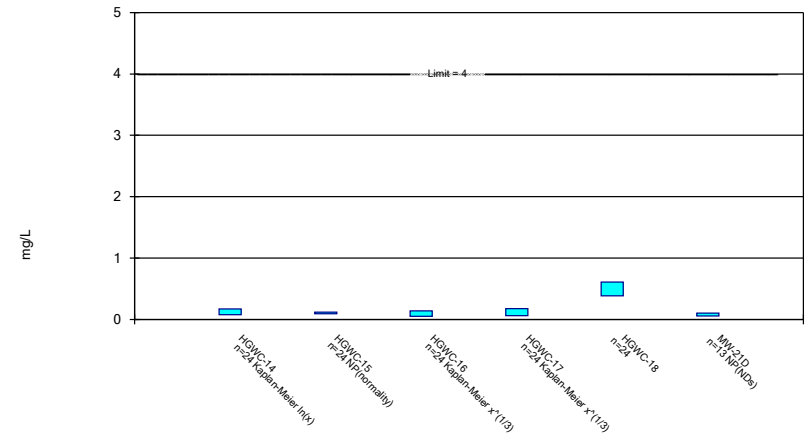
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Constituent: Combined Radium 226 + 228 Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confiden  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

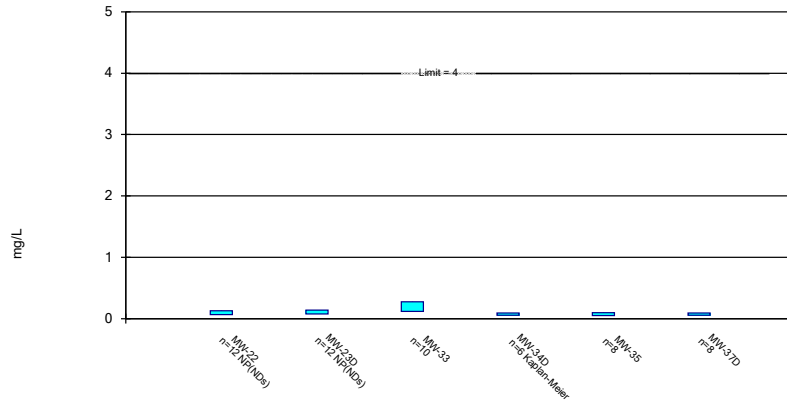
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

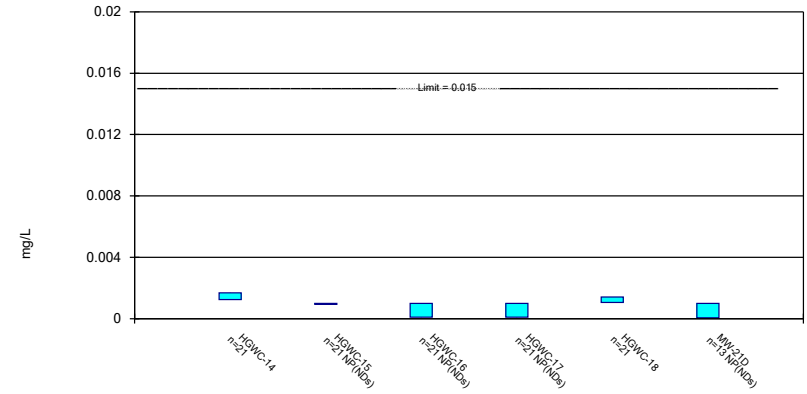
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

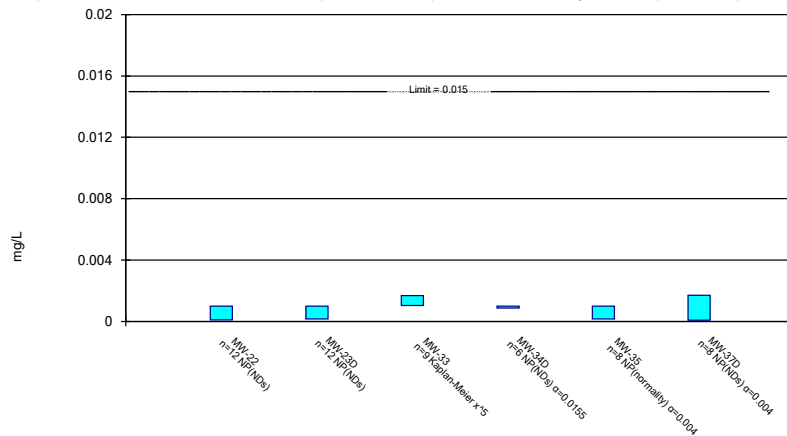
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

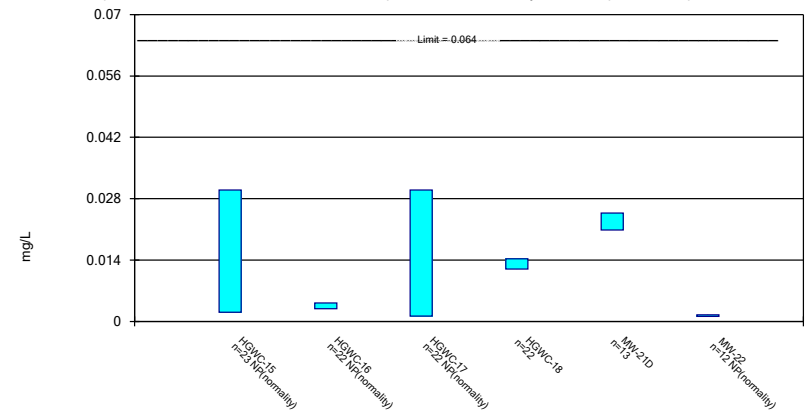
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

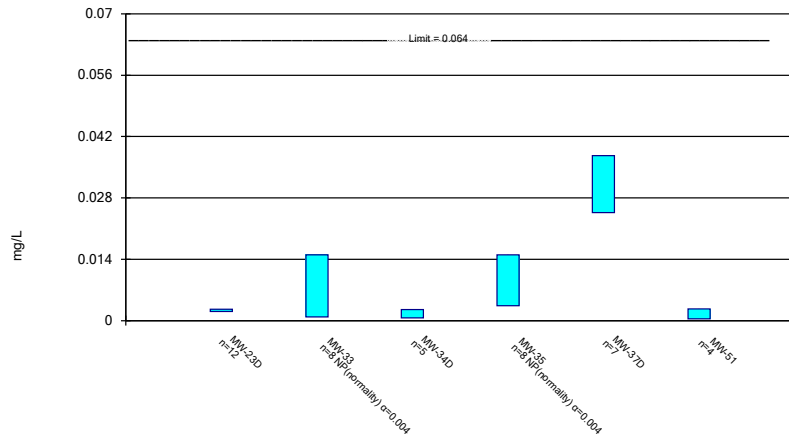
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

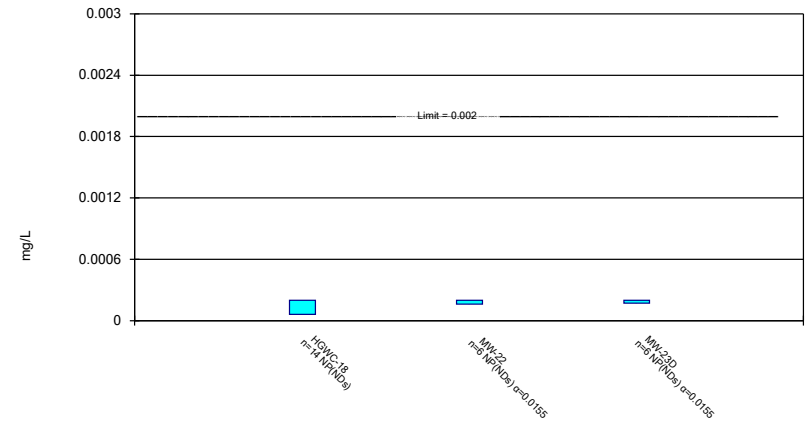
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

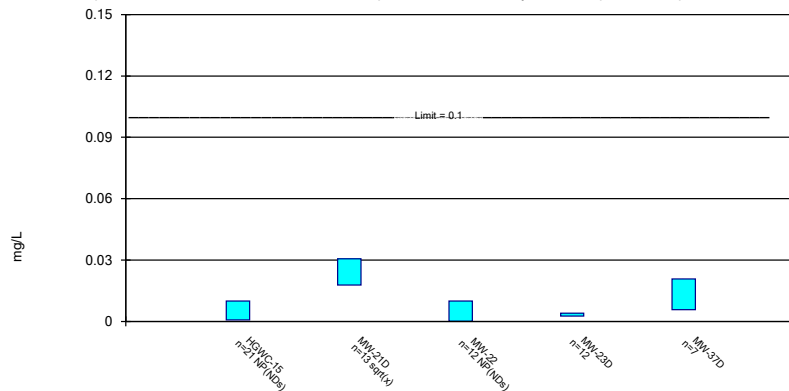
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Mercury Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

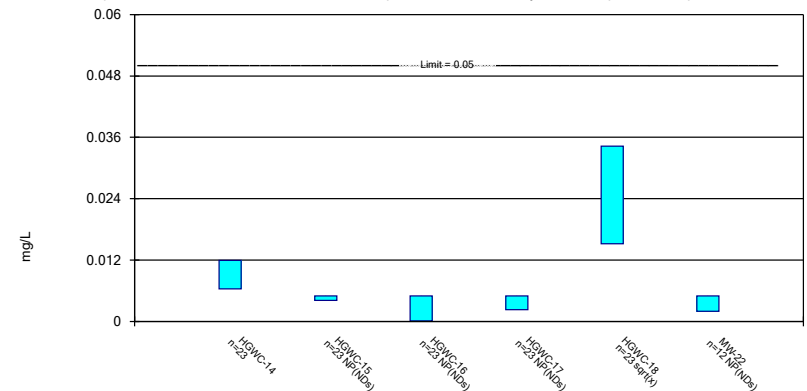
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

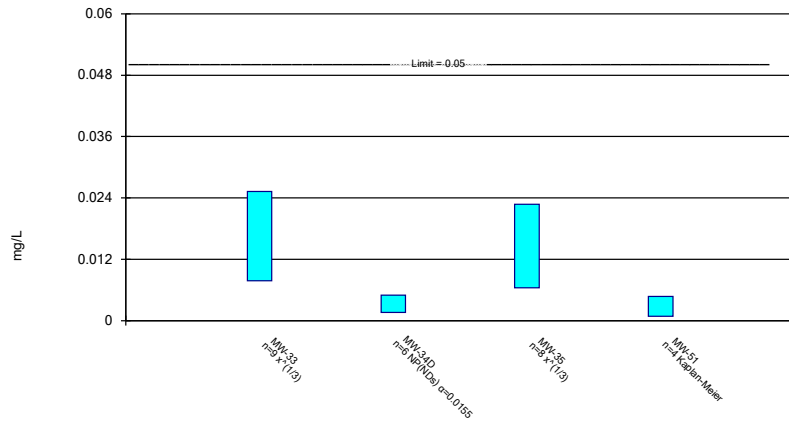
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

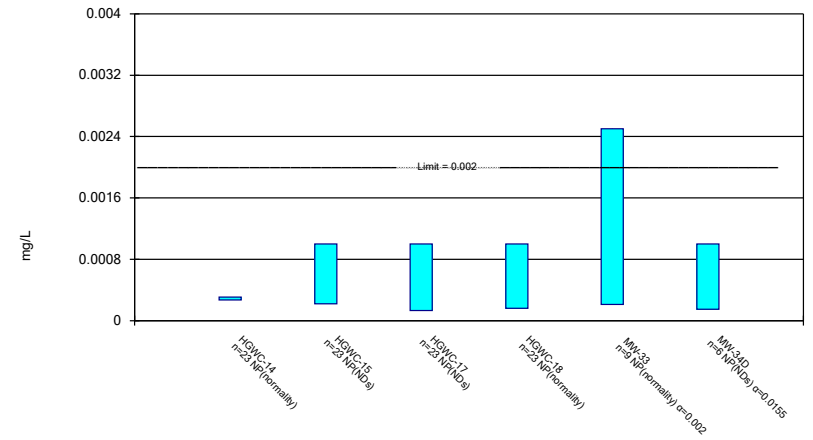
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

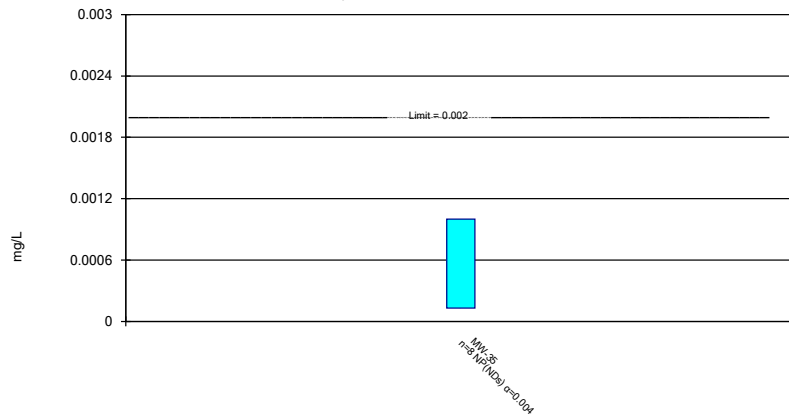
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Thallium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 5/22/2023 3:59 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-18	MW-22	MW-33	MW-34D
5/23/2016	<0.003	<0.003				
5/24/2016			<0.003			
7/12/2016	0.0003 (J)	<0.003	<0.003			
9/1/2016	<0.003	<0.003	<0.003			
10/24/2016	<0.003	<0.003				
10/25/2016			<0.003			
12/7/2016	<0.003	<0.003				
12/8/2016			<0.003			
1/26/2017	<0.003	<0.003	<0.003			
3/23/2017	<0.003	<0.003	<0.003			
5/24/2017	<0.003	<0.003				
5/25/2017			<0.003			
4/3/2018		<0.003	<0.003			
4/4/2018	<0.003					
3/14/2019	<0.003	<0.003	<0.003			
3/15/2019				<0.003		
3/2/2020				<0.003		
3/3/2020	<0.003	<0.003	<0.003			
2/11/2021	0.00043 (J)		<0.003			
2/12/2021		<0.003			0.00046 (J)	
2/15/2021				<0.003		
3/16/2021		<0.003				
3/17/2021	<0.003			<0.003		
3/18/2021			<0.003		<0.003	
8/16/2021						<0.003
8/18/2021	<0.003				<0.003	
8/19/2021		<0.003	0.0008 (J)	0.0016 (J)		
2/8/2022		0.002 (J)	<0.003	<0.003	<0.003	
2/9/2022	<0.003					<0.003
8/10/2022			<0.003		<0.003	<0.003
8/11/2022	0.001 (J)	0.0016 (J)		<0.003		
1/27/2023					<0.003	
1/30/2023				<0.003		0.0018 (J)
2/1/2023	<0.003	0.0021 (J)	<0.003			
Mean	0.002572	0.002806	0.002871	0.002825	0.002577	0.0027
Std. Dev.	0.0009613	0.0004423	0.0005336	0.000495	0.001037	0.0006
Upper Lim.	0.003	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.001	0.0021	0.0008	0.0016	0.00046	0.0018

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-35	MW-37D
2/11/2021		0.00079 (J)
2/15/2021	0.00041 (J)	
3/12/2021		<0.003
3/19/2021	<0.003	
8/18/2021	<0.003	<0.003
2/8/2022	0.0029 (J)	<0.003
8/10/2022		<0.003
8/11/2022	<0.003	
1/30/2023		<0.003
2/1/2023	<0.003	
Mean	0.002552	0.002632
Std. Dev.	0.00105	0.0009022
Upper Lim.	0.003	0.003
Lower Lim.	0.00041	0.00079



# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
5/23/2016	0.00268 (J)	<0.005	<0.005	<0.005		
5/24/2016					0.00294 (J)	
7/12/2016	0.0059	<0.005	<0.005	<0.005	0.0074	
9/1/2016	0.0056	<0.005	<0.005	<0.005	0.0073	
10/24/2016	0.0058	<0.005				
10/25/2016			<0.005	<0.005	0.006	
12/7/2016	<0.025	<0.005	<0.005	<0.005		
12/8/2016					0.007	
1/26/2017	0.0089	<0.005	<0.005	<0.005	0.0068	
3/22/2017			0.0005 (J)	0.0007 (J)		
3/23/2017	0.0069	0.0008 (J)			0.0082	
5/24/2017	0.0048 (J)	<0.005	<0.005			
5/25/2017				0.0007 (J)	0.006	
4/3/2018		<0.005	<0.005	<0.005	0.0062	
4/4/2018	0.0052					
6/5/2018					0.008	
6/6/2018	0.0059	<0.005	<0.005	0.00097 (J)		
10/3/2018	0.0032 (J)	<0.005	<0.005	<0.005	0.0039 (J)	
3/14/2019	0.0029 (J)	<0.005			0.0036 (J)	
3/15/2019			<0.005	<0.005		<0.005
4/4/2019		0.00017 (J)	0.0001 (J)			0.00019 (J)
4/5/2019	<0.025			<0.005	0.0015 (J)	
9/24/2019	0.0039 (J)	0.00037 (J)				
9/25/2019			<0.005	<0.005	0.0044 (J)	<0.005
3/3/2020	0.0035 (J)	<0.005	<0.005	<0.005	0.0057	<0.005
3/26/2020		<0.005				
3/30/2020	0.0051		0.0011 (J)			
3/31/2020				0.0008 (J)	0.0056	
4/1/2020						0.0013 (J)
6/17/2020						<0.005
9/15/2020					0.0074	
9/16/2020				<0.005		
9/17/2020		<0.005	<0.005			
9/18/2020	0.0029 (J)					
9/21/2020						<0.005
2/10/2021			0.0012 (J)			
2/11/2021	0.0062			0.0012 (J)	0.0069 (B)	0.001 (J)
2/12/2021		<0.005				
3/16/2021		<0.005				
3/17/2021	<0.025		<0.005			
3/18/2021				<0.005	0.0083 (J)	<0.005
8/18/2021	0.0035 (J)			<0.005		
8/19/2021		<0.005	<0.005		0.0045 (J)	<0.005
2/8/2022		<0.005	<0.005	0.0017 (J)	0.005 (J)	<0.005
2/9/2022	0.0077					
8/10/2022			<0.005	<0.005	0.0058	
8/11/2022	0.006	<0.005				0.003 (J)
1/27/2023						<0.005
1/30/2023				0.0028 (J)		
2/1/2023	0.004 (J)	<0.005	<0.005		0.0036 (J)	
Mean	0.006003	0.004406	0.004257	0.003864	0.005741	0.003884
Std. Dev.	0.003023	0.001571	0.001668	0.001801	0.001813	0.00184

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
Upper Lim.	0.007215	0.005	0.005	0.005	0.006689	0.005
Lower Lim.	0.004338	0.0008	0.0012	0.0017	0.004793	0.001

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-22	MW-23D	MW-33	MW-34D	MW-35	MW-37D
3/14/2019		<0.005				
3/15/2019	<0.005					
4/5/2019	<0.005	<0.005				
9/26/2019		<0.005				
9/27/2019	0.00045 (J)					
3/2/2020	<0.005	<0.005				
3/27/2020	<0.005					
4/1/2020		0.00082 (J)	0.0061			
6/17/2020			0.0031 (J)			
6/18/2020				0.0032 (J)	0.005 (J)	0.0021 (J)
9/17/2020	<0.005	<0.005				
9/21/2020			0.0083		0.0059	
9/23/2020				0.001 (J)		0.00095 (J)
2/11/2021						0.0023 (J)
2/12/2021		0.001 (J)	0.0059			
2/15/2021	<0.005				0.005	
3/12/2021						<0.005
3/17/2021	<0.005	<0.005				
3/18/2021			0.0054 (J)			
3/19/2021					<0.025	
8/16/2021				0.0024 (J)		
8/18/2021			0.0058		0.0043 (J)	<0.005
8/19/2021	<0.005	<0.005				
2/8/2022	<0.005		0.0069		0.0072	<0.005
2/9/2022				0.0054		
2/10/2022		<0.005				
8/10/2022			<0.025	0.0045 (J)		<0.005
8/11/2022	<0.005	<0.005			<0.025	
1/27/2023			0.0031 (J)			
1/30/2023	<0.005			0.0047 (J)		<0.005
2/1/2023		<0.005			0.006	
Mean	0.004621	0.004318	0.006344	0.003533	0.01043	0.003794
Std. Dev.	0.001313	0.001592	0.00284	0.001649	0.009037	0.00171
Upper Lim.	0.005	0.005	0.009086	0.005798	0.025	0.005
Lower Lim.	0.00045	0.001	0.003603	0.001268	0.0043	0.00095

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
5/23/2016	<0.25	0.0315 (J)	0.0841	0.0222 (J)		
5/24/2016					<0.2	
7/12/2016	0.0214	0.0372	0.0886	0.0221	0.0346	
9/1/2016	0.0208	0.0364	0.0934	0.0227	0.0336	
10/24/2016	0.0208	0.0326				
10/25/2016			0.0991	0.0225	0.0349	
12/7/2016	0.022	0.0301	0.101	0.0227		
12/8/2016					0.0339	
1/26/2017	0.0238	0.0287	0.105	0.0229	0.0293	
3/22/2017			0.11	0.0248		
3/23/2017	0.0244	0.0329			0.0313	
5/24/2017	0.0228	0.0283	0.106			
5/25/2017				0.0255	0.0336	
4/3/2018		0.019	0.099	0.025	0.028	
4/4/2018	0.021					
6/5/2018					0.03	
6/6/2018	0.022	0.022	0.11	0.028		
10/3/2018	0.02	0.025	0.11	0.028	0.032	
3/14/2019	0.019	0.021			0.029	
3/15/2019			0.13	0.029		0.09
4/4/2019		0.018	0.11			0.075
4/5/2019	0.016			0.022	0.021	
9/24/2019	0.021	0.019				
9/25/2019			0.11	0.025	0.03	0.066
3/3/2020	0.018	0.018	0.12	0.026	0.026	0.058
3/26/2020		0.016				
3/30/2020	0.02		0.11			
3/31/2020				0.029	0.029	
4/1/2020						0.066
6/17/2020						0.054
9/15/2020					0.03	
9/16/2020				0.025		
9/17/2020		0.017	0.11			
9/18/2020	0.019					
9/21/2020						0.049
2/10/2021			0.11			
2/11/2021	0.02			0.025	0.03	0.044
2/12/2021		0.014				
3/16/2021		0.012				
3/17/2021	0.023		0.12			
3/18/2021				0.027	0.031	0.047
8/18/2021	0.018			0.022		
8/19/2021		0.01	0.1		0.031	0.042
2/8/2022		0.0098	0.1	0.021	0.02	0.033
2/9/2022	0.017					
8/10/2022			0.1	0.027	0.026	
8/11/2022	0.017	0.015				0.037
1/27/2023						0.031
1/30/2023				0.03		
2/1/2023	0.017	0.021	0.11		0.019	
Mean	0.02474	0.02237	0.1059	0.02497	0.03231	0.05323
Std. Dev.	0.02198	0.008352	0.01019	0.002661	0.01539	0.01735

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
Upper Lim.	0.022	0.02674	0.1113	0.02637	0.0336	0.06613
Lower Lim.	0.018	0.018	0.1006	0.02358	0.028	0.04033

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-22	MW-23D	MW-33	MW-34D	MW-35	MW-37D
3/14/2019		0.082				
3/15/2019	0.044					
4/5/2019	0.036	0.061				
9/26/2019		0.064				
9/27/2019	0.028					
3/2/2020	0.027	0.06				
3/27/2020	0.025					
4/1/2020		0.065	0.027			
6/17/2020			0.024			
6/18/2020				0.044	0.029	0.19
9/17/2020	0.02	0.057				
9/21/2020			0.024		0.028	
9/23/2020				0.038		0.14
2/11/2021						0.14
2/12/2021		0.056	0.025			
2/15/2021	0.017				0.026	
3/12/2021						0.12
3/17/2021	0.018	0.058				
3/18/2021			0.029			
3/19/2021					0.032	
8/16/2021				0.035		
8/18/2021			0.025		0.025	0.12
8/19/2021	0.018	0.05				
2/8/2022	0.014		0.02		0.023	0.11
2/9/2022				0.04		
2/10/2022		0.05				
8/10/2022			0.02 (J)	0.046		0.11
8/11/2022	0.014	0.05			0.022 (J)	
1/27/2023			0.018			
1/30/2023	0.014			0.04		0.13
2/1/2023		0.047			0.022	
Mean	0.02292	0.05833	0.02356	0.0405	0.02588	0.1325
Std. Dev.	0.009501	0.00949	0.003575	0.003987	0.003603	0.02605
Upper Lim.	0.03037	0.06578	0.02701	0.04598	0.02969	0.1578
Lower Lim.	0.01546	0.05089	0.0201	0.03502	0.02206	0.108

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-51
8/18/2021	0.032
2/8/2022	0.046
8/11/2022	0.028
2/1/2023	0.033
Mean	0.03475
Std. Dev.	0.007805
Upper Lim.	0.05247
Lower Lim.	0.01703

# Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-17	HGWC-18	MW-22	MW-33	MW-34D
5/23/2016	<0.003	<0.0005				
5/24/2016			0.00278 (J)			
7/12/2016	0.0005 (J)	<0.0005	0.0032			
9/1/2016	0.0005 (J)	<0.0005	0.0034			
10/24/2016	0.0005 (J)					
10/25/2016		<0.0005	0.0034			
12/7/2016	0.0006 (J)	<0.0005				
12/8/2016			0.0033			
1/26/2017	0.0005 (J)	<0.0005	0.0034			
3/22/2017		<0.0005				
3/23/2017	0.0006 (J)		0.0036			
5/24/2017	0.0005 (J)					
5/25/2017		<0.0005	0.0036			
4/3/2018		<0.0005	<0.003			
4/4/2018	<0.003					
3/14/2019	0.00043 (J)		0.0026 (J)			
3/15/2019		<0.0005		<0.0005		
4/5/2019	0.00027 (J)	<0.0005	0.0022 (J)	<0.0005		
9/24/2019	0.00044 (J)					
9/25/2019		<0.0005	0.0031			
9/27/2019				<0.0005		
3/2/2020				<0.0005		
3/3/2020	0.00043 (J)	<0.0005	0.0029 (J)			
3/27/2020				<0.0005		
3/30/2020	0.00043 (J)					
3/31/2020		<0.0005	0.003			
4/1/2020				0.0011 (J)		
6/17/2020				0.00099 (J)		
6/18/2020						0.00015 (J)
9/15/2020			0.0033			
9/16/2020		<0.0005				
9/17/2020				4.7E-05 (J)		
9/18/2020	0.00043 (J)					
9/21/2020				0.0009 (J)		
9/23/2020						<0.0005
2/11/2021	0.00044 (J)	6.7E-05 (J)	0.0036			
2/12/2021					0.001 (J)	
2/15/2021				6.2E-05 (J)		
3/17/2021	0.00058			8.2E-05 (J)		
3/18/2021		4.8E-05 (J)	0.0038		0.0011	
8/16/2021						<0.0005
8/18/2021	0.00039 (J)	<0.0005			0.00097	
8/19/2021			0.0034	7E-05 (J)		
2/8/2022		<0.0005	0.0026	7.9E-05 (J)	0.00087 (J)	
2/9/2022	0.00056					6.5E-05 (J)
8/10/2022		6E-05 (J)	0.0032		0.0008	<0.0005
8/11/2022	0.00039 (J)			<0.0005		
1/27/2023					0.00019 (J)	
1/30/2023		5.7E-05 (J)		8.1E-05 (J)		<0.0005
2/1/2023	0.00039 (J)		0.002			
Mean	0.0005657	0.0004158	0.003042	0.0002851	0.00088	0.0003692
Std. Dev.	0.0003206	0.0001779	0.0005857	0.0002247	0.0002771	0.0002045



# Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-17	HGWC-18	MW-22	MW-33	MW-34D
Upper Lim.	0.00058	0.0005	0.003365	0.0005	0.00109	0.0005
Lower Lim.	0.00043	6.7E-05	0.002719	6.2E-05	0.0007052	6.5E-05

# Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-35	MW-37D
6/18/2020	0.00032 (J)	0.00012 (J)
9/21/2020	0.0004 (J)	
9/23/2020		<0.0005
2/11/2021		<0.0005
2/15/2021	0.0006 (J)	
3/12/2021		<0.0005
3/19/2021	0.00061	
8/18/2021	0.00061	<0.0005
2/8/2022	0.0007 (J)	<0.0005
8/10/2022		<0.0005
8/11/2022	0.00066 (J)	
1/30/2023		<0.0005
2/1/2023	0.00049 (J)	
Mean	0.0005488	0.0004525
Std. Dev.	0.0001327	0.0001344
Upper Lim.	0.0006894	0.0005
Lower Lim.	0.0004081	0.00012

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-17	HGWC-18	MW-22	MW-23D
5/23/2016	0.000139 (J)	0.00271 (J)	<0.0005			
5/24/2016				<0.02		
7/12/2016	<0.0005	0.0019	<0.0005	0.0022		
9/1/2016	0.0001 (J)	0.0017	<0.0005	0.0024		
10/24/2016	0.0002 (J)	0.0018				
10/25/2016			<0.0005	0.0022		
12/7/2016	0.0001 (J)	0.0018	<0.0005			
12/8/2016				0.0024		
1/26/2017	0.0001 (J)	0.0013	<0.0005	0.0025		
3/22/2017			7E-05 (J)			
3/23/2017	0.0002 (J)	0.002		0.0025		
5/24/2017	0.0001 (J)	0.0041				
5/25/2017			<0.0005	0.0027		
4/3/2018		0.0022	<0.0005	0.0022		
4/4/2018	<0.0005					
6/5/2018				0.0022		
6/6/2018	0.00012 (J)	0.0021	<0.0005			
10/3/2018	0.0001 (J)	0.0026	<0.0005	0.0027		
3/14/2019	<0.0005	0.0024		0.0019		<0.0025
3/15/2019			<0.0005		0.00082 (J)	
4/4/2019		0.0018				
4/5/2019	7.9E-05 (J)		<0.0005	0.0017	0.00064 (J)	<0.0025
9/24/2019	<0.0005	0.0014 (J)				
9/25/2019			<0.0005	0.0023 (J)		
9/26/2019						<0.0025
9/27/2019					0.0014 (J)	
3/2/2020					0.0021 (J)	<0.0025
3/3/2020	<0.0005	0.0015 (J)	<0.0005	0.0021 (J)		
3/26/2020		0.0016 (J)				
3/27/2020					0.0019 (J)	
3/30/2020	<0.0005					
3/31/2020			<0.0005	0.0017 (J)		
4/1/2020						<0.0025
9/15/2020				0.0019 (J)		
9/16/2020			<0.0005			
9/17/2020		0.0016 (J)			0.0021 (J)	0.0006 (J)
9/18/2020	<0.0005					
2/11/2021	<0.0005		<0.0005	0.0016 (J)		
2/12/2021		0.0014 (J)				0.00045 (J)
2/15/2021					0.002 (J)	
3/16/2021		0.0011				
3/17/2021	<0.0005				0.0022	0.00057
3/18/2021			<0.0005	0.0015		
8/18/2021	0.00013 (J)		<0.0005			
8/19/2021		0.0012		0.0014	0.0021	0.00012 (J)
2/8/2022		0.0011	<0.0005	0.00076	0.002	
2/9/2022	<0.0005					
2/10/2022						0.00024 (J)
8/10/2022			<0.0005	0.0017		
8/11/2022	<0.0005	0.00095			0.002	0.00021 (J)
1/30/2023			<0.0005		0.0017	
2/1/2023	<0.0005	0.00088		0.001		0.00012 (J)

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-17	HGWC-18	MW-22	MW-23D
Mean	0.0003203	0.001789	0.0004813	0.002329	0.001747	0.001234
Std. Dev.	0.0001938	0.0007095	8.966E-05	0.001747	0.0005224	0.001128
Upper Lim.	0.0005	0.00216	0.0005	0.0024	0.0021	0.0025
Lower Lim.	0.00012	0.001418	7E-05	0.0016	0.001547	0.00012

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35
4/1/2020	0.00022 (J)		
6/17/2020	0.00021 (J)		
6/18/2020		<0.0025	0.00053 (J)
9/21/2020	0.00016 (J)		0.001 (J)
9/23/2020		<0.0025	
2/12/2021	0.00017 (J)		
2/15/2021			0.0017 (J)
3/18/2021	0.00019 (J)		
3/19/2021			0.0018
8/16/2021		0.00023 (J)	
8/18/2021	0.00017 (J)		0.0015
2/8/2022	0.00013 (J)		0.0015
2/9/2022		0.00072	
8/10/2022	<0.0025	0.00041 (J)	
8/11/2022			0.0013 (J)
1/27/2023	0.00017 (J)		
1/30/2023		0.00047 (J)	
2/1/2023			0.0017
Mean	0.0002967	0.001138	0.001379
Std. Dev.	0.0003585	0.001066	0.0004282
Upper Lim.	0.00125	0.0007197	0.001833
Lower Lim.	0.00013	0.0002366	0.0009249

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
5/23/2016	<0.025	<0.025	<0.025	<0.005		
5/24/2016					<0.025	
7/12/2016	<0.025	<0.025	<0.025	<0.005	<0.025	
9/1/2016	<0.025	<0.025	<0.025	<0.005	<0.025	
10/24/2016	<0.025	<0.025				
10/25/2016			<0.025	<0.005	<0.025	
12/7/2016	<0.025	<0.025	<0.025	<0.005		
12/8/2016					<0.025	
1/26/2017	<0.025	<0.025	<0.025	<0.005	<0.025	
3/22/2017			0.0021 (J)	<0.005		
3/23/2017	<0.025	0.0005 (J)			0.0005 (J)	
5/24/2017	<0.025	<0.025	<0.025			
5/25/2017				<0.005	<0.025	
4/3/2018		<0.025	<0.025	<0.005	<0.025	
4/4/2018	<0.025					
3/14/2019	<0.025	<0.025			<0.025	
3/15/2019			<0.025	<0.005		<0.005
4/4/2019		<0.025	<0.025			<0.005
4/5/2019	<0.025			<0.005	<0.025	
9/24/2019	<0.025	0.00041 (J)				
9/25/2019			<0.025	<0.005	<0.025	<0.005
3/3/2020	0.00042 (J)	<0.025	0.00071 (J)	0.0018 (J)	0.0004 (J)	<0.005
3/26/2020		<0.025				
3/30/2020	0.00066 (J)		0.0004 (J)			
3/31/2020				<0.005	<0.025	
4/1/2020						<0.005
6/17/2020						0.00057 (J)
9/15/2020					0.00063 (J)	
9/16/2020				<0.005		
9/17/2020		<0.025	<0.025			
9/18/2020	<0.025					
9/21/2020						<0.005
2/10/2021			<0.025			
2/11/2021	<0.025			0.00074 (J)	<0.025	<0.005
2/12/2021		<0.025				
3/16/2021		0.0012 (J)				
3/17/2021	<0.025		<0.025			
3/18/2021				0.00069 (J)	<0.025	0.00074 (J)
8/18/2021	<0.025			<0.005		
8/19/2021		<0.025	<0.025		<0.025	<0.005
2/8/2022		<0.025	<0.025	<0.005	<0.025	<0.005
2/9/2022	<0.025					
8/10/2022			<0.025	<0.005	<0.025	
8/11/2022	<0.025	<0.025				<0.005
1/27/2023						<0.005
1/30/2023				<0.005		
2/1/2023	<0.025	<0.025	<0.025		<0.025	
Mean	0.02267	0.02153	0.02158	0.00444	0.0215	0.004332
Std. Dev.	0.007357	0.008713	0.008585	0.001421	0.008781	0.001632
Upper Lim.	0.025	0.025	0.025	0.005	0.025	0.005
Lower Lim.	0.00066	0.0012	0.0021	0.0018	0.00063	0.00074

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-22	MW-23D	MW-33	MW-34D	MW-35	MW-37D
3/14/2019		<0.025				
3/15/2019	<0.005					
4/5/2019	<0.005	<0.025				
9/26/2019		<0.025				
9/27/2019	0.0004 (J)					
3/2/2020	<0.005	<0.025				
3/27/2020	<0.005					
4/1/2020		0.00086 (J)	0.00069 (J)			
6/17/2020			<0.005			
6/18/2020				0.0059 (J)	<0.025	0.0048 (J)
9/17/2020	<0.005	<0.025				
9/21/2020			<0.005		0.00079 (J)	
9/23/2020				<0.005		<0.005
2/11/2021						0.0014 (J)
2/12/2021		<0.025	<0.005			
2/15/2021	<0.005				<0.025	
3/12/2021						<0.005
3/17/2021	0.00075 (J)	0.00083 (J)				
3/18/2021			<0.005			
3/19/2021					0.00083 (J)	
8/16/2021				<0.005		
8/18/2021			<0.005		<0.025	<0.005
8/19/2021	<0.005	<0.025				
2/8/2022	<0.005		<0.005		<0.025	<0.005
2/9/2022				<0.005		
2/10/2022		<0.025				
8/10/2022			<0.005	<0.005		<0.005
8/11/2022	<0.005	<0.025			<0.025	
1/27/2023			<0.005			
1/30/2023	<0.005			<0.005		<0.005
2/1/2023		<0.025			<0.025	
Mean	0.004262	0.02097	0.004521	0.00515	0.01895	0.004525
Std. Dev.	0.001724	0.009402	0.001437	0.0003674	0.0112	0.001265
Upper Lim.	0.005	0.025	0.005	0.0059	0.025	0.005
Lower Lim.	0.00075	0.00086	0.00069	0.005	0.00079	0.0014

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
5/23/2016	<0.25	0.0419 (J)	<0.005	0.0167		
5/24/2016					0.17 (J)	
7/12/2016	0.0232	0.0393	<0.005	0.0148	0.168	
9/1/2016	0.0248	0.045	<0.005	0.0151	0.18	
10/24/2016	0.0253	0.0557				
10/25/2016			<0.005	0.0141	0.188	
12/7/2016	0.0269	0.0536	<0.005	0.0141		
12/8/2016					0.206	
1/26/2017	0.0294	0.055	<0.005	0.0154	0.195	
3/22/2017			<0.005	0.0169		
3/23/2017	0.0311	0.0715			0.223	
5/24/2017	0.0279	0.0446	<0.005			
5/25/2017				0.0154	0.209	
4/3/2018		0.032	<0.005	0.016	0.19	
4/4/2018	0.025					
6/5/2018					0.19	
6/6/2018	0.027	0.032	<0.005	0.018		
10/3/2018	0.023	0.051	<0.005	0.016	0.19	
3/14/2019	0.025	0.038			0.16	
3/15/2019			<0.005	0.017		<0.005
4/4/2019		0.035	0.00028 (J)			0.00034 (J)
4/5/2019	0.021			0.016	0.14	
9/24/2019	0.026	0.022				
9/25/2019			<0.005	0.015	0.18	<0.005
3/3/2020	0.029	0.03	0.00037 (J)	0.016	0.15	<0.005
3/26/2020		0.022				
3/30/2020	0.028		<0.005			
3/31/2020				0.016	0.16	
4/1/2020						<0.005
6/17/2020						<0.005
9/15/2020					0.16	
9/16/2020				0.013		
9/17/2020		0.026	<0.005			
9/18/2020	0.027					
9/21/2020						<0.005
2/10/2021			<0.005			
2/11/2021	0.033			0.012	0.14	<0.005
2/12/2021		0.019				
3/16/2021		0.018				
3/17/2021	0.034		<0.005			
3/18/2021				0.012	0.14	<0.005
8/18/2021	0.033			0.009		
8/19/2021		0.011	<0.005		0.15	<0.005
2/8/2022		0.0081	<0.005	0.0066	0.16	<0.005
2/9/2022	0.038					
8/10/2022			<0.005	0.012	0.16	
8/11/2022	0.037	0.0088				<0.005
1/27/2023						<0.005
1/30/2023				0.011		
2/1/2023	0.035	0.0091	<0.005		0.11	
Mean	0.03281	0.03342	0.004593	0.01427	0.1704	0.004642
Std. Dev.	0.02061	0.01737	0.001347	0.00276	0.02661	0.001292



# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
Upper Lim.	0.033	0.0425	0.005	0.01571	0.1843	0.005
Lower Lim.	0.025	0.02433	0.00037	0.01282	0.1565	0.00034

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-22	MW-23D	MW-33	MW-34D	MW-35	MW-37D
3/14/2019		0.0013 (J)				
3/15/2019	0.028					
4/5/2019	0.022	0.0012 (J)				
9/26/2019		0.00098 (J)				
9/27/2019	0.035					
1/22/2020			0.052			
3/2/2020	0.043	0.0011 (J)				
3/27/2020	0.025					
4/1/2020		0.0011 (J)	0.058			
6/17/2020			0.053			
6/18/2020				0.011	0.091	0.0015 (J)
9/17/2020	0.029	0.00096 (J)				
9/21/2020			0.047		0.084	
9/23/2020				0.0056		<0.005
2/11/2021						0.00048 (J)
2/12/2021		0.001 (J)	0.055			
2/15/2021	0.038				0.095	
3/12/2021						<0.005
3/17/2021	0.039	0.0011 (J)				
3/18/2021			0.057			
3/19/2021					0.1	
8/16/2021				0.0093		
8/18/2021			0.054		0.085	<0.005
8/19/2021	0.022	0.00089 (J)				
2/8/2022	0.034		0.048		0.09	<0.005
2/9/2022				0.0065		
2/10/2022		0.001 (J)				
8/10/2022			0.046	0.0066		<0.005
8/11/2022	0.015	0.00088 (J)			0.082	
1/27/2023			0.034			
1/30/2023	0.027			0.0071		<0.005
2/1/2023		0.00081 (J)			0.088	
Mean	0.02975	0.001027	0.0504	0.007683	0.08938	0.003997
Std. Dev.	0.008237	0.0001402	0.007074	0.002043	0.005999	0.001876
Upper Lim.	0.03621	0.001137	0.05671	0.01049	0.09573	0.005
Lower Lim.	0.02329	0.0009167	0.04409	0.004877	0.08302	0.00048

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-51
8/18/2021	0.03
2/8/2022	0.031
8/11/2022	0.027
2/1/2023	0.021 (J)
Mean	0.02725
Std. Dev.	0.0045
Upper Lim.	0.03747
Lower Lim.	0.01703

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
5/23/2016	0.568 (U)	0.171 (U)		0.618 (U)		
5/24/2016					1.82	
7/1/2016			0 (U)			
7/12/2016	1.31	0.611 (U)	0.182 (U)	0.867	1.76	
9/1/2016	1.64	0.766 (U)	1.23	0.857 (U)	1.51	
10/24/2016	1.88	0.969				
10/25/2016			1.05 (U)	1.11 (U)	2.69	
12/7/2016	1.35	0.302 (U)	1.11 (U)	0.964 (U)		
12/8/2016					2.21	
1/26/2017	2.1	0.626 (U)	1.29 (U)	0.612 (U)	2.26	
3/22/2017			0.453 (U)	0.437 (U)		
3/23/2017	1.17	0.662 (U)			1.81	
5/24/2017	1 (U)	0.202 (U)	1.05 (U)			
5/25/2017				1.21 (U)	1.63	
4/3/2018		0.384 (U)	0.783 (U)	0.409 (U)	2.53	
4/4/2018	1.72					
6/5/2018					1.91	
6/6/2018	1.31 (U)	1.32 (U)	0.595 (U)	0.772 (U)		
10/3/2018	1.48	0.858 (U)	1.03 (U)	1.08 (U)	2.22	
3/14/2019	1.5	0.462 (U)			1.37 (U)	
3/15/2019			0.591 (U)	0.917 (U)		0.972 (U)
4/4/2019		0.512 (U)	0.96 (U)			0.791 (U)
4/5/2019	1.43 (U)			1.07 (U)	2.22	
9/24/2019	1.17	0.582 (U)				
9/25/2019			0.643 (U)	1.54	2.77	0.751 (U)
3/3/2020	1.84	1.43	1.32 (U)	1.33	2.35	1.94
3/26/2020		0.855 (U)				
3/30/2020	1.08 (U)		0.288 (U)			
3/31/2020				0.591 (U)	2.7	
4/1/2020						0.758 (U)
6/17/2020						0.691 (U)
9/15/2020					1.65	
9/16/2020				0.295 (U)		
9/17/2020		0.395 (U)	1.1 (U)			
9/18/2020	1.8 (U)					
9/21/2020						0.436 (U)
2/10/2021			0.773 (U)			
2/11/2021	0.73 (U)			0.831 (U)	1.11	0.317 (U)
2/12/2021		1.65				
3/16/2021		0.801 (U)				
3/17/2021	1.84		0.228 (U)			
3/18/2021				0.856 (U)	1.63	0.5 (U)
8/18/2021	0.858 (U)			0.548 (U)		
8/19/2021		0.527 (U)	0.668 (U)		1.45	1.17
2/8/2022		0.0242 (U)	0.168 (U)	1 (U)	0.93 (U)	0.463 (U)
2/9/2022	0.346 (U)					
8/11/2022	1.31	0.656 (U)	0.249 (U)	0.361 (U)	1.46	0.691 (U)
1/27/2023						0.256 (U)
1/30/2023				0.5 (U)		
2/1/2023	1.13	0.626 (U)	0.757 (U)		0.871	
Mean	1.329	0.6692	0.7182	0.8163	1.864	0.7489
Std. Dev.	0.4443	0.3947	0.3987	0.3254	0.5525	0.4402

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
Upper Lim.	1.561	0.8756	0.9267	0.9865	2.152	1.019
Lower Lim.	1.096	0.4627	0.5097	0.6461	1.575	0.4388

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-22	MW-23D	MW-33	MW-34D	MW-35	MW-37D
3/14/2019		0.872 (U)				
3/15/2019	0.977					
4/5/2019	1.06 (U)	0.932 (U)				
9/26/2019		1.25				
9/27/2019	1.44 (U)					
3/2/2020	0.872 (U)	0.964 (U)				
3/27/2020	0.96 (U)					
4/1/2020		0.914 (U)	2.57			
6/17/2020			1.43 (U)			
6/18/2020				1.36	2.02	1.79
9/17/2020	0.0879 (U)	0.32 (U)				
9/21/2020			2.53		3.85	
9/23/2020				0.563 (U)		0.98 (U)
2/11/2021						0.12 (U)
2/12/2021		1.21 (U)	2.26			
2/15/2021	0.215 (U)				1.52	
3/12/2021						0.578 (U)
3/17/2021	0.981 (U)	0.579 (U)				
3/18/2021			0.733 (U)			
3/19/2021					0.524 (U)	
8/16/2021				0.693 (U)		
8/18/2021			1.77		1.67	1.31
8/19/2021	0.689 (U)	0.69 (U)				
2/8/2022	0.0657 (U)		0.967 (U)		1.38	0.345 (U)
2/9/2022				0.297 (U)		
2/10/2022		0.919 (U)				
8/11/2022	0.789 (U)	0.39 (U)	1.52	1.05	1.71	0.505 (U)
1/27/2023			1.44 (U)			
1/30/2023	0.621 (U)			0.689 (U)		0.309 (U)
2/1/2023		0.406 (U)			1.24	
Mean	0.7298	0.7872	1.691	0.7753	1.739	0.7421
Std. Dev.	0.4206	0.3104	0.6528	0.3756	0.9594	0.5723
Upper Lim.	1.06	1.031	2.321	1.291	2.706	1.349
Lower Lim.	0.3998	0.5436	1.061	0.2594	0.832	0.1355

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-51
8/18/2021	0.973 (U)
2/8/2022	0.431 (U)
8/11/2022	1.02
2/1/2023	0.82 (U)
Mean	0.811
Std. Dev.	0.2673
Upper Lim.	1.418
Lower Lim.	0.2041

# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
5/23/2016	<0.1	<0.1	0.038 (J)	<0.3		
5/24/2016					<0.3	
7/12/2016	0.2 (J)	0.09 (J)	0.26 (J)	0.09 (J)	0.54	
9/1/2016	0.08 (J)	0.22 (J)	0.42	0.03 (J)	0.49	
10/24/2016	0.04 (J)	0.07 (J)				
10/25/2016			0.25 (J)	0.07 (J)	0.58	
12/7/2016	0.11 (J)	0.23 (J)	0.23 (J)	0.54		
12/8/2016					0.63	
1/26/2017	0.13 (J)	<0.1	0.02 (J)	<0.3	0.71	
3/22/2017			0.3	0.07 (J)		
3/23/2017	0.28 (J)	0.12 (J)			0.57	
5/24/2017	0.32	0.31	0.46			
5/25/2017				0.42	0.54	
10/4/2017	0.52	0.6	<0.1	0.93	0.95	
4/3/2018		<0.1	<0.1	<0.3	0.33	
4/4/2018	<0.1					
6/5/2018					0.66	
6/6/2018	0.25 (J)	0.17 (J)	<0.1	0.23 (J)		
10/3/2018	0.21 (J)	<0.1	<0.1	<0.3	0.32	
3/14/2019	0.24 (J)	<0.1			0.88	
3/15/2019			<0.1	<0.3		<0.1
4/4/2019		0.066 (J)	<0.1			0.1 (J)
4/5/2019	0.66			0.16 (J)	0.37	
9/24/2019	0.053 (J)	0.12 (J)				
9/25/2019			<0.1	0.081 (J)	0.73	<0.1
3/3/2020	<0.1	0.064 (J)	<0.1	<0.3	0.34	<0.1
3/26/2020		<0.1				
3/30/2020	0.092 (J)		0.059 (J)			
3/31/2020				<0.3	0.45	
4/1/2020						<0.1
6/17/2020						<0.1
9/15/2020					0.31	
9/16/2020				0.058 (J)		
9/17/2020		<0.1	<0.1			
9/18/2020	<0.1					
9/21/2020						<0.1
2/10/2021			0.21			
2/11/2021	0.059 (J)			0.058 (J)	0.71	<0.1
2/12/2021		0.053 (J)				
3/16/2021		<0.1				
3/17/2021	0.076 (J)		<0.1			
3/18/2021				0.057 (J)	0.64	<0.1
8/18/2021	<0.1			0.062 (J)		
8/19/2021		<0.1	<0.1		0.31	<0.1
2/8/2022		<0.1	<0.1	0.055 (J)	0.19	<0.1
2/9/2022	0.053 (J)					
8/10/2022			0.054 (J)	0.086 (J)	0.3	
8/11/2022	0.085 (J)	0.097 (J)				0.056 (J)
1/27/2023						0.05 (J)
1/30/2023				0.097 (J)		
2/1/2023	0.094 (J)	0.086 (J)	0.053 (J)		0.21	
Mean	0.1688	0.1373	0.1481	0.2164	0.4963	0.09277



# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
Std. Dev.	0.1523	0.1149	0.1161	0.206	0.2173	0.01769
Upper Lim.	0.1721	0.12	0.1407	0.1743	0.6071	0.1
Lower Lim.	0.07713	0.09	0.04851	0.06167	0.3854	0.056

# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-22	MW-23D	MW-33	MW-34D	MW-35	MW-37D
3/14/2019		<0.1				
3/15/2019	<0.1					
4/5/2019	0.13 (J)	0.14 (J)				
9/26/2019		0.16 (J)				
9/27/2019	0.28 (J)					
1/22/2020			0.18 (J)			
3/2/2020	<0.1	<0.1				
3/27/2020	<0.1					
4/1/2020		<0.1	0.15 (J)			
6/17/2020			0.25			
6/18/2020				0.082 (J)	0.053 (J)	0.1
9/17/2020	<0.1	<0.1				
9/21/2020			0.14		<0.1	
9/23/2020				<0.1		0.065 (J)
2/11/2021						0.077 (J)
2/12/2021		<0.1	0.25			
2/15/2021	<0.1				0.093 (J)	
3/12/2021						0.061 (J)
3/17/2021	<0.1	<0.1				
3/18/2021			0.4			
3/19/2021					0.082 (J)	
8/16/2021				0.066 (J)		
8/18/2021			0.16		0.052 (J)	0.05 (J)
8/19/2021	<0.1	<0.1				
2/8/2022	<0.1		0.14		0.065 (J)	0.055 (J)
2/9/2022				0.051 (J)		
2/10/2022		<0.1				
8/10/2022			0.21	0.081 (J)		0.084 (J)
8/11/2022	0.063 (J)	0.06 (J)			0.088 (J)	
1/27/2023			0.087 (J)			
1/30/2023	0.064 (J)			0.089 (J)		0.092 (J)
2/1/2023		0.074 (J)			0.1	
Mean	0.1114	0.1028	0.1967	0.07817	0.07288	0.073
Std. Dev.	0.05592	0.0259	0.08785	0.01734	0.02024	0.01808
Upper Lim.	0.13	0.14	0.2751	0.09254	0.09433	0.09216
Lower Lim.	0.064	0.074	0.1183	0.05506	0.05142	0.05384

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D
5/23/2016	0.00182 (J)	<0.001	<0.001	<0.001		
5/24/2016					0.00154 (J)	
7/12/2016	0.0015 (J)	<0.001	<0.001	<0.001	0.0012 (J)	
9/1/2016	0.0016 (J)	<0.001	<0.001	<0.001	0.0014 (J)	
10/24/2016	0.0016 (J)	<0.001				
10/25/2016			<0.001	<0.001	0.0015 (J)	
12/7/2016	0.0018 (J)	<0.001	<0.001	<0.001		
12/8/2016					0.0017 (J)	
1/26/2017	0.002 (J)	<0.001	0.0001 (J)	<0.001	0.0013 (J)	
3/22/2017			0.0002 (J)	0.0001 (J)		
3/23/2017	0.0019 (J)	0.001 (J)			0.001 (J)	
5/24/2017	0.0016 (J)	0.0001 (J)	0.0001 (J)			
5/25/2017				<0.001	0.0012 (J)	
4/3/2018		<0.001	<0.001	<0.001	<0.001	
4/4/2018	<0.001					
3/14/2019	0.0014 (J)	<0.001			0.0015 (J)	
3/15/2019			<0.001	<0.001		<0.001
4/4/2019		7.2E-05 (J)	0.00016 (J)			<0.001
4/5/2019	0.0012 (J)			7.6E-05 (J)	0.0015 (J)	
9/24/2019	0.0013 (J)	0.0002 (J)				
9/25/2019			<0.001	8.9E-05 (J)	0.0015 (J)	<0.001
3/3/2020	0.0017 (J)	5.3E-05 (J)	0.00016 (J)	0.00013 (J)	0.0013 (J)	4.7E-05 (J)
3/26/2020		<0.001				
3/30/2020	0.0015 (J)		7.3E-05 (J)			
3/31/2020				7.7E-05 (J)	0.0014 (J)	
4/1/2020						4.8E-05 (J)
6/17/2020						<0.001
9/15/2020					0.0014 (J)	
9/16/2020				6.5E-05 (J)		
9/17/2020		<0.001	7.8E-05 (J)			
9/18/2020	0.0012 (J)					
9/21/2020						<0.001
2/10/2021			9.4E-05 (J)			
2/11/2021	0.0015 (J)			0.00018 (J)	0.00098 (J)	0.00066 (J)
2/12/2021		<0.001				
3/16/2021		<0.001				
3/17/2021	0.0019		5.8E-05 (J)			
3/18/2021				8.8E-05 (J)	0.00096 (J)	7.3E-05 (J)
8/18/2021	0.0015			<0.001		
8/19/2021		<0.001	<0.001		0.0013	<0.001
2/8/2022		<0.001	<0.001	<0.001	0.0009 (J)	<0.001
2/9/2022	0.0014					
8/10/2022			<0.001	<0.001	0.0011	
8/11/2022	<0.001	<0.001				<0.001
1/27/2023						<0.001
1/30/2023				<0.001		
2/1/2023	0.0011	<0.001	<0.001		<0.001	
Mean	0.001453	0.0008298	0.0006201	0.0006574	0.001223	0.000756
Std. Dev.	0.0003992	0.0003605	0.0004505	0.0004481	0.0003233	0.0004098
Upper Lim.	0.001674	0.001	0.001	0.001	0.001401	0.001
Lower Lim.	0.001233	0.001	0.0001	8.9E-05	0.001045	4.8E-05

# Confidence Interval

Constituent: Lead (mg/L)    Analysis Run 5/22/2023 4:01 PM    View: Appendix IV - Confidence Intervals  
 Plant Hammond    Client: Southern Company    Data: Hammond AP-2

	MW-22	MW-23D	MW-33	MW-34D	MW-35	MW-37D
3/14/2019		<0.001				
3/15/2019	<0.001					
4/5/2019	<0.001	<0.001				
9/26/2019		<0.001				
9/27/2019	0.0001 (J)					
3/2/2020	9.4E-05 (J)	5.1E-05 (J)				
3/27/2020	<0.001					
4/1/2020		<0.001	0.0017 (J)			
6/17/2020			0.0017 (J)			
6/18/2020				0.00087 (J)	0.00016 (J)	0.0017 (J)
9/17/2020	<0.001	0.00016 (J)				
9/21/2020			0.0017 (J)		0.00099 (J)	
9/23/2020				<0.001		8.2E-05 (J)
2/11/2021						0.00039 (J)
2/12/2021		<0.001	0.0018 (J)			
2/15/2021	3.6E-05 (J)				0.00055 (J)	
3/12/2021						<0.001
3/17/2021	<0.001	<0.001				
3/18/2021			0.0017			
3/19/2021					0.00066 (J)	
8/16/2021				<0.001		
8/18/2021			0.0016		<0.001	<0.001
8/19/2021	<0.001	<0.001				
2/8/2022	<0.001		0.0014		<0.001	<0.001
2/9/2022				<0.001		
2/10/2022		<0.001				
8/10/2022			<0.001	<0.001		<0.001
8/11/2022	<0.001	<0.001			<0.001	
1/27/2023			<0.001			
1/30/2023	<0.001			<0.001		<0.001
2/1/2023		<0.001			<0.001	
Mean	0.0007692	0.0008509	0.001511	0.0009783	0.000795	0.0008965
Std. Dev.	0.0004179	0.000349	0.00031	5.307E-05	0.0003134	0.0004809
Upper Lim.	0.001	0.001	0.001674	0.001	0.001	0.0017
Lower Lim.	9.4E-05	0.00016	0.001032	0.00087	0.00016	8.2E-05

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
5/23/2016	<0.03	<0.03	<0.03			
5/24/2016				0.0142 (J)		
7/12/2016	<0.03	0.0037 (J)	<0.03	0.0141 (J)		
9/1/2016	0.0021 (J)	0.0033 (J)	<0.03	0.0158 (J)		
10/24/2016	<0.03					
10/25/2016		0.0029 (J)	<0.03	0.016 (J)		
12/7/2016	<0.03	0.0029 (J)	<0.03			
12/8/2016				0.0144 (J)		
1/26/2017	<0.03	0.0028 (J)	<0.03	0.0136 (J)		
3/22/2017		0.0025 (J)	<0.03			
3/23/2017	0.0016 (J)			0.0151 (J)		
5/24/2017	0.0029 (J)	0.0029 (J)				
5/25/2017			0.0011 (J)	0.0154 (J)		
4/3/2018	0.0026 (J)	0.0028 (J)	<0.03	0.013 (J)		
6/5/2018				0.013 (J)		
6/6/2018	0.0013 (J)	0.0031 (J)	<0.03			
10/3/2018	0.0017 (J)	0.0026 (J)	<0.03	0.015 (J)		
3/14/2019	<0.03			0.011 (J)		
3/15/2019		0.0041 (J)	0.0011 (J)		0.025 (J)	0.002 (J)
4/4/2019	0.0009 (J)	0.0032 (J)			0.019 (J)	
4/5/2019			0.00074 (J)	0.0084 (J)		0.0013 (J)
9/24/2019	0.0012 (J)					
9/25/2019		0.0038 (J)	0.0011 (J)	0.015 (J)	0.024 (J)	
9/27/2019						0.0013 (J)
3/2/2020						0.0015 (J)
3/3/2020	0.0084 (J)	0.0047 (J)	0.0012 (J)	0.012 (J)	0.026 (J)	
3/26/2020	0.0061 (J)					
3/27/2020						0.0013 (J)
3/30/2020		0.0041 (J)				
3/31/2020			0.0009 (J)	0.012 (J)		
4/1/2020					0.026 (J)	
6/17/2020					0.023 (J)	
9/15/2020				0.014 (J)		
9/16/2020			0.0012 (J)			
9/17/2020	0.0094 (J)	0.0043 (J)				0.0011 (J)
9/21/2020					0.022 (J)	
2/10/2021		0.0038 (J)				
2/11/2021			0.0013 (J)	0.011 (J)	0.021 (J)	
2/12/2021	0.036					
2/15/2021						0.0011 (J)
3/16/2021	0.032					
3/17/2021		0.0048 (J)				0.0012 (J)
3/18/2021			0.0014 (J)	0.013 (J)	0.026 (J)	
8/18/2021			0.0012 (J)			
8/19/2021	0.0058 (J)	0.0042 (J)		0.013 (J)	0.022 (J)	0.0012 (J)
2/8/2022	0.014 (J)	0.0034 (J)	0.0014 (J)	0.01 (J)	0.022 (J)	0.0011 (J)
8/11/2022	0.0025 (J)				0.022 (J)	0.0011 (J)
1/27/2023					0.018 (J)	
1/30/2023			0.0014 (J)			0.0011 (J)
2/1/2023	0.016 (J)	0.0036 (J)		0.0093 (J)		
Mean	0.01411	0.004023	0.01427	0.0131	0.02277	0.001275
Std. Dev.	0.01324	0.002541	0.01469	0.002122	0.002587	0.0002598

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
Upper Lim.	0.03	0.0042	0.03	0.01424	0.02469	0.0015
Lower Lim.	0.0021	0.0029	0.0012	0.01197	0.02085	0.0011

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-23D	MW-33	MW-34D	MW-35	MW-37D	MW-51
3/14/2019	0.0028 (J)					
4/5/2019	0.0021 (J)					
9/26/2019	0.0023 (J)					
3/2/2020	0.0025 (J)					
4/1/2020	0.0024 (J)	0.0011 (J)				
6/17/2020		0.00097 (J)				
6/18/2020			0.0021 (J)	0.0046 (J)	0.038 (J)	
9/17/2020	0.0021 (J)					
9/21/2020		0.00086 (J)		0.0036 (J)		
9/23/2020			0.0011 (J)		0.031	
2/11/2021					0.034	
2/12/2021	0.0023 (J)	0.0011 (J)				
2/15/2021				0.0043 (J)		
3/12/2021					0.035	
3/17/2021	0.0024 (J)					
3/18/2021		0.0012 (J)				
3/19/2021				0.0045 (J)		
8/16/2021			0.001 (J)			
8/18/2021		0.00097 (J)		0.0036 (J)	0.03	0.0022 (J)
8/19/2021	0.0022 (J)					
2/8/2022		0.001 (J)		0.0039 (J)	0.029 (J)	0.001 (J)
2/9/2022			0.0022 (J)			
2/10/2022	0.0029 (J)					
8/11/2022	0.002 (J)			<0.03		0.0014 (J)
1/27/2023		<0.03				
1/30/2023			0.0013 (J)		0.021 (J)	
2/1/2023	0.0019 (J)			0.0034 (J)		0.0015 (J)
Mean	0.002325	0.002775	0.00154	0.005362	0.03114	0.001525
Std. Dev.	0.0003019	0.004941	0.0005683	0.00392	0.00546	0.0004992
Upper Lim.	0.002562	0.015	0.002492	0.015	0.03763	0.002658
Lower Lim.	0.002088	0.00086	0.0005877	0.0034	0.02466	0.0003917

# Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-22	MW-23D
5/24/2016	<0.0002		
7/12/2016	<0.0002		
9/1/2016	6E-05 (J)		
10/25/2016	4E-05 (J)		
12/8/2016	<0.0002		
1/26/2017	8E-05 (J)		
3/23/2017	9E-05 (J)		
5/25/2017	8E-05 (J)		
4/3/2018	<0.0002		
3/14/2019	<0.0002		<0.0002
3/15/2019		<0.0002	
3/2/2020		<0.0002	<0.0002
3/3/2020	<0.0002		
2/11/2021	<0.0002		
2/12/2021			<0.0002
2/15/2021		<0.0002	
2/8/2022	<0.0002	<0.0002	
2/10/2022			<0.0002
8/11/2022		0.00016 (J)	0.00017 (J)
1/30/2023		<0.0002	
2/1/2023	<0.0002		<0.0002
Mean	0.0001536	0.0001933	0.000195
Std. Dev.	6.559E-05	1.633E-05	1.225E-05
Upper Lim.	0.0002	0.0002	0.0002
Lower Lim.	6E-05	0.00016	0.00017



# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-15	MW-21D	MW-22	MW-23D	MW-37D
5/23/2016	<0.01				
7/12/2016	0.0007 (J)				
9/1/2016	<0.01				
10/24/2016	<0.01				
12/7/2016	<0.01				
1/26/2017	<0.01				
3/23/2017	<0.01				
5/24/2017	<0.01				
4/3/2018	<0.01				
3/14/2019	<0.01			<0.01	
3/15/2019		0.045	<0.01		
4/4/2019	<0.01	0.033			
4/5/2019			0.00013 (J)	0.0014 (J)	
9/24/2019	<0.01				
9/25/2019		0.038			
9/26/2019				0.0025 (J)	
9/27/2019			<0.01		
3/2/2020			<0.01	0.003 (J)	
3/3/2020	<0.01	0.025			
3/26/2020	<0.01				
3/27/2020			<0.01		
4/1/2020		0.024		0.0032 (J)	
6/17/2020		0.019			
6/18/2020					0.023
9/17/2020	<0.01		<0.01	0.0026 (J)	
9/21/2020		0.017			
9/23/2020					0.015
2/11/2021		0.016			0.019
2/12/2021	<0.01			0.0039 (J)	
2/15/2021			<0.01		
3/12/2021					0.014
3/16/2021	<0.01				
3/17/2021			<0.01	0.0034 (J)	
3/18/2021		0.016			
8/18/2021					0.0083 (J)
8/19/2021	<0.01	0.018	<0.01	0.0034 (J)	
2/8/2022	<0.01	0.016	<0.01		0.007 (J)
2/10/2022				0.0034 (J)	
8/11/2022	<0.01	0.023	<0.01	0.0039 (J)	
1/27/2023		0.028			
1/30/2023			<0.01		0.0063 (J)
2/1/2023	<0.01			0.0041 (J)	
Mean	0.009557	0.02446	0.009177	0.003317	0.01323
Std. Dev.	0.002029	0.009288	0.002849	0.0009104	0.006372
Upper Lim.	0.01	0.03062	0.01	0.004031	0.0208
Lower Lim.	0.0007	0.01772	0.00013	0.002602	0.00566

# Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-22
5/23/2016	0.017	<0.005	<0.005	<0.005		
5/24/2016					<0.2	
7/12/2016	0.0146	<0.005	<0.005	<0.005	0.036	
9/1/2016	0.0137	<0.005	<0.005	0.0014 (J)	0.0347	
10/24/2016	0.0135	0.0012 (J)				
10/25/2016			<0.005	<0.005	0.0282	
12/7/2016	0.01 (J)	0.0041 (J)	<0.005	0.0023 (J)		
12/8/2016					0.0373	
1/26/2017	0.0214	<0.005	<0.005	<0.005	0.0385	
3/22/2017			<0.005	<0.005		
3/23/2017	0.0167	0.0016 (J)			0.0414	
5/24/2017	0.0083 (J)	<0.005	<0.005			
5/25/2017				<0.005	0.019	
4/3/2018		<0.005	<0.005	<0.005	0.029	
4/4/2018	0.012					
6/5/2018					0.038	
6/6/2018	0.014	<0.005	<0.005	<0.005		
10/3/2018	0.0056 (J)	<0.005	<0.005	<0.005	0.017	
3/14/2019	0.0048 (J)	<0.005			0.016	
3/15/2019			<0.005	<0.005		<0.005
4/4/2019		0.00021 (J)	8.9E-05 (J)			
4/5/2019	0.00091 (J)			9.3E-05 (J)	0.0018 (J)	<0.005
9/24/2019	0.0064 (J)	<0.005				
9/25/2019			<0.005	<0.005	0.02	
9/27/2019						<0.005
3/2/2020						<0.005
3/3/2020	0.0045 (J)	<0.005	<0.005	<0.005	0.014	
3/26/2020		<0.005				
3/27/2020						<0.005
3/30/2020	0.0049 (J)		<0.005			
3/31/2020				<0.005	0.019	
9/15/2020					0.059	
9/16/2020				<0.005		
9/17/2020		<0.005	<0.005			0.002 (J)
9/18/2020	0.0045 (J)					
2/10/2021			<0.005			
2/11/2021	0.0072 (J)			<0.005	0.023	
2/12/2021		<0.005				
2/15/2021						<0.005
3/16/2021		<0.005				
3/17/2021	0.01 (J)		<0.005			<0.005
3/18/2021				<0.005	0.019 (J)	
8/18/2021	0.0077			<0.005		
8/19/2021		<0.005	<0.005		0.01	<0.005
2/8/2022		<0.005	<0.005	<0.005	0.0082	<0.005
2/9/2022	0.0047 (J)					
8/10/2022			<0.005	<0.005	0.0096	
8/11/2022	0.0037 (J)	<0.005				<0.005
1/30/2023				<0.005		<0.005
2/1/2023	0.0036 (J)	<0.005	<0.005		0.0054	
Mean	0.009118	0.00444	0.004786	0.004513	0.02713	0.00475
Std. Dev.	0.005336	0.00139	0.001024	0.001329	0.02106	0.000866

# Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-22
Upper Lim.	0.01191	0.005	0.005	0.005	0.03429	0.005
Lower Lim.	0.006327	0.0041	8.9E-05	0.0023	0.0152	0.002

# Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-51
4/1/2020	0.011			
6/17/2020	0.014			
6/18/2020		0.0025 (J)	0.014	
9/21/2020	0.041		0.037	
9/23/2020		<0.005		
2/12/2021	0.011			
2/15/2021			0.01	
3/18/2021	0.028			
3/19/2021			0.016 (J)	
8/16/2021		<0.005		
8/18/2021	0.014		0.014	0.004 (J)
2/8/2022	0.0078		0.0083	<0.005
2/9/2022		<0.005		
8/10/2022	0.007 (J)	<0.005		
8/11/2022			0.0089 (J)	0.0023 (J)
1/27/2023	0.015			
1/30/2023		0.0016 (J)		
2/1/2023			0.0063	0.0021 (J)
Mean	0.01653	0.004017	0.01431	0.00335
Std. Dev.	0.01103	0.00155	0.009754	0.001392
Upper Lim.	0.02526	0.005	0.02273	0.004735
Lower Lim.	0.007766	0.0016	0.006433	0.0008646

# Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-17	HGWC-18	MW-33	MW-34D
5/23/2016	0.000306 (J)	<0.001	<0.001			
5/24/2016				<0.001		
7/12/2016	0.0003 (J)	<0.001	0.0001 (J)	0.0002 (J)		
9/1/2016	0.0003 (J)	<0.001	<0.001	<0.001		
10/24/2016	0.0004	<0.001				
10/25/2016			<0.001	<0.001		
12/7/2016	0.0003 (J)	<0.001	<0.001			
12/8/2016				<0.001		
1/26/2017	0.0003 (J)	<0.001	<0.001	<0.001		
3/22/2017			0.0001 (J)			
3/23/2017	0.0003 (J)	<0.001		0.0002 (J)		
5/24/2017	0.0003 (J)	<0.001				
5/25/2017			0.0001 (J)	0.0002 (J)		
4/3/2018		<0.001	<0.001	0.00014 (J)		
4/4/2018	0.00028 (J)					
6/5/2018				0.00016 (J)		
6/6/2018	0.00029 (J)	<0.001	<0.001			
10/3/2018	0.00029 (J)	<0.001	<0.001	<0.001		
3/14/2019	0.00028 (J)	<0.001		<0.001		
3/15/2019			<0.001			
4/4/2019		<0.001				
4/5/2019	0.00028 (J)		0.00013 (J)	0.00014 (J)		
9/24/2019	0.0003 (J)	<0.001				
9/25/2019			0.00012 (J)	0.00019 (J)		
3/3/2020	0.00026 (J)	<0.001	0.00011 (J)	0.00013 (J)		
3/26/2020		<0.001				
3/30/2020	0.00028 (J)					
3/31/2020			0.00014 (J)	0.00015 (J)		
4/1/2020					0.00029 (J)	
6/17/2020					0.00028 (J)	
6/18/2020						0.00015 (J)
9/15/2020				0.00016 (J)		
9/16/2020			<0.001			
9/17/2020		<0.001				
9/18/2020	0.00028 (J)					
9/21/2020					0.00029 (J)	
9/23/2020						<0.001
2/11/2021	0.00026 (J)		<0.001	<0.001		
2/12/2021		<0.001			0.00025 (J)	
3/16/2021		<0.001				
3/17/2021	0.00034 (J)					
3/18/2021			<0.001	0.00016 (J)	0.00031 (J)	
8/16/2021						<0.001
8/18/2021	0.00027 (J)		<0.001		0.0004 (J)	
8/19/2021		<0.001		0.0002 (J)		
2/8/2022		<0.001	<0.001	<0.001	0.00025 (J)	
2/9/2022	0.00025 (J)					<0.001
8/10/2022			<0.001	<0.001	<0.005	<0.001
8/11/2022	0.00024 (J)	<0.001				
1/27/2023					0.00021 (J)	
1/30/2023			0.00025 (J)			<0.001
2/1/2023	0.00047 (J)	0.00022 (J)		<0.001		

# Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-17	HGWC-18	MW-33	MW-34D
Mean	0.000299	0.0009661	0.0006978	0.0005665	0.0005311	0.0008583
Std. Dev.	4.904E-05	0.0001626	0.000424	0.0004248	0.0007402	0.000347
Upper Lim.	0.000306	0.001	0.001	0.001	0.0025	0.001
Lower Lim.	0.00027	0.00022	0.00013	0.00016	0.00021	0.00015

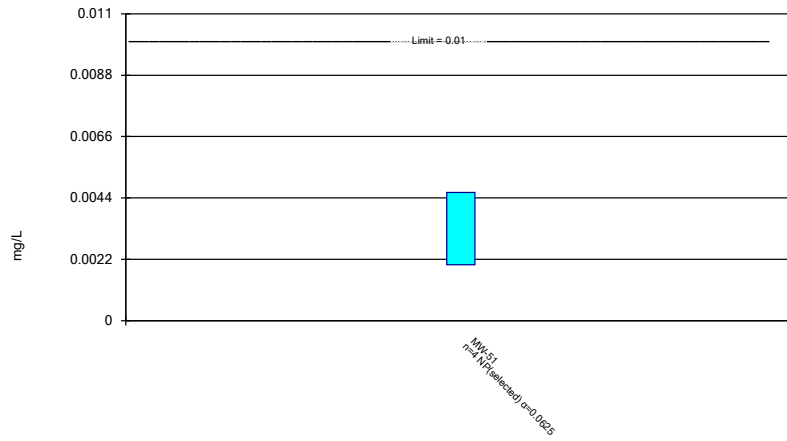
# Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-35
6/18/2020	0.00013 (J)
9/21/2020	<0.001
2/15/2021	<0.001
3/19/2021	<0.001
8/18/2021	<0.001
2/8/2022	<0.001
8/11/2022	<0.001
2/1/2023	<0.001
Mean	0.0008913
Std. Dev.	0.0003076
Upper Lim.	0.001
Lower Lim.	0.00013

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

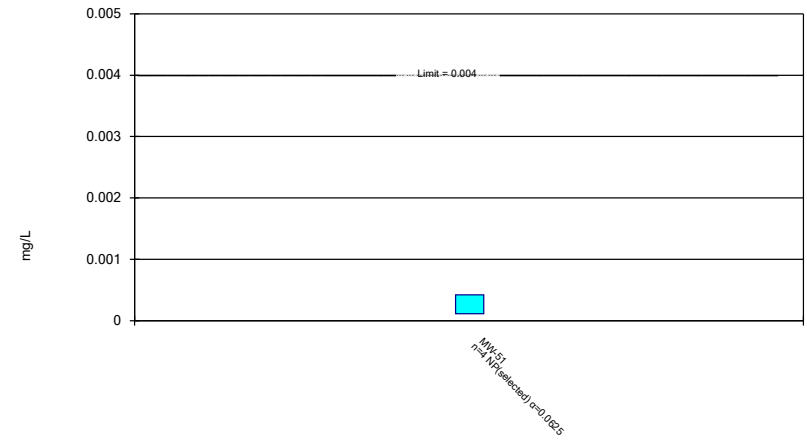


Normality testing disabled.

Constituent: Arsenic Analysis Run 5/22/2023 4:00 PM View: Appendix IV - Nonparametric Confidence Int  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

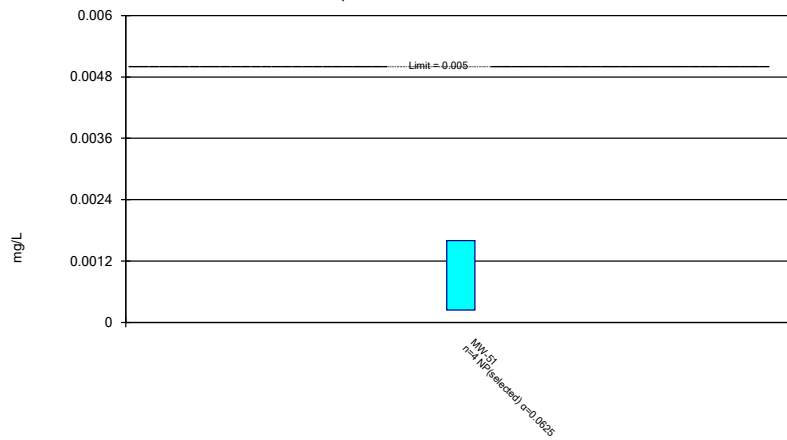


Normality testing disabled.

Constituent: Beryllium Analysis Run 5/22/2023 4:00 PM View: Appendix IV - Nonparametric Confidence In  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

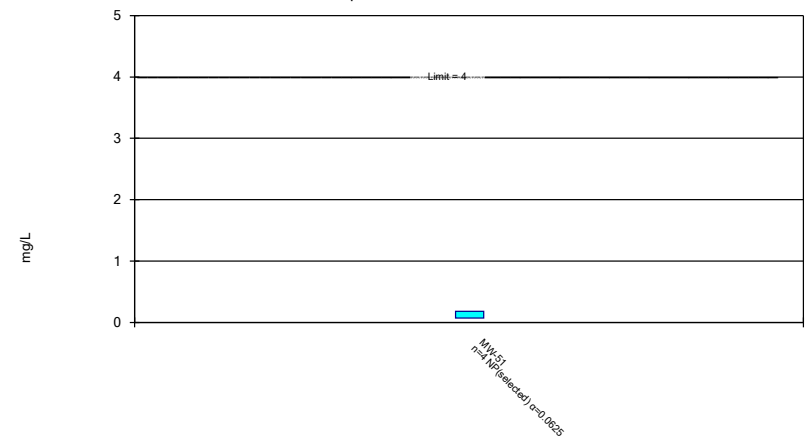


Normality testing disabled.

Constituent: Cadmium Analysis Run 5/22/2023 4:00 PM View: Appendix IV - Nonparametric Confidence In  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



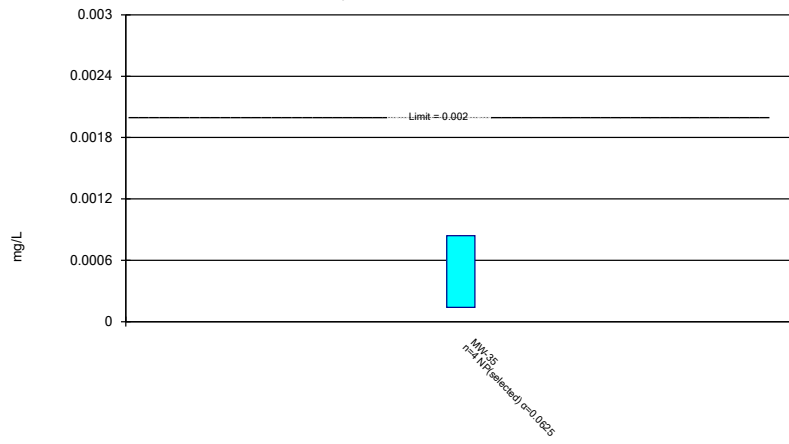
Normality testing disabled.

Constituent: Fluoride Analysis Run 5/22/2023 4:00 PM View: Appendix IV - Nonparametric Confidence Int  
Plant Hammond Client: Southern Company Data: Hammond AP-2



### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

Constituent: Mercury Analysis Run 5/22/2023 4:00 PM View: Appendix IV - Nonparametric Confidence Int  
Plant Hammond Client: Southern Company Data: Hammond AP-2

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Nonparametric Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-51
8/18/2021	0.002 (J)
2/8/2022	0.0046 (J)
8/11/2022	0.0043 (J)
2/1/2023	0.0041 (J)
Mean	0.00375
Std. Dev.	0.001185
Upper Lim.	0.0046
Lower Lim.	0.002

# Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Nonparametric Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-51
8/18/2021	0.00042 (J)
2/8/2022	0.00011 (J)
8/11/2022	0.00028 (J)
2/1/2023	0.00028 (J)
Mean	0.0002725
Std. Dev.	0.0001269
Upper Lim.	0.00042
Lower Lim.	0.00011

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Nonparametric Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-51
8/18/2021	0.00094
2/8/2022	0.00024 (J)
8/11/2022	0.00045 (J)
2/1/2023	0.0016
Mean	0.0008075
Std. Dev.	0.0006043
Upper Lim.	0.0016
Lower Lim.	0.00024

# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Nonparametric Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-51
8/18/2021	0.072 (J)
2/8/2022	0.078 (J)
8/11/2022	0.11
2/1/2023	0.18
Mean	0.11
Std. Dev.	0.04956
Upper Lim.	0.18
Lower Lim.	0.072

# Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 5/22/2023 4:01 PM View: Appendix IV - Nonparametric Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-35
2/15/2021	<0.0005
2/8/2022	0.00014 (J)
8/11/2022	0.00014 (J)
2/1/2023	0.00084
Mean	0.000405
Std. Dev.	0.000336
Upper Lim.	0.00084
Lower Lim.	0.00014

FIGURE I.

# Appendix IV Trend Test - Confidence Interval Exceedances - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/15/2023, 2:49 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWA-4 (bg)	-0.00006016	-118	-98	Yes	23	65.22	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWC-18	-0.008561	-117	-98	Yes	23	0	n/a	n/a	0.01	NP

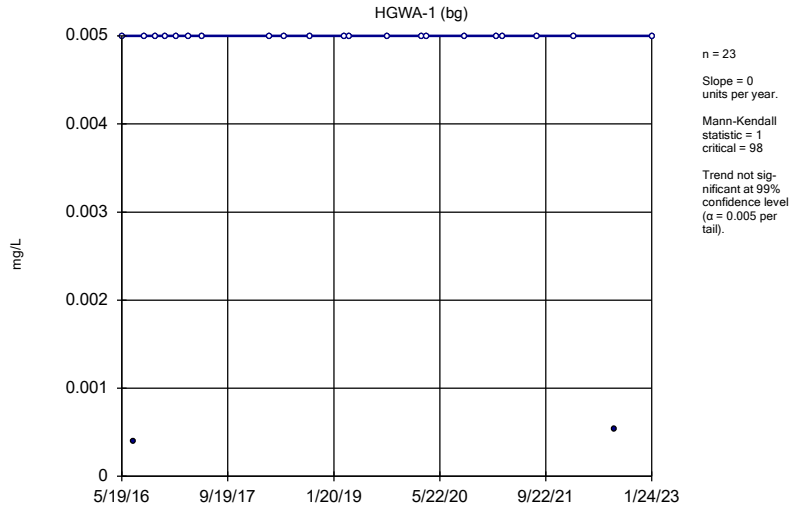


# Appendix IV Trend Test - Confidence Interval Exceedances - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 5/15/2023, 2:49 PM

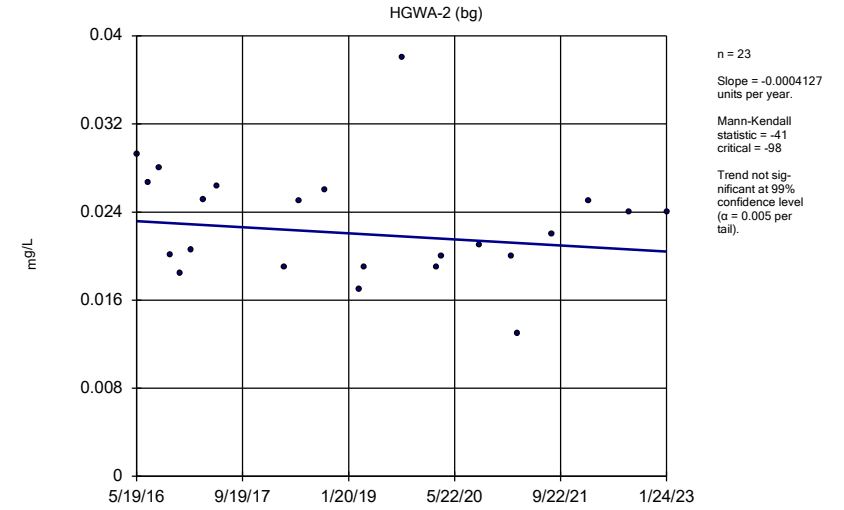
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	HGWA-1 (bg)	0	1	98	No	23	91.3	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-2 (bg)	-0.0004127	-41	-98	No	23	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-3 (bg)	0	0	98	No	23	100	n/a	n/a	0.01	NP
<b>Cobalt (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-0.00006016</b>	<b>-118</b>	<b>-98</b>	<b>Yes</b>	<b>23</b>	<b>65.22</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Cobalt (mg/L)	HGWA-42D (bg)	0	5	30	No	10	90	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-43D (bg)	0	0	30	No	10	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-44D (bg)	0	0	30	No	10	100	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-5 (bg)	0	-9	-98	No	23	26.09	n/a	n/a	0.01	NP
Cobalt (mg/L)	HGWA-6 (bg)	0	0	98	No	23	100	n/a	n/a	0.01	NP
<b>Cobalt (mg/L)</b>	<b>HGWC-18</b>	<b>-0.008561</b>	<b>-117</b>	<b>-98</b>	<b>Yes</b>	<b>23</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Cobalt (mg/L)	MW-33	-0.003989	-19	-30	No	10	0	n/a	n/a	0.01	NP
Cobalt (mg/L)	MW-35	-0.001591	-6	-21	No	8	0	n/a	n/a	0.01	NP

### Sen's Slope Estimator



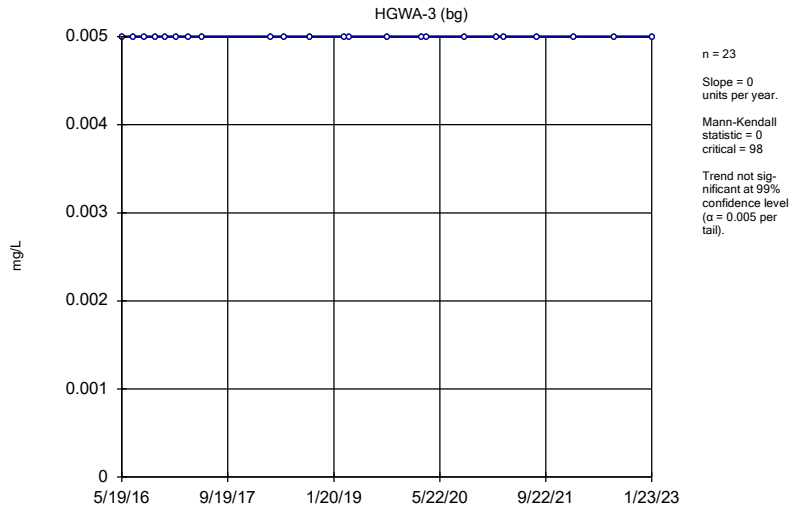
Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator



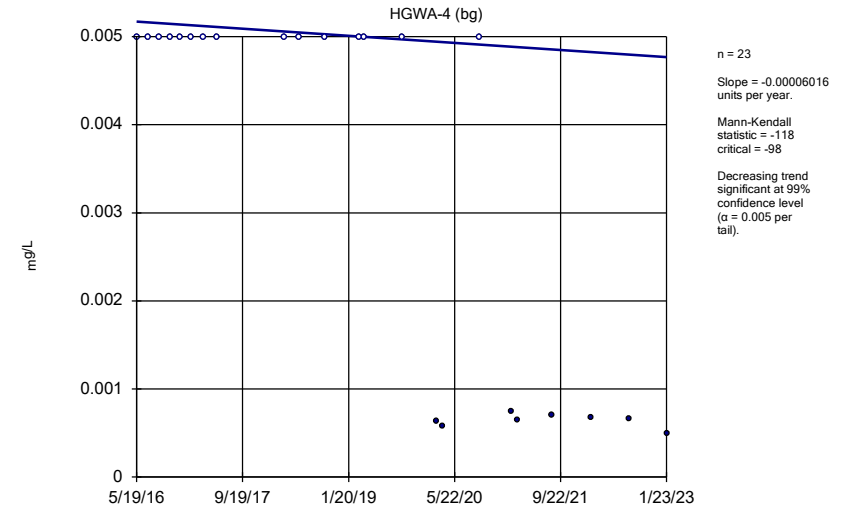
Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator



Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

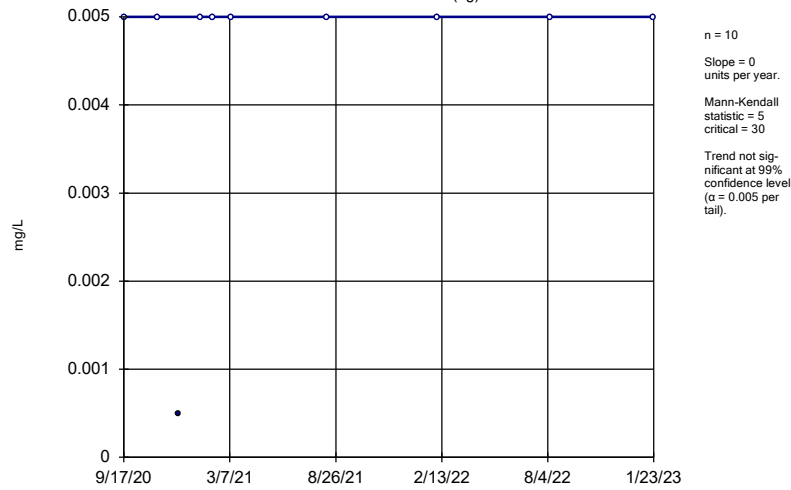
### Sen's Slope Estimator



Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

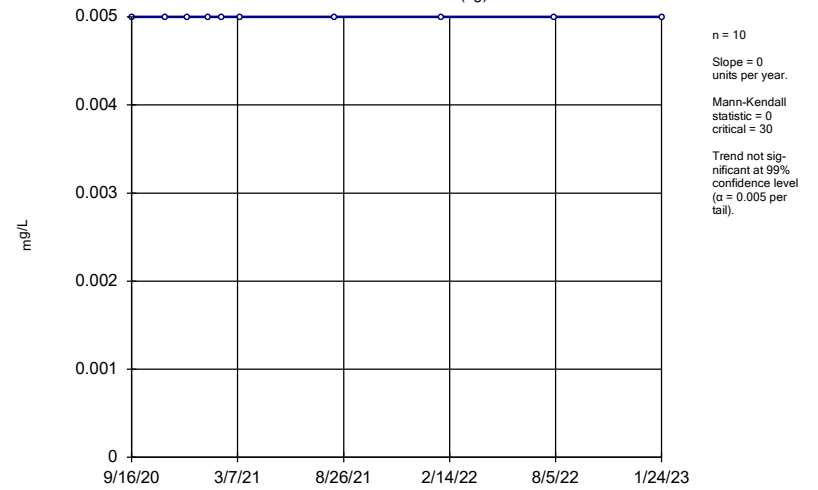
HGWA-42D (bg)



Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

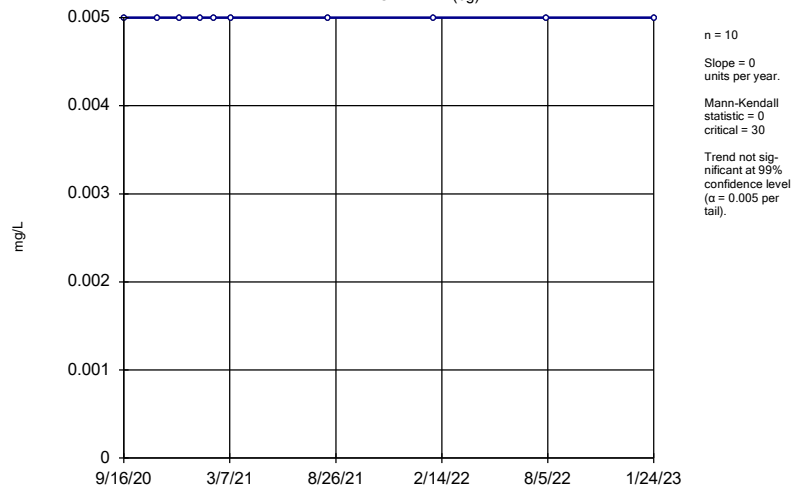
HGWA-43D (bg)



Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

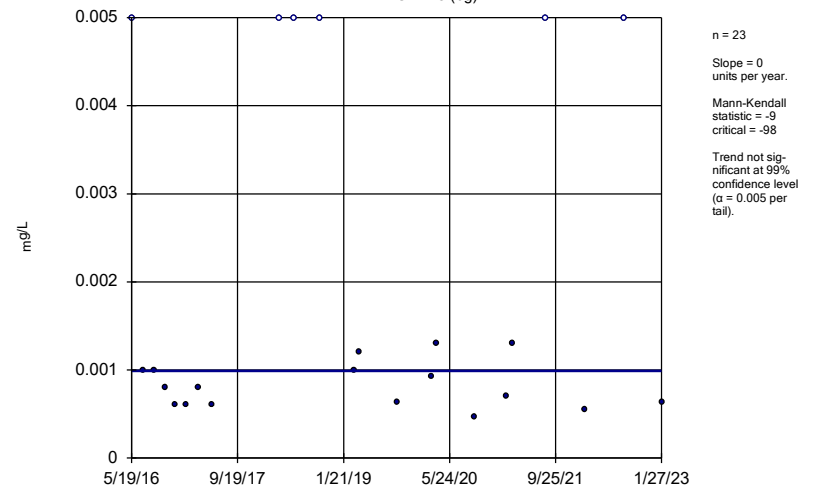
HGWA-44D (bg)



Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

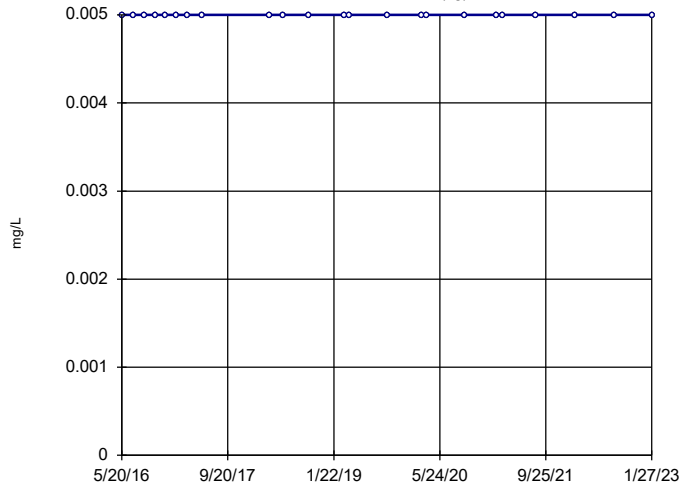
HGWA-5 (bg)



Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-6 (bg)

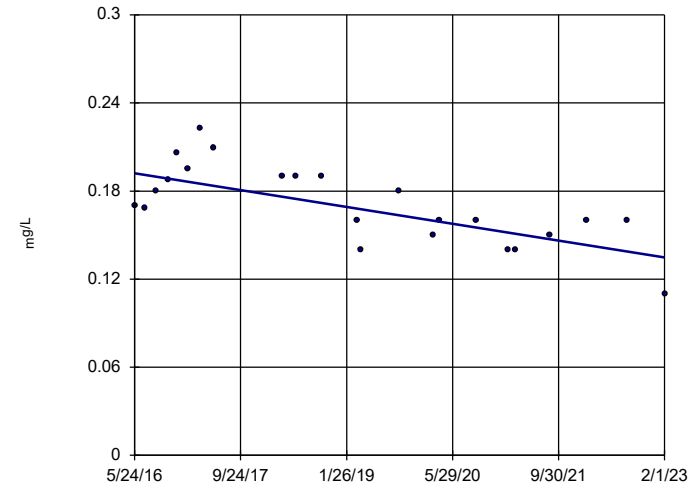


n = 23  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = 0  
 critical = 98  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-18

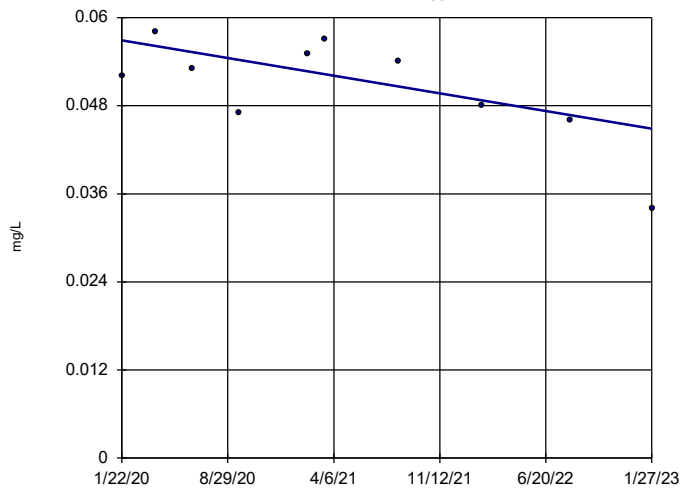


n = 23  
 Slope = -0.008561  
 units per year.  
 Mann-Kendall  
 statistic = -117  
 critical = -98  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

MW-33

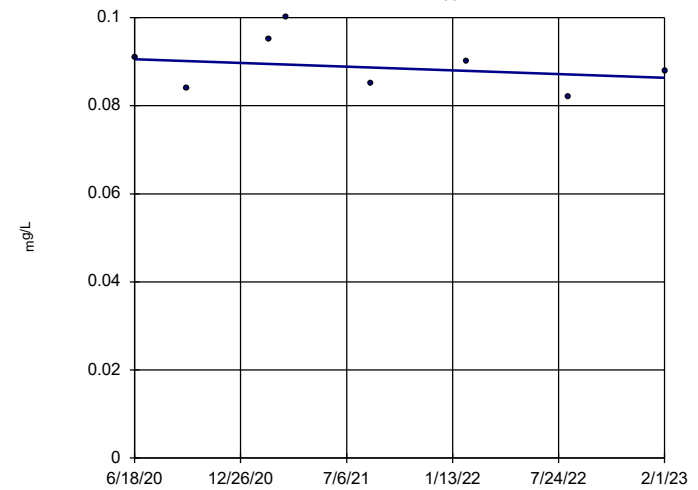


n = 10  
 Slope = -0.003989  
 units per year.  
 Mann-Kendall  
 statistic = -19  
 critical = -30  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

MW-35



n = 8  
 Slope = -0.001591  
 units per year.  
 Mann-Kendall  
 statistic = -6  
 critical = -21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

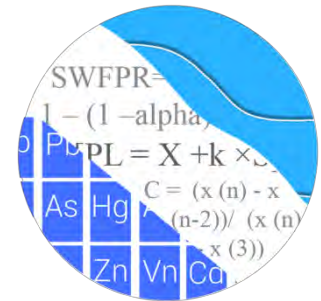
Constituent: Cobalt Analysis Run 5/15/2023 2:47 PM View: A4 Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

August 2023

## GROUNDWATER STATS CONSULTING

January 31, 2024

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



Re: Plant Hammond Ash Pond 2 (AP-2)  
Statistical Analysis – August 2023 Sample Event

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August 2023 Semi-Annual Groundwater Detection and Assessment Monitoring Statistical summary of groundwater data for Georgia Power Company's Plant Hammond AP-2. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the Coal Combustion Residuals (CCR) program in 2016 for all wells except those noted below, and at least 8 samples were collected at all wells. Sampling began in 2019 for assessment wells MW-21D, MW-22, and MW-23D; and in 2020 for upgradient wells HGWA-42D, HGWA-43D, HGWA-44D, assessment well MW-37D, and piezometers MW-33, MW-34D, and MW-35; and in 2021 for piezometer MW-51.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient well:** HGWA-1, HGWA-2, HGWA-3, HGWA-4, HGWA-5, HGWA-6, HGWA-42D, HGWA-43D, and HGWA-44D
- **Downgradient wells:** HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- **Assessment wells:** MW-21D, MW-22, MW-23D, and MW-37D

- **Piezometers:** MW-33, MW-34D, MW-35, and MW-51

Assessment wells and piezometers are included on time series and box plots for all parameters. When a minimum of 4 samples is available, downgradient wells, assessment wells, and piezometers are evaluated using confidence intervals for the Appendix IV constituents.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager for Groundwater Stats Consulting. The statistical analysis was performed according to the groundwater data screening that was performed in April 2018 by GSC and approved by Dr. Cameron, PhD Statistician with MacStat Consulting and primary author of the USEPA Unified Guidance.

The CCR program consists of the constituents listed below. The terms “parameters” and “constituents” are used interchangeably.

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of well/constituent pairs containing 100% non-detects follows this letter.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data. In the case of lithium, historical reporting limits vary among the wells. Therefore, the reporting limit of 0.03 mg/L was substituted across all wells, which is the most recent reporting limit provided by the laboratory. Note that the reporting limit for arsenic during this event increased to 0.01 mg/L; therefore, the historic reporting limit of 0.005 mg/L was substituted across all wells in order to maintain statistical limits that are conservative from a regulatory perspective.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. When values in background are flagged as outliers, the measurements may be

seen in a lighter font and as a disconnected symbol on the graphs. No values were flagged as outliers (Figure C).

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

### **Statistical Methods – Appendix III Parameters**

Appendix III parameters are evaluated using Interwell Prediction Limits combined with 1-of-2 resamples for all constituents: boron, calcium, chloride, fluoride, pH, sulfate, and TDS.

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data for parametric limits. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.



- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, an earlier portion of data may require deselection prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs. When this step is required, a summary of any adjusted records will be provided.

### **Statistical Evaluation of Appendix III Parameters – August 2023**

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were reassessed for potential outliers during this analysis. When values in background are flagged as outliers, the measurements may be seen in a lighter font and as a disconnected symbol on the graphs. No Appendix III values have been flagged as outliers (Figure C).

#### Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed for Appendix III parameters using all historical upgradient well data through August 2023 (Figure D). Downgradient measurements were compared to these interwell background limits. Interwell prediction limits use all available upgradient well data to establish a background limit for an individual constituent. The August 2023 sample from each downgradient well is compared to the background limit to determine whether any initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirm the initial exceedance, a statistically significant increase (SSI) is identified and further research would be required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. If no resample is collected, the initial exceedance is automatically confirmed.

A summary table of these findings is provided along with the prediction limits. When the August 2023 compliance data from downgradient wells were compared to interwell prediction limits, exceedances were noted for the following well/constituent pairs:

- Boron: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- Calcium: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- Chloride: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- Sulfate: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18
- TDS: HGWC-14, HGWC-15, HGWC-16, HGWC-17, and HGWC-18

### Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient well data are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of variability in groundwater unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

#### Increasing trends:

- Boron: HGWA-2 (upgradient) and HGWC-16
- Calcium: HGWA-3 (upgradient) and HGWC-16
- Chloride: HGWA-44D (upgradient) and HGWC-16
- Sulfate: HGWA-2 (upgradient)
- TDS: HGWC-16 and HGWC-17

#### Decreasing trends:

- Boron: HGWA-43D (upgradient) and HGWC-14
- Calcium: HGWA-4 and HGWA-44D (both upgradient)
- Chloride: HGWA-3 (upgradient), HGWA-4 (upgradient), HGWC-14, HGWC-15, and HGWC-18
- Sulfate: HGWA-43D (upgradient)
- TDS: HGWA-4 (upgradient), HGWC-14, and HGWC-15

## **Statistical Methods – Appendix IV Parameters**

Appendix IV parameters are evaluated by statistically comparing the mean or median of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (MCL or CCR rule-specified limits) or site-specific limits that are based on upgradient background groundwater quality. Site-specific background limits are determined using tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. Confidence intervals are provided for Appendix IV well/constituent pairs with detections and with current reported data. The methods are described below.

### **Statistical Evaluation of Appendix IV Parameters – August 2023**

For Appendix IV parameters, confidence intervals for each downgradient well, assessment well, and piezometer/constituent pair were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that contain 100% non-detects do not require analysis. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis. The highest value for lithium at HGWA-44D was flagged during this analysis in order to maintain statistical limits that are conservative (i.e., lower) from a regulatory perspective. (Figure C).

#### Interwell Upper Tolerance Limits

Site specific background limits were calculated as upper one-sided tolerance limits (UTLs) on pooled upgradient interwell data through August 2023 for each of the Appendix IV constituents (Figure F). When varying detection limits were present in upgradient wells, all non-detects were substituted with the most recent reporting limit. As mentioned above, reporting limits of 0.005 mg/L and 0.03 mg/L were substituted across all wells for arsenic and lithium, respectively. Parametric tolerance limits were constructed when data followed a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were constructed.

#### Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a). On July 30, 2018, US EPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Effective on February 22,

2022, Georgia EPD incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). In accordance with the updated Rules, the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, Federal and State CCR Rules specify levels for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix IV constituents for this sample event (Figure G).

#### Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals were constructed for the Appendix IV constituents in each downgradient wells, assessment wells, and piezometers with 4 or more samples through August 2023 (Figure H).

The Sanitas software was used to calculate the tolerance limits and the confidence intervals, either parametric or nonparametric, depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

For any well/constituent pairs where  $n < 8$  and the parametric lower confidence limit resulted in a negative number, nonparametric confidence intervals were constructed and may be found at the end of Figure H. This is a more conservative approach in that the lower confidence limit reflects the low measurements in the data set for a given well rather than a negative number.

Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Summaries of the confidence interval results, along with graphical comparison against GWPS follow this letter. Exceedances were noted for the following well/constituent pairs:

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

#### Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test at the 95% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure I). Although the trend tests for Assessment monitoring pairs were previously evaluated using 99% confidence, the 95% confidence level more rapidly identifies statistically significant trends. Additionally, the 95% confidence is recommended in cases with limited sample sizes and, particularly, for new assessment wells. Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient wells, it is an indication of variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing trends:

- None

Decreasing trends:

- Cobalt: HGWA-4 (upgradient) and HGWC-18

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Hammond AP-2. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Abdul Diane  
Groundwater Analyst



Andrew T. Collins  
Project Manager

# 100% Non-Detects: Appendix IV Downgradient, Assessment, and Piezometers

Analysis Run 10/17/2023 2:19 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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## Antimony (mg/L)

HGWC-16, HGWC-17, MW-21D, MW-23D, MW-51

## Beryllium (mg/L)

HGWC-15, HGWC-16, MW-21D, MW-23D

## Cadmium (mg/L)

HGWC-16, MW-21D, MW-37D

## Chromium (mg/L)

MW-51

## Lead (mg/L)

MW-51

## Lithium (mg/L)

HGWC-14

## Mercury (mg/L)

HGWC-14, HGWC-15, HGWC-16, HGWC-17, MW-21D, MW-33, MW-34D, MW-37D

## Molybdenum (mg/L)

HGWC-14, HGWC-16, HGWC-17, HGWC-18, MW-33, MW-34D, MW-35, MW-51

## Selenium (mg/L)

MW-21D, MW-23D, MW-37D

## Thallium (mg/L)

HGWC-16, MW-21D, MW-22, MW-23D, MW-37D, MW-51

# Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/17/2023, 2:02 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-14	0.55	n/a	8/13/2023	6.9	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.55	n/a	8/13/2023	1.6	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.55	n/a	8/13/2023	2.2	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.55	n/a	8/13/2023	6.2	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.55	n/a	8/13/2023	7.7	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	8/13/2023	418	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	8/13/2023	182	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	8/13/2023	187	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	8/13/2023	261	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	8/13/2023	355	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	8/13/2023	95.8	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	8/13/2023	78.2	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	8/13/2023	89.1	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	8/13/2023	109	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	8/13/2023	104	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	89.9	n/a	8/13/2023	935	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	89.9	n/a	8/13/2023	281	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	89.9	n/a	8/13/2023	214	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	89.9	n/a	8/13/2023	351	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	89.9	n/a	8/13/2023	895	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	8/13/2023	1960	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	8/13/2023	881	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	8/13/2023	861	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	8/13/2023	1180	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	8/13/2023	1700	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2

# Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/17/2023, 2:02 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-14	0.55	n/a	8/13/2023	6.9	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.55	n/a	8/13/2023	1.6	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.55	n/a	8/13/2023	2.2	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.55	n/a	8/13/2023	6.2	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.55	n/a	8/13/2023	7.7	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	8/13/2023	418	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	8/13/2023	182	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	8/13/2023	187	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	8/13/2023	261	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	8/13/2023	355	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	8/13/2023	95.8	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	8/13/2023	78.2	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	8/13/2023	89.1	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	8/13/2023	109	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	8/13/2023	104	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-14	8.25	4.57	8/13/2023	4.83	No	183	n/a	n/a	0	n/a	n/a	0.0001178	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-15	8.25	4.57	8/13/2023	6.66	No	183	n/a	n/a	0	n/a	n/a	0.0001178	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-16	8.25	4.57	8/13/2023	7.13	No	183	n/a	n/a	0	n/a	n/a	0.0001178	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-17	8.25	4.57	8/13/2023	6.46	No	183	n/a	n/a	0	n/a	n/a	0.0001178	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-18	8.25	4.57	8/13/2023	4.75	No	183	n/a	n/a	0	n/a	n/a	0.0001178	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-14	1.3	n/a	8/13/2023	0.1	No	183	n/a	n/a	29.51	n/a	n/a	0.00005888	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-15	1.3	n/a	8/13/2023	0.12	No	183	n/a	n/a	29.51	n/a	n/a	0.00005888	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-16	1.3	n/a	8/13/2023	0.053J	No	183	n/a	n/a	29.51	n/a	n/a	0.00005888	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-17	1.3	n/a	8/13/2023	0.081J	No	183	n/a	n/a	29.51	n/a	n/a	0.00005888	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-18	1.3	n/a	8/13/2023	0.25	No	183	n/a	n/a	29.51	n/a	n/a	0.00005888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	89.9	n/a	8/13/2023	935	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	89.9	n/a	8/13/2023	281	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	89.9	n/a	8/13/2023	214	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	89.9	n/a	8/13/2023	351	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	89.9	n/a	8/13/2023	895	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	8/13/2023	1960	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	8/13/2023	881	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	8/13/2023	861	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	8/13/2023	1180	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	8/13/2023	1700	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2



# Appendix III Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/17/2023, 2:07 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-2 (bg)	0.002577	142	87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-43D (bg)	-0.007982	-31	-30	Yes	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-14	-1.418	-116	-87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-16	0.213	135	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	1.977	110	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-4 (bg)	-7.312	-103	-87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-7.57	-31	-30	Yes	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-16	11.73	154	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-3 (bg)	-0.14	-106	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-4 (bg)	-0.3879	-163	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-44D (bg)	7.347	33	30	Yes	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-14	-71.62	-147	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-15	-22.69	-140	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-16	12.06	180	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-18	-33.83	-132	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	2.095	138	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-3.197	-35	-30	Yes	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-4 (bg)	-23.33	-111	-87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-14	-189.4	-146	-87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-15	-53.15	-111	-87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-16	51.71	170	87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-17	49.9	122	87	Yes	21	4.762	n/a	n/a	0.01	NP

# Appendix III Trend Tests - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 10/17/2023, 2:08 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.0002648	-19	-87	No	21	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>0.002577</b>	<b>142</b>	<b>87</b>	<b>Yes</b>	<b>21</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)	0.0003268	22	87	No	21	19.05	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-4 (bg)	0.0004817	17	87	No	21	4.762	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-42D (bg)	-0.001093	-2	-30	No	10	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWA-43D (bg)</b>	<b>-0.007982</b>	<b>-31</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>
Boron (mg/L)	HGWA-44D (bg)	0.08822	29	30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-5 (bg)	0.0005721	50	87	No	21	19.05	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-6 (bg)	-0.000409	-44	-87	No	21	4.762	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-14</b>	<b>-1.418</b>	<b>-116</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-15	0	-6	-87	No	21	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-16</b>	<b>0.213</b>	<b>135</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-17	0.1028	38	87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-18	-0.2917	-68	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.147	75	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	1.082	82	87	No	21	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>1.977</b>	<b>110</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-7.312</b>	<b>-103</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWA-42D (bg)	-0.3182	-7	-30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-43D (bg)	-3.038	-25	-30	No	10	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWA-44D (bg)</b>	<b>-7.57</b>	<b>-31</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>
Calcium (mg/L)	HGWA-5 (bg)	0.2632	25	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-6 (bg)	0.3126	33	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-14	-13.11	-70	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-15	-0.7372	-14	-87	No	21	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWC-16</b>	<b>11.73</b>	<b>154</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWC-17	12.03	70	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-18	2.683	13	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	0.716	75	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-2 (bg)	0	4	87	No	21	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>-0.14</b>	<b>-106</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-0.3879</b>	<b>-163</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	HGWA-42D (bg)	0	1	30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-43D (bg)	-0.1067	-10	-30	No	10	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWA-44D (bg)</b>	<b>7.347</b>	<b>33</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>
Chloride (mg/L)	HGWA-5 (bg)	-0.064	-75	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-6 (bg)	-0.04474	-53	-87	No	21	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWC-14</b>	<b>-71.62</b>	<b>-147</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWC-15</b>	<b>-22.69</b>	<b>-140</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWC-16</b>	<b>12.06</b>	<b>180</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	HGWC-17	7.625	70	87	No	21	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWC-18</b>	<b>-33.83</b>	<b>-132</b>	<b>-87</b>	<b>Yes</b>	<b>21</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)	0.9291	31	87	No	21	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>2.095</b>	<b>138</b>	<b>87</b>	<b>Yes</b>	<b>21</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)	0.09502	8	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-4 (bg)	-0.05621	-16	-87	No	21	14.29	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-42D (bg)	0.09493	6	30	No	10	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-43D (bg)</b>	<b>-3.197</b>	<b>-35</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-44D (bg)	1.358	7	30	No	10	10	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-5 (bg)	-0.05539	-16	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-6 (bg)	-0.264	-63	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-14	-22.7	-34	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-15	-18.52	-83	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-16	1.52	39	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-17	-1.796	-11	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-18	5.095	24	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	3.922	26	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	3.534	35	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	0.9434	22	87	No	21	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-23.33</b>	<b>-111</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids (mg/L)	HGWA-42D (bg)	-2.613	-4	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	-4.269	-13	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	32.23	25	30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-5 (bg)	0	2	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-6 (bg)	-1.451	-49	-87	No	21	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-14</b>	<b>-189.4</b>	<b>-146</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-15</b>	<b>-53.15</b>	<b>-111</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-16</b>	<b>51.71</b>	<b>170</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

# Appendix III Trend Tests - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/17/2023, 2:08 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/L)	HGWC-17	49.9	122	87	Yes	21	4.762	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-18	-35.5	-78	-87	No	21	0	n/a	n/a	0.01	NP

# Upper Tolerance Limits Summary Table

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 11/15/2023, 1:33 PM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	n/a	n/a	n/a	n/a	144	81.94	n/a	0.0006197	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	n/a	n/a	177	81.92	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.46	n/a	n/a	n/a	n/a	177	0	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	n/a	n/a	165	82.42	n/a	0.0002111	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	n/a	177	92.09	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.019	n/a	n/a	n/a	n/a	165	86.06	n/a	0.0002111	NP Inter(NDs)
Cobalt (mg/L)	0.038	n/a	n/a	n/a	n/a	177	69.49	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.594	n/a	n/a	n/a	n/a	176	0	sqrt(x)	0.05	Inter
Fluoride (mg/L)	1.3	n/a	n/a	n/a	n/a	183	29.51	n/a	NaN	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	165	76.36	n/a	0.0002111	NP Inter(NDs)
Lithium (mg/L)	0.064	n/a	n/a	n/a	n/a	174	17.82	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	121	93.39	n/a	0.002016	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	n/a	n/a	163	83.44	n/a	0.0002339	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	177	97.74	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	177	98.87	n/a	NaN	NP Inter(NDs)

<b>PLANT HAMMOND AP-2 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		0.46	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.019	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		1.59	5
Fluoride, Total (mg/L)	4		1.3	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.064	0.064
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

*\*GWPS = Groundwater Protection Standard*

# Confidence Intervals Summary Table - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 1/22/2024, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	HGWC-18	0.1828	0.1555	0.038	Yes 24	0.1691	0.02675	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-33	0.05756	0.04517	0.038	Yes 11	0.05136	0.007433	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-35	0.09447	0.08264	0.038	Yes 9	0.08856	0.006126	0	None	No	0.01	Param.

# Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 1/22/2024, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-14	0.0032	0.001	0.006	No 18	0.002607	0.0009443	77.78	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-15	0.003	0.0027	0.006	No 18	0.0028	0.0004298	77.78	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-18	0.003	0.0008	0.006	No 18	0.002878	0.0005185	94.44	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-22	0.003	0.0016	0.006	No 9	0.002844	0.0004667	88.89	None	No	0.002	NP (NDs)
Antimony (mg/L)	MW-33	0.003	0.00046	0.006	No 7	0.002637	0.00096	85.71	None	No	0.008	NP (NDs)
Antimony (mg/L)	MW-34D	0.003	0.0018	0.006	No 5	0.00276	0.0005367	80	None	No	0.031	NP (NDs)
Antimony (mg/L)	MW-35	0.003	0.00041	0.006	No 7	0.002616	0.0009733	71.43	None	No	0.008	NP (NDs)
Antimony (mg/L)	MW-37D	0.003	0.00079	0.006	No 7	0.002684	0.0008353	85.71	None	No	0.008	NP (NDs)
Arsenic (mg/L)	HGWC-14	0.007101	0.004359	0.01	No 24	0.005953	0.002966	12.5	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	HGWC-15	0.01	0.0008	0.01	No 24	0.008806	0.003229	87.5	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-16	0.01	0.0012	0.01	No 24	0.008454	0.003536	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-17	0.01	0.0017	0.01	No 24	0.007453	0.004073	70.83	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-18	0.006653	0.004842	0.01	No 24	0.005748	0.001774	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-21D	0.01	0.0013	0.01	No 14	0.007535	0.004084	71.43	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-22	0.01	0.00045	0.01	No 13	0.009265	0.002649	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-23D	0.01	0.001	0.01	No 13	0.008602	0.003414	84.62	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-33	0.008692	0.003908	0.01	No 10	0.0063	0.002681	10	None	No	0.01	Param.
Arsenic (mg/L)	MW-34D	0.005648	0.001838	0.01	No 7	0.003743	0.001604	14.29	None	No	0.01	Param.
Arsenic (mg/L)	MW-35	0.025	0.0043	0.01	No 9	0.009767	0.008681	22.22	None	No	0.002	NP (normality)
Arsenic (mg/L)	MW-37D	0.01	0.00095	0.01	No 9	0.007261	0.004124	66.67	None	No	0.002	NP (NDs)
Arsenic (mg/L)	MW-51	0.005469	0.002031	0.01	No 5	0.005	0.002977	20	Kaplan-Meier	No	0.01	Param.
Barium (mg/L)	HGWC-14	0.022	0.018	2	No 24	0.02438	0.02157	4.167	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-15	0.02623	0.01756	2	No 24	0.0219	0.008492	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-16	0.1108	0.1005	2	No 24	0.1056	0.01006	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-17	0.0263	0.02365	2	No 24	0.02498	0.002602	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-18	0.032	0.028	2	No 24	0.03205	0.01511	4.167	None	No	0.01	NP (normality)
Barium (mg/L)	MW-21D	0.0642	0.03938	2	No 14	0.05179	0.01752	0	None	No	0.01	Param.
Barium (mg/L)	MW-22	0.02833	0.01531	2	No 13	0.02215	0.009503	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	MW-23D	0.06464	0.04936	2	No 13	0.057	0.01028	0	None	No	0.01	Param.
Barium (mg/L)	MW-33	0.02651	0.02049	2	No 10	0.0235	0.003375	0	None	No	0.01	Param.
Barium (mg/L)	MW-34D	0.04491	0.03395	2	No 7	0.03943	0.004614	0	None	No	0.01	Param.
Barium (mg/L)	MW-35	0.02895	0.02172	2	No 9	0.02533	0.003742	0	None	No	0.01	Param.
Barium (mg/L)	MW-37D	0.1586	0.1103	2	No 9	0.1344	0.02506	0	None	No	0.01	Param.
Barium (mg/L)	MW-51	0.04609	0.01991	2	No 5	0.033	0.00781	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-14	0.00056	0.0004	0.004	No 22	0.0005582	0.0003148	9.091	None	No	0.01	NP (normality)
Beryllium (mg/L)	HGWC-17	0.0005	0.0001	0.004	No 22	0.0004015	0.0001862	77.27	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-18	0.003347	0.002733	0.004	No 22	0.00304	0.0005717	4.545	None	No	0.01	Param.
Beryllium (mg/L)	MW-22	0.0005	0.000062	0.004	No 13	0.0003016	0.0002232	53.85	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-33	0.001061	0.0007889	0.004	No 10	0.000891	0.0002636	0	None	x^3	0.01	Param.
Beryllium (mg/L)	MW-34D	0.0005	0.000065	0.004	No 7	0.0003879	0.0001931	71.43	None	No	0.008	NP (NDs)
Beryllium (mg/L)	MW-35	0.0006612	0.0004054	0.004	No 9	0.0005333	0.0001325	0	None	No	0.01	Param.
Beryllium (mg/L)	MW-37D	0.0005	0.00012	0.004	No 9	0.0004578	0.0001267	88.89	None	No	0.002	NP (NDs)
Beryllium (mg/L)	MW-51	0.0004587	0.00002532	0.004	No 5	0.000242	0.0001293	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-14	0.0005	0.00012	0.005	No 24	0.0003278	0.0001931	54.17	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-15	0.002113	0.001343	0.005	No 24	0.001728	0.0007551	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-17	0.0005	0.00007	0.005	No 24	0.0004821	0.00008777	95.83	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-18	0.0024	0.0017	0.005	No 24	0.002302	0.001714	4.167	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-22	0.002084	0.001657	0.005	No 13	0.001766	0.0005051	0	None	x^4	0.01	Param.
Cadmium (mg/L)	MW-23D	0.0025	0.00015	0.005	No 13	0.001151	0.001121	38.46	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-33	0.00022	0.00016	0.005	No 10	0.000287	0.0003394	10	None	No	0.011	NP (normality)
Cadmium (mg/L)	MW-34D	0.00153	0.0001696	0.005	No 7	0.00139	0.001179	28.57	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	MW-35	0.00175	0.0009679	0.005	No 9	0.001359	0.0004049	0	None	No	0.01	Param.
Cadmium (mg/L)	MW-51	0.0016	0.00019	0.005	No 5	0.000684	0.0005917	0	None	No	0.031	NP (selected)
Chromium (mg/L)	HGWC-14	0.005	0.00066	0.1	No 22	0.004595	0.001313	90.91	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-15	0.005	0.0012	0.1	No 22	0.004414	0.001515	86.36	None	No	0.01	NP (NDs)

# Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 1/22/2024, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	HGWC-16	0.005	0.0021	0.1	No 22	0.004464	0.001408	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-17	0.005	0.0018	0.1	No 22	0.004465	0.001392	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-18	0.005	0.00063	0.1	No 22	0.004388	0.001578	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-21D	0.005	0.00074	0.1	No 14	0.004379	0.001578	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-22	0.005	0.00075	0.1	No 13	0.004319	0.001663	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-23D	0.005	0.00086	0.1	No 13	0.004361	0.00156	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-33	0.005	0.005	0.1	No 10	0.004569	0.001363	90	None	No	0.011	NP (NDs)
Chromium (mg/L)	MW-34D	0.0059	0.005	0.1	No 7	0.005129	0.0003402	85.71	None	No	0.008	NP (NDs)
Chromium (mg/L)	MW-35	0.005	0.00079	0.1	No 9	0.004069	0.001848	77.78	None	No	0.002	NP (NDs)
Chromium (mg/L)	MW-37D	0.005	0.0014	0.1	No 9	0.004578	0.001194	77.78	None	No	0.002	NP (NDs)
Cobalt (mg/L)	HGWC-14	0.034	0.0253	0.038	No 24	0.03294	0.02017	4.167	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-15	0.04137	0.02281	0.038	No 24	0.03209	0.01819	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-16	0.005	0.00037	0.038	No 24	0.00461	0.00132	91.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-17	0.01553	0.01256	0.038	No 24	0.01405	0.002906	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>HGWC-18</b>	<b>0.1828</b>	<b>0.1555</b>	<b>0.038</b>	<b>Yes 24</b>	<b>0.1691</b>	<b>0.02675</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-21D	0.005	0.00034	0.038	No 14	0.004667	0.001245	92.86	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-22	0.03542	0.02087	0.038	No 13	0.02815	0.009779	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-23D	0.001121	0.0008868	0.038	No 13	0.001004	0.0001574	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>MW-33</b>	<b>0.05756</b>	<b>0.04517</b>	<b>0.038</b>	<b>Yes 11</b>	<b>0.05136</b>	<b>0.007433</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-34D	0.009785	0.005043	0.038	No 7	0.007414	0.001996	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>MW-35</b>	<b>0.09447</b>	<b>0.08264</b>	<b>0.038</b>	<b>Yes 9</b>	<b>0.08856</b>	<b>0.006126</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-37D	0.005	0.00048	0.038	No 9	0.004109	0.001787	77.78	None	No	0.002	NP (NDs)
Cobalt (mg/L)	MW-51	0.03382	0.01858	0.038	No 5	0.0262	0.00455	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-14	1.535	1.078	5	No 24	1.307	0.4476	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-15	0.8714	0.4766	5	No 24	0.674	0.3868	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-16	0.9041	0.4959	5	No 24	0.7	0.4	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-17	0.9736	0.6475	5	No 24	0.8105	0.3195	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-18	2.118	1.54	5	No 24	1.829	0.5665	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-21D	0.9666	0.4187	5	No 14	0.7166	0.4399	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-22	1.01	0.3925	5	No 13	0.7014	0.4155	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-23D	0.9983	0.4643	5	No 13	0.7313	0.359	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-33	2.206	0.9922	5	No 10	1.599	0.6805	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-34D	1.171	0.3514	5	No 7	0.7611	0.3449	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-35	2.47	0.8314	5	No 9	1.646	0.9403	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-37D	1.229	0.1585	5	No 9	0.6939	0.5545	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-51	1.204	0.2867	5	No 5	0.7456	0.2738	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-14	0.1683	0.07801	4	No 25	0.1661	0.1497	20	Kaplan-Meier ln(x)		0.01	Param.
Fluoride (mg/L)	HGWC-15	0.12	0.097	4	No 25	0.1366	0.1125	40	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-16	0.1326	0.04524	4	No 25	0.1443	0.1152	48	Kaplan-Meier x^(1/3)		0.01	Param.
Fluoride (mg/L)	HGWC-17	0.1671	0.06062	4	No 25	0.211	0.2035	28	Kaplan-Meier x^(1/3)		0.01	Param.
Fluoride (mg/L)	HGWC-18	0.5952	0.3776	4	No 25	0.4864	0.2183	4	None	No	0.01	Param.
Fluoride (mg/L)	MW-21D	0.1	0.1	4	No 14	0.09329	0.01711	78.57	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-22	0.13	0.063	4	No 13	0.1072	0.05563	61.54	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-23D	0.14	0.061	4	No 13	0.09962	0.02738	61.54	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-33	0.2685	0.1291	4	No 11	0.1988	0.08364	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-34D	0.08721	0.05021	4	No 7	0.06871	0.01557	14.29	None	No	0.01	Param.
Fluoride (mg/L)	MW-35	0.09166	0.055	4	No 9	0.07333	0.01899	11.11	None	No	0.01	Param.
Fluoride (mg/L)	MW-37D	0.09732	0.0569	4	No 9	0.07711	0.02093	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-51	0.1803	0.03569	4	No 5	0.108	0.04315	0	None	No	0.01	Param.
Lead (mg/L)	HGWC-14	0.001646	0.001201	0.015	No 22	0.001423	0.0004144	9.091	None	No	0.01	Param.
Lead (mg/L)	HGWC-15	0.001	0.001	0.015	No 22	0.0008375	0.0003537	77.27	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-16	0.001	0.0001	0.015	No 22	0.0006374	0.000447	59.09	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-17	0.001	0.0001	0.015	No 22	0.0006498	0.0004387	59.09	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-18	0.001379	0.001024	0.015	No 22	0.001201	0.0003312	9.091	None	No	0.01	Param.
Lead (mg/L)	MW-21D	0.001	0.000073	0.015	No 14	0.0007734	0.0003991	71.43	None	No	0.01	NP (NDs)



# Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 1/22/2024, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	MW-22	0.001	0.000094	0.015	No 13	0.0007869	0.0004052	76.92	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-23D	0.001	0.00016	0.015	No 13	0.0008624	0.0003367	84.62	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-33	0.001631	0.001032	0.015	No 10	0.00147	0.0003199	20	Kaplan-Meier	x^4	0.01	Param.
Lead (mg/L)	MW-34D	0.001	0.00087	0.015	No 7	0.0009814	0.00004914	85.71	Kaplan-Meier	No	0.008	NP (NDs)
Lead (mg/L)	MW-35	0.001	0.00016	0.015	No 9	0.0007456	0.0003286	44.44	None	No	0.002	NP (normality)
Lead (mg/L)	MW-37D	0.0017	0.000082	0.015	No 9	0.000908	0.0004512	66.67	None	No	0.002	NP (NDs)
Lithium (mg/L)	HGWC-15	0.007165	0.002459	0.064	No 24	0.01372	0.01309	25	Kaplan-Meier	ln(x)	0.01	Param.
Lithium (mg/L)	HGWC-16	0.0041	0.0029	0.064	No 23	0.003978	0.002492	4.348	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-17	0.03	0.0012	0.064	No 23	0.01373	0.01459	43.48	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-18	0.01415	0.01197	0.064	No 23	0.01306	0.002086	0	None	No	0.01	Param.
Lithium (mg/L)	MW-21D	0.02451	0.01992	0.064	No 14	0.02221	0.003239	0	None	No	0.01	Param.
Lithium (mg/L)	MW-22	0.0015	0.0011	0.064	No 13	0.001285	0.0002512	0	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-23D	0.002528	0.002026	0.064	No 13	0.002277	0.000337	0	None	No	0.01	Param.
Lithium (mg/L)	MW-33	0.015	0.00077	0.064	No 9	0.002552	0.00467	11.11	None	No	0.002	NP (normality)
Lithium (mg/L)	MW-34D	0.002211	0.0007888	0.064	No 6	0.0015	0.0005177	0	None	No	0.01	Param.
Lithium (mg/L)	MW-35	0.015	0.0031	0.064	No 9	0.005111	0.003743	11.11	None	No	0.002	NP (normality)
Lithium (mg/L)	MW-37D	0.03654	0.02296	0.064	No 8	0.02975	0.006409	0	None	No	0.01	Param.
Lithium (mg/L)	MW-51	0.002248	0.0005844	0.064	No 5	0.001416	0.0004963	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-18	0.0002	0.00008	0.002	No 15	0.0001567	0.00006433	66.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-22	0.0002	0.00016	0.002	No 7	0.0001943	0.00001512	85.71	None	No	0.008	NP (NDs)
Mercury (mg/L)	MW-23D	0.0002	0.00017	0.002	No 7	0.0001957	0.00001134	85.71	None	No	0.008	NP (NDs)
Mercury (mg/L)	MW-35	0.00084	0.00014	0.002	No 5	0.000304	0.0003011	40	None	No	0.031	NP (normality)
Mercury (mg/L)	MW-51	0.0002	0.00013	0.002	No 4	0.0001825	0.000035	75	None	No	0.0625	NP (NDs)
Molybdenum (mg/L)	HGWC-15	0.01	0.0007	0.1	No 22	0.009577	0.001983	95.45	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-21D	0.0298	0.018	0.1	No 14	0.02421	0.008972	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-22	0.01	0.00013	0.1	No 13	0.009241	0.002737	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-23D	0.004045	0.002709	0.1	No 13	0.003377	0.0008983	7.692	None	No	0.01	Param.
Molybdenum (mg/L)	MW-37D	0.01929	0.004584	0.1	No 8	0.01194	0.006938	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-14	0.01162	0.006176	0.05	No 24	0.008896	0.00533	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-15	0.005	0.0041	0.05	No 24	0.004463	0.001365	83.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-16	0.005	0.000089	0.05	No 24	0.004795	0.001002	95.83	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-17	0.005	0.0023	0.05	No 24	0.004533	0.001304	87.5	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-18	0.03308	0.01474	0.05	No 24	0.02636	0.02095	4.167	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	MW-22	0.005	0.002	0.05	No 13	0.004769	0.0008321	92.31	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-33	0.02357	0.007179	0.05	No 10	0.01553	0.01087	0	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	MW-34D	0.005	0.0016	0.05	No 7	0.004157	0.001463	71.43	None	No	0.008	NP (NDs)
Selenium (mg/L)	MW-35	0.02048	0.006174	0.05	No 9	0.01337	0.009555	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	MW-51	0.004228	0.001372	0.05	No 5	0.00368	0.001413	40	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	HGWC-14	0.0003	0.00027	0.002	No 24	0.0002973	0.00004862	0	None	No	0.01	NP (normality)
Thallium (mg/L)	HGWC-15	0.001	0.00022	0.002	No 24	0.0009675	0.0001592	95.83	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-17	0.001	0.00013	0.002	No 24	0.0007104	0.0004193	66.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-18	0.001	0.00016	0.002	No 24	0.0005846	0.0004248	50	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-33	0.0004	0.00022	0.002	No 10	0.0005	0.0007048	10	None	No	0.011	NP (normality)
Thallium (mg/L)	MW-34D	0.001	0.00015	0.002	No 7	0.0008786	0.0003213	85.71	None	No	0.008	NP (NDs)
Thallium (mg/L)	MW-35	0.001	0.00013	0.002	No 9	0.0009033	0.00029	88.89	None	No	0.002	NP (NDs)

# Appendix IV Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/25/2023, 1:28 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWA-4 (bg)	-0.0001892	-141	-81	Yes	24	62.5	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWC-18	-0.008278	-135	-81	Yes	24	0	n/a	n/a	0.05	NP

# Appendix IV Trend Tests - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 10/25/2023, 1:28 PM

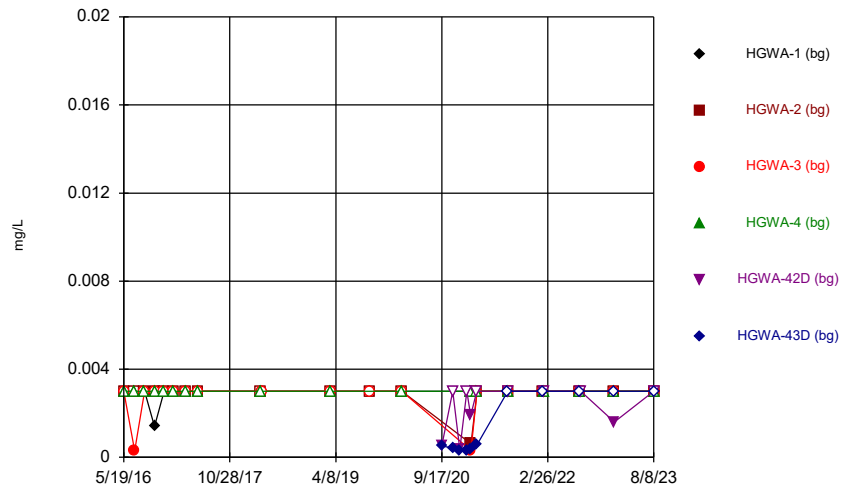
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWA-1 (bg)	0	-18	-81	No	24	87.5	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-2 (bg)	-0.0001971	-22	-81	No	24	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-3 (bg)	0	0	81	No	24	100	n/a	n/a	0.05	NP
<b>Cobalt (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-0.0001892</b>	<b>-141</b>	<b>-81</b>	<b>Yes</b>	<b>24</b>	<b>62.5</b>	<b>n/a</b>	<b>n/a</b>	<b>0.05</b>	<b>NP</b>
Cobalt (mg/L)	HGWA-42D (bg)	0	6	27	No	11	90.91	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-43D (bg)	0	0	27	No	11	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-44D (bg)	0	0	27	No	11	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-5 (bg)	0	8	81	No	24	29.17	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-6 (bg)	0	0	81	No	24	100	n/a	n/a	0.05	NP
<b>Cobalt (mg/L)</b>	<b>HGWC-18</b>	<b>-0.008278</b>	<b>-135</b>	<b>-81</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.05</b>	<b>NP</b>
Cobalt (mg/L)	MW-33	-0.002352	-9	-27	No	11	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	MW-35	-0.002448	-13	-20	No	9	0	n/a	n/a	0.05	NP

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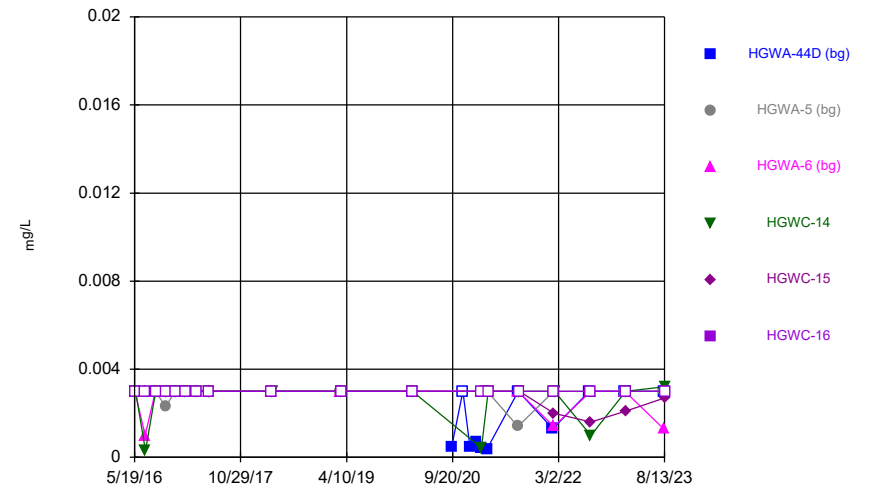
FIGURE A.

Time Series



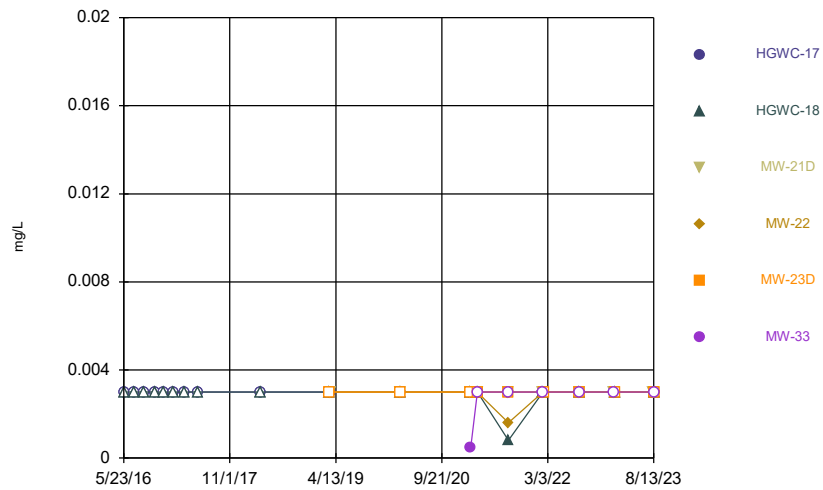
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



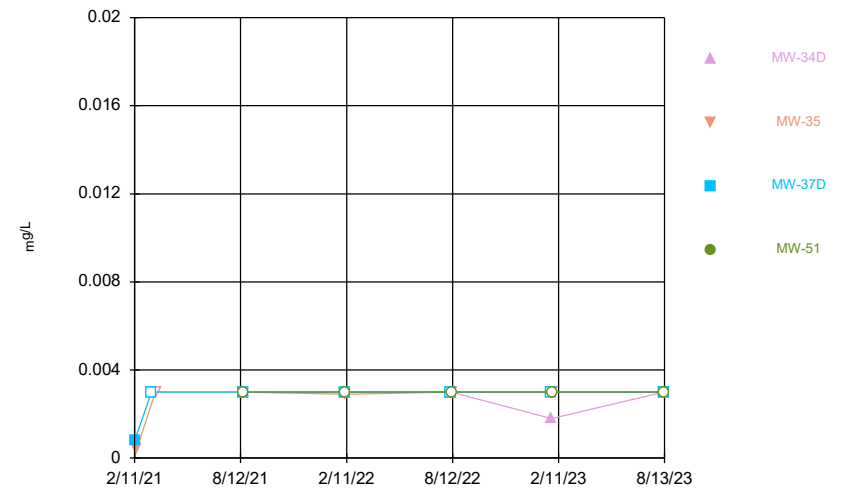
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Time Series



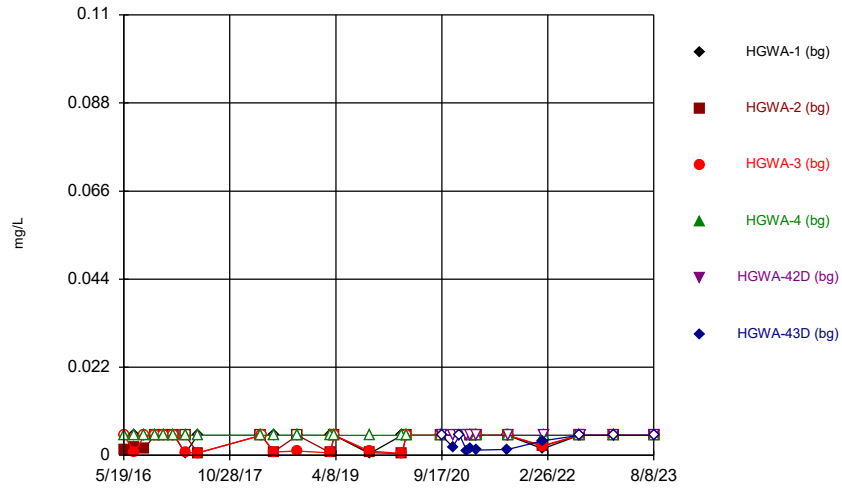
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Time Series



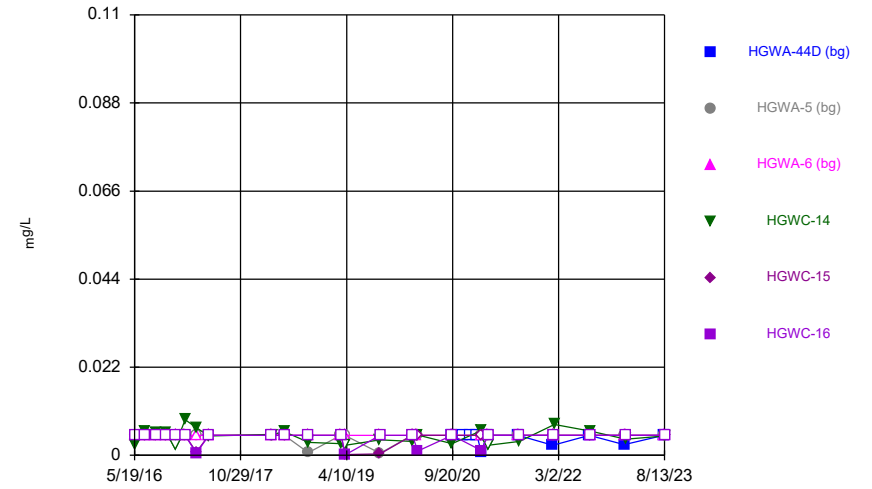
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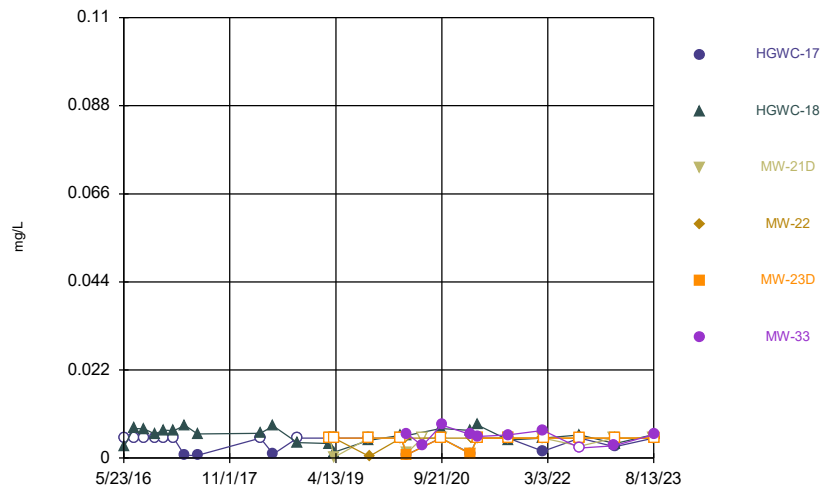
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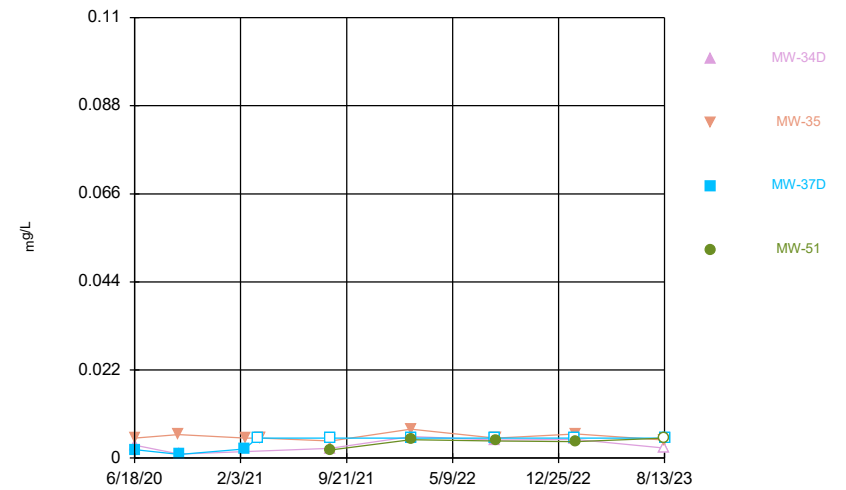
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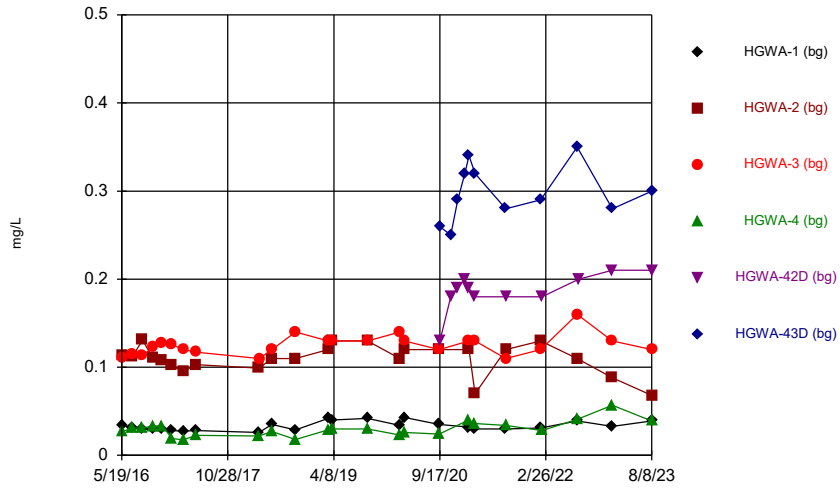
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### Time Series



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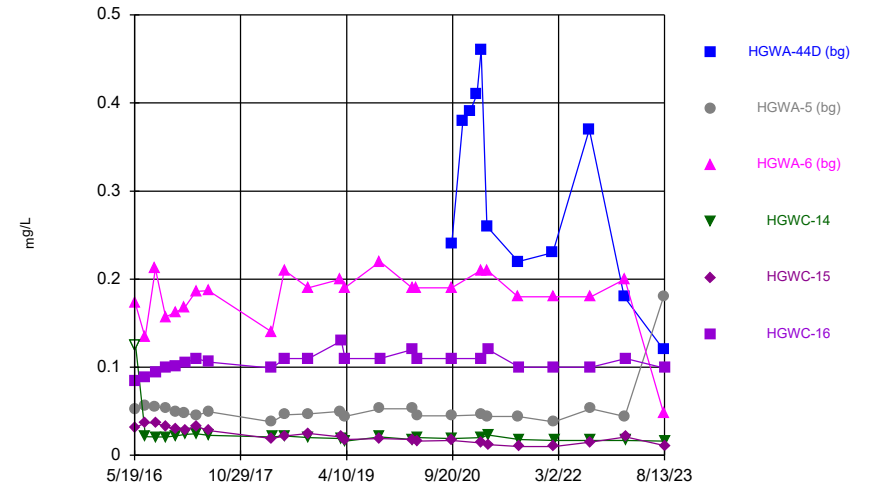
Time Series



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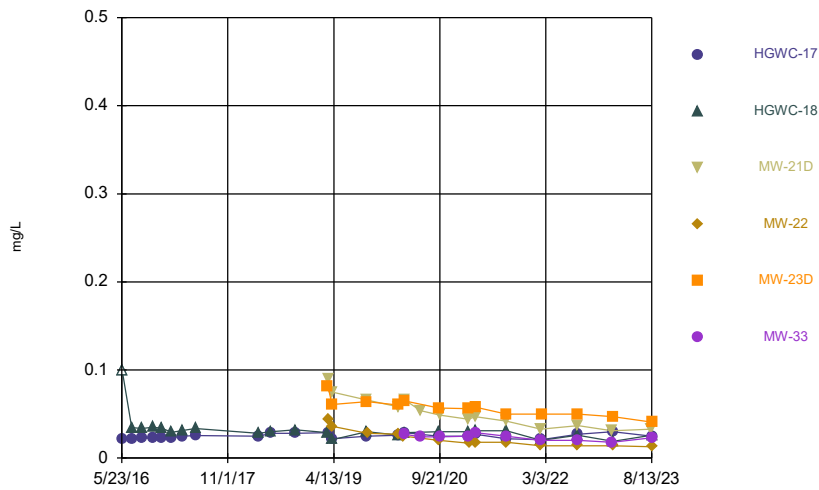
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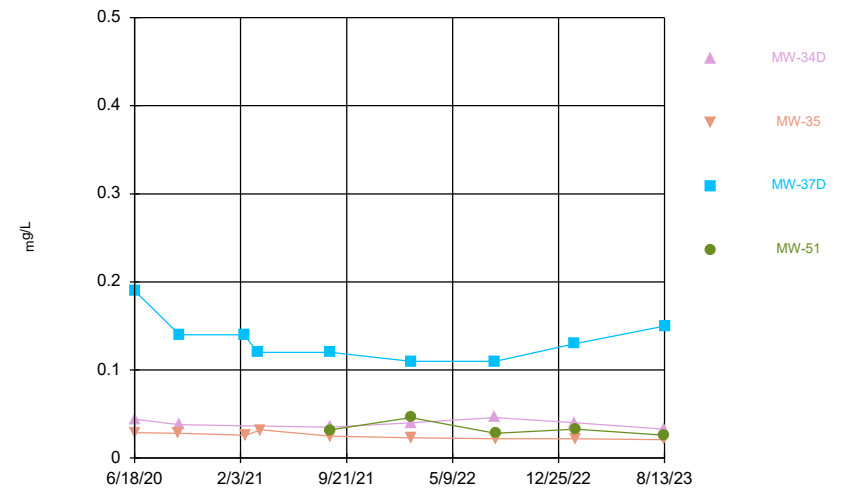
Hollow symbols indicate censored values.

Time Series



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Plant Hammond Client: Southern Company Data: Hammond AP-2

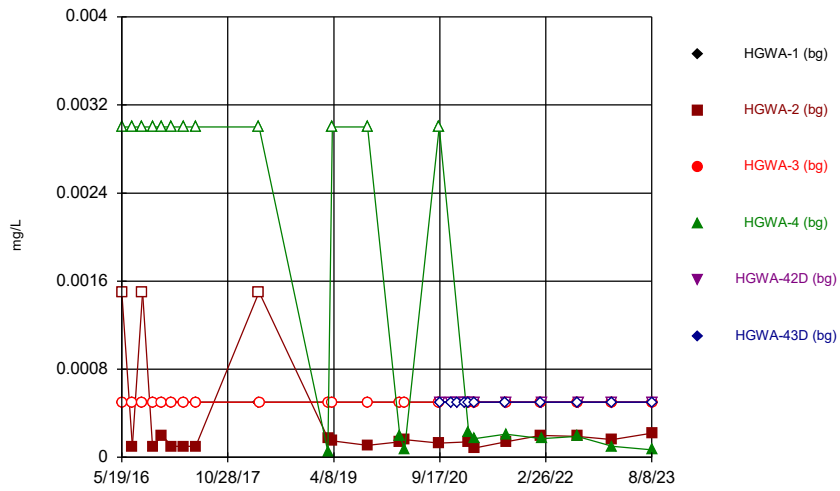
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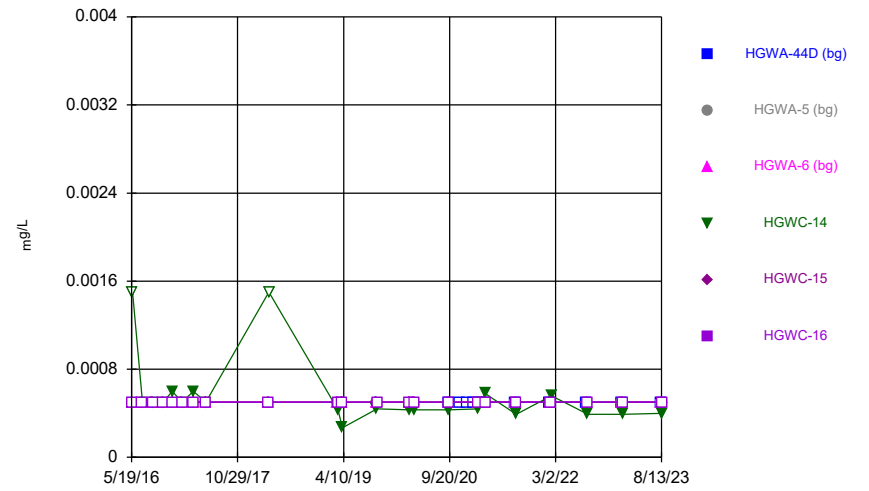


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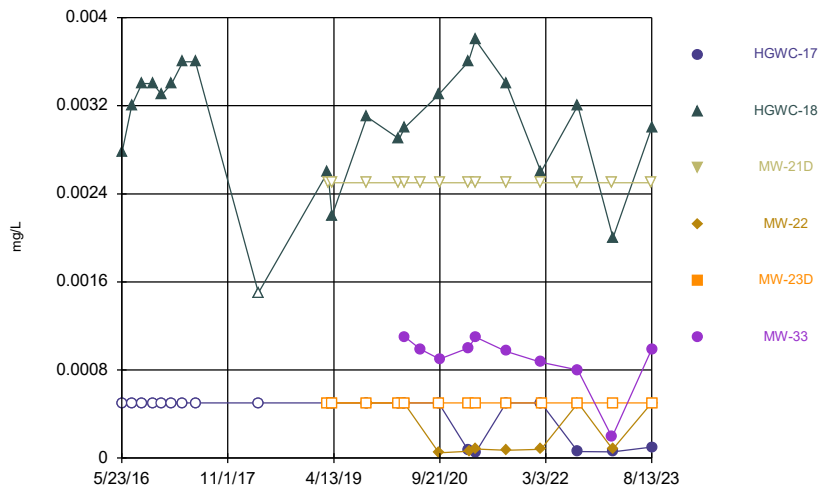
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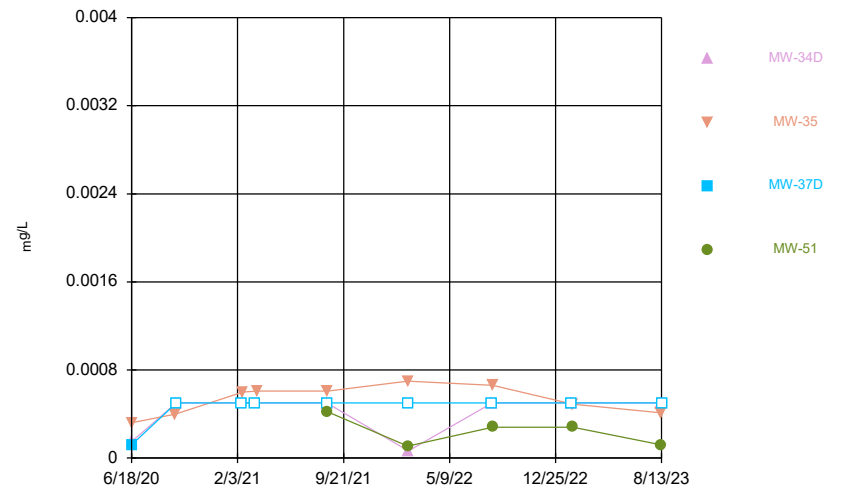
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### Time Series



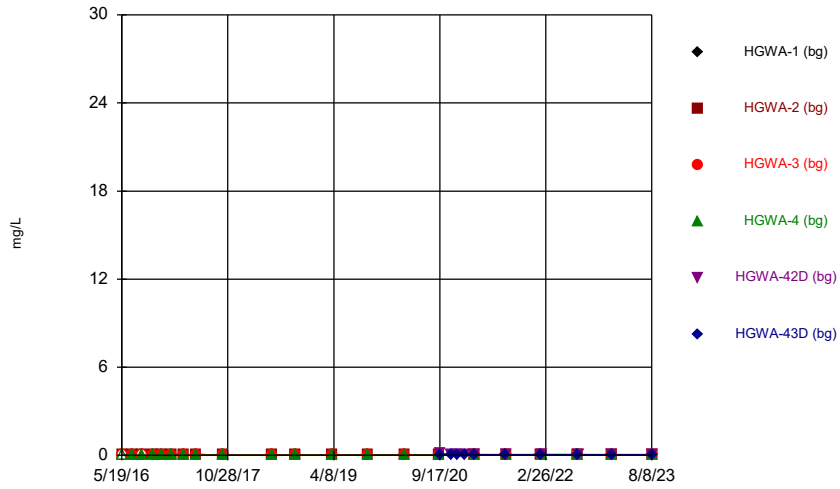
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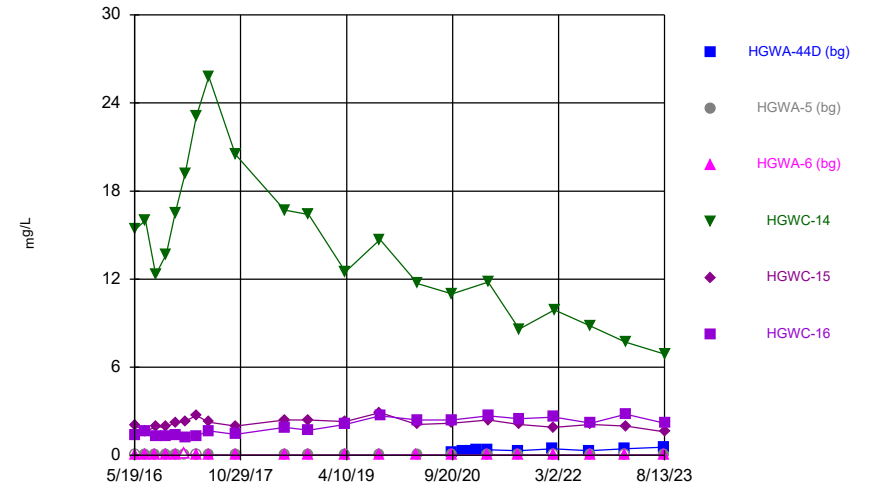
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### Time Series



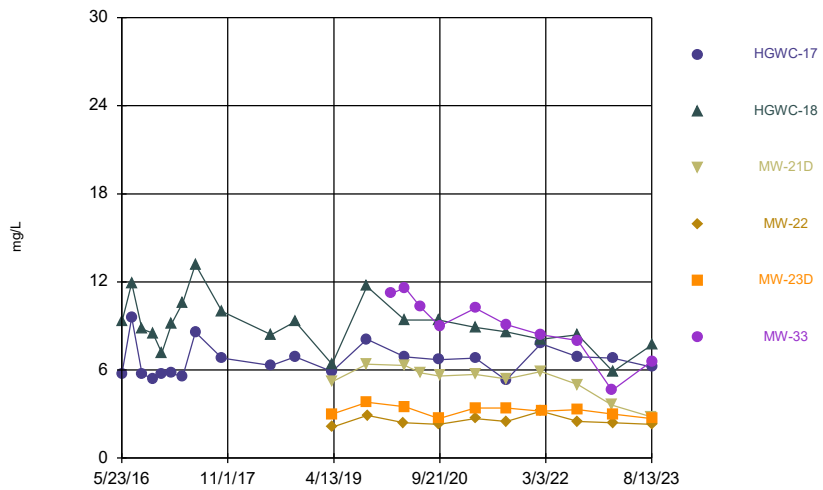
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### Time Series



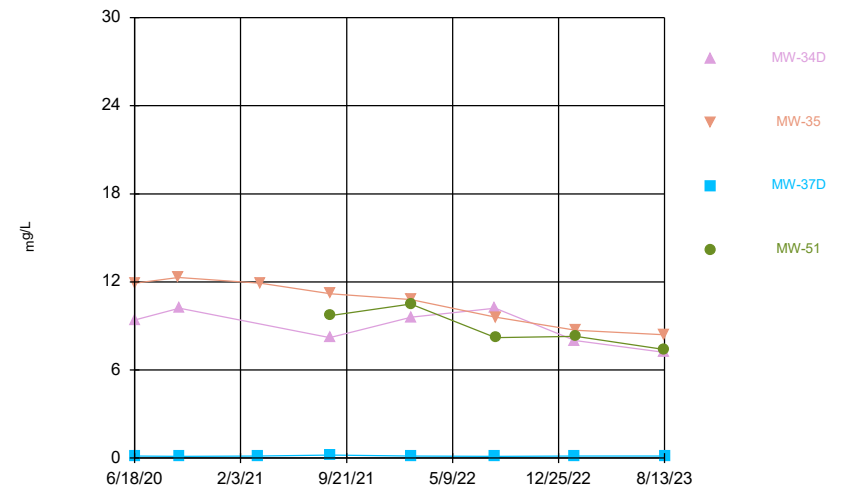
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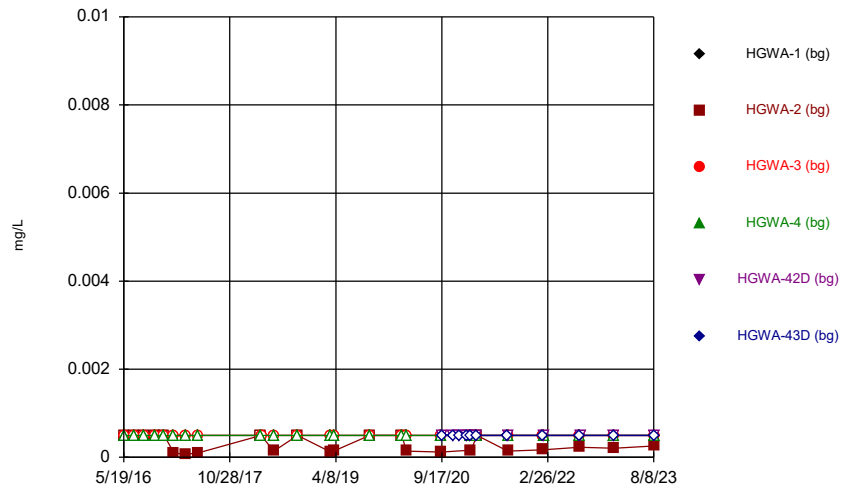
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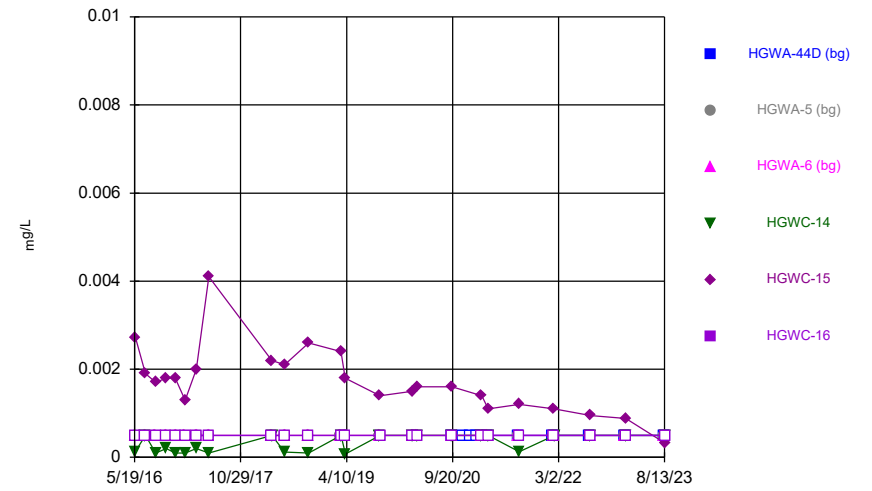
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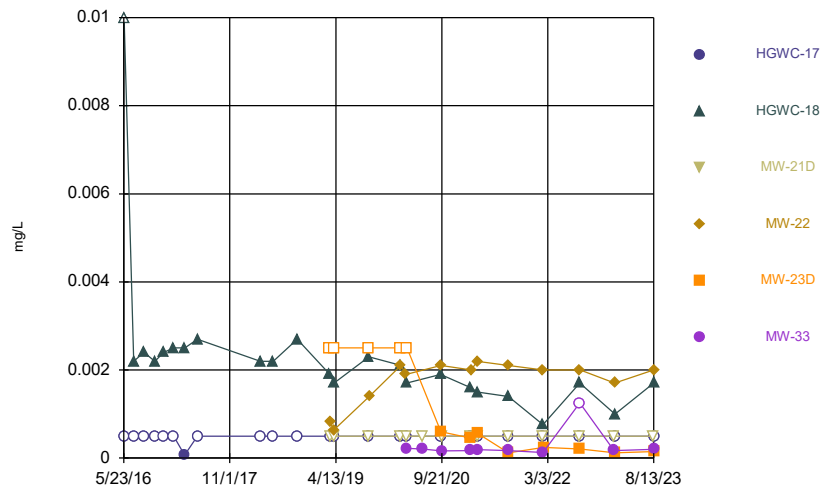
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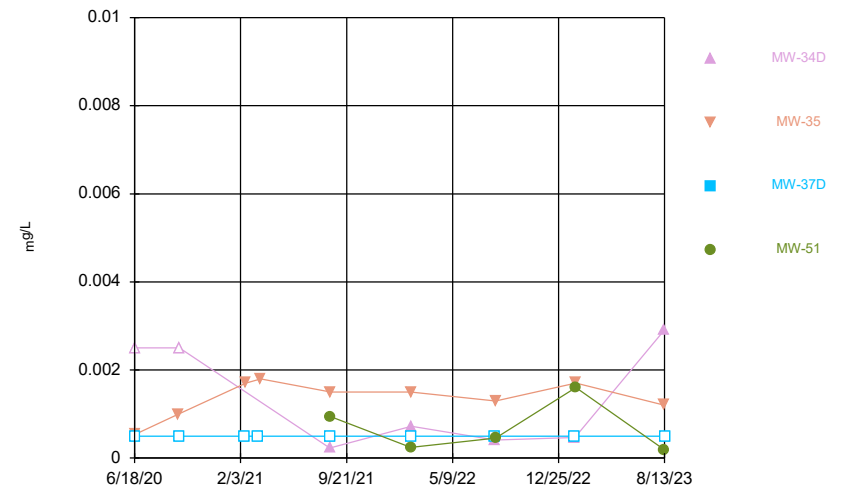
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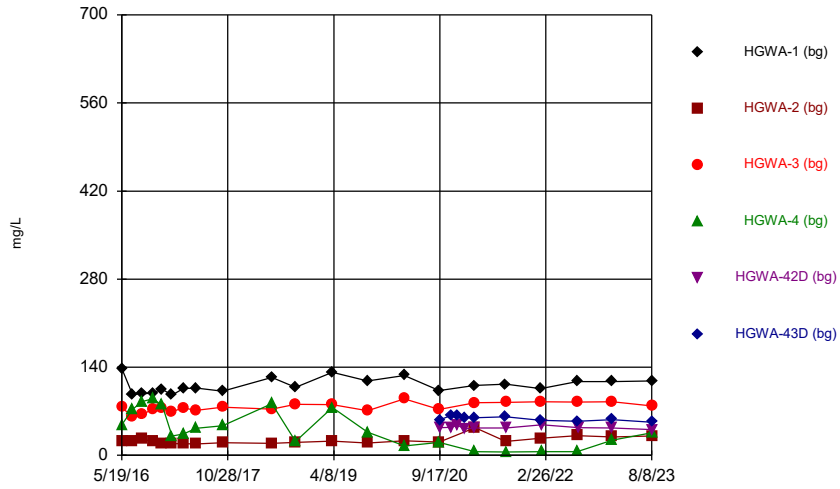
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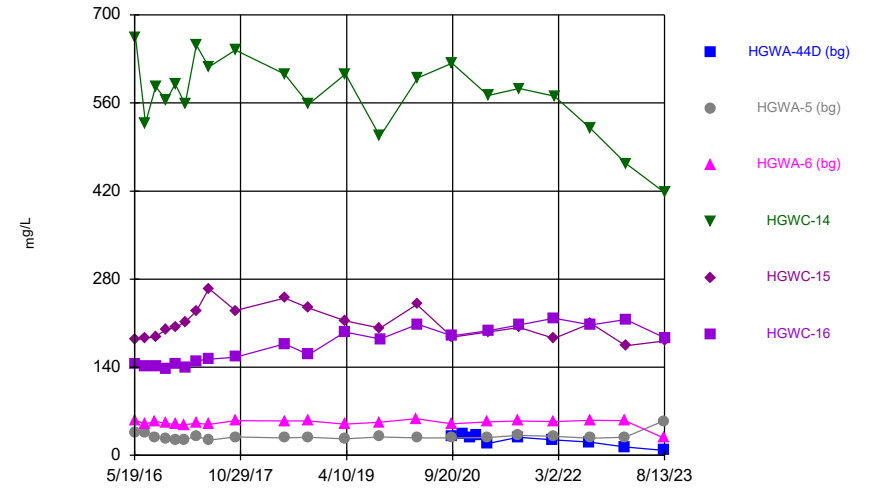
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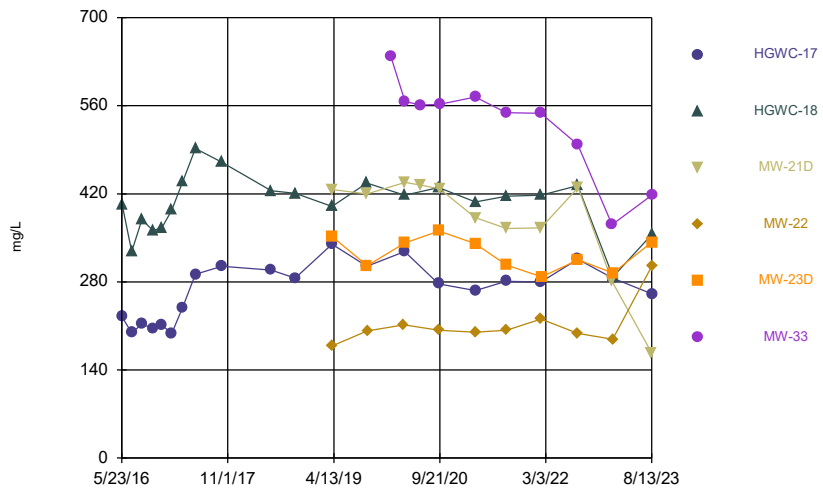
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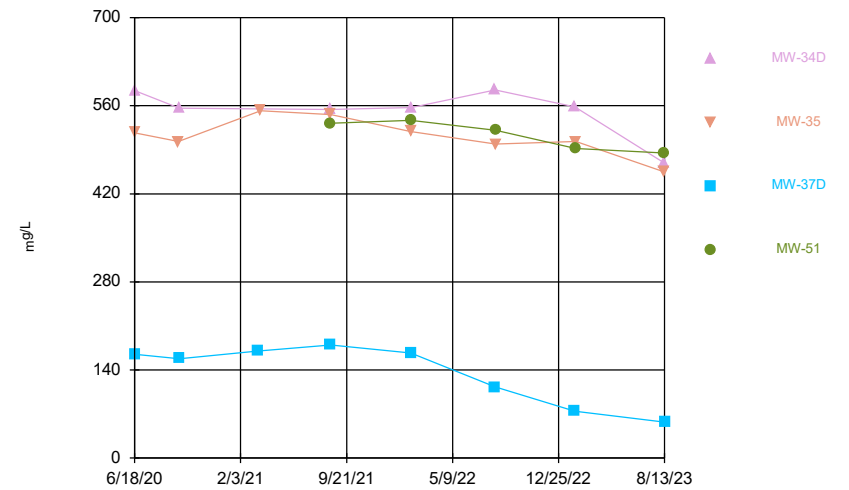
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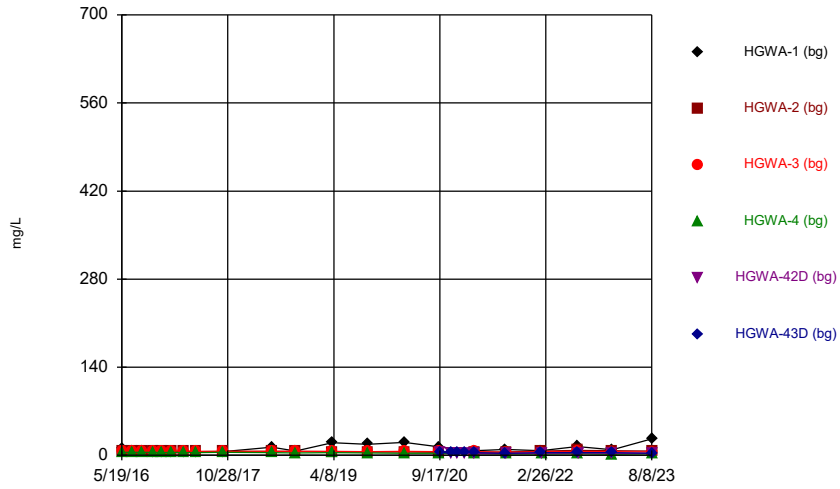
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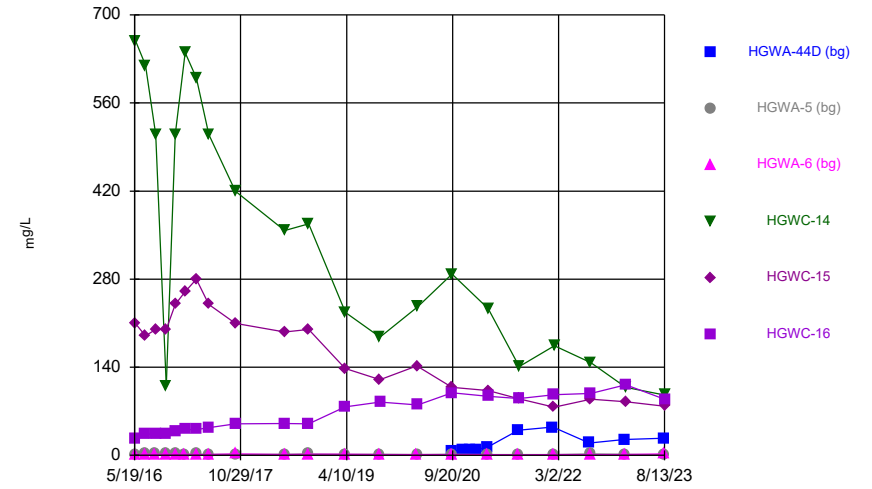
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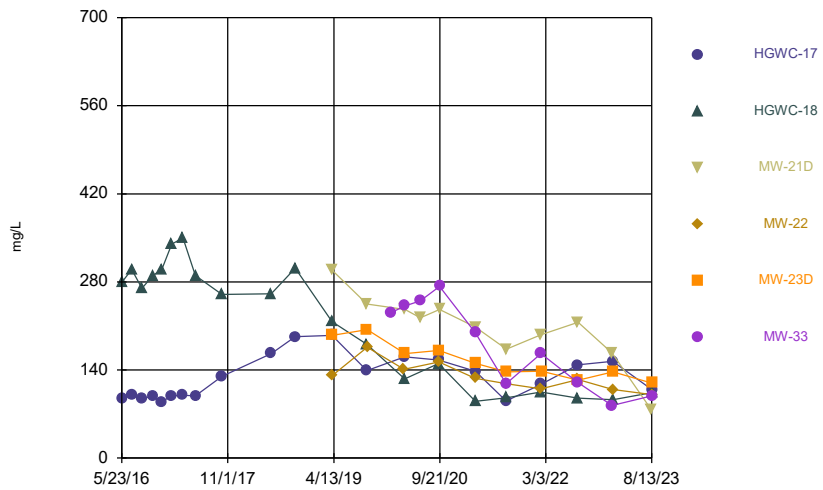
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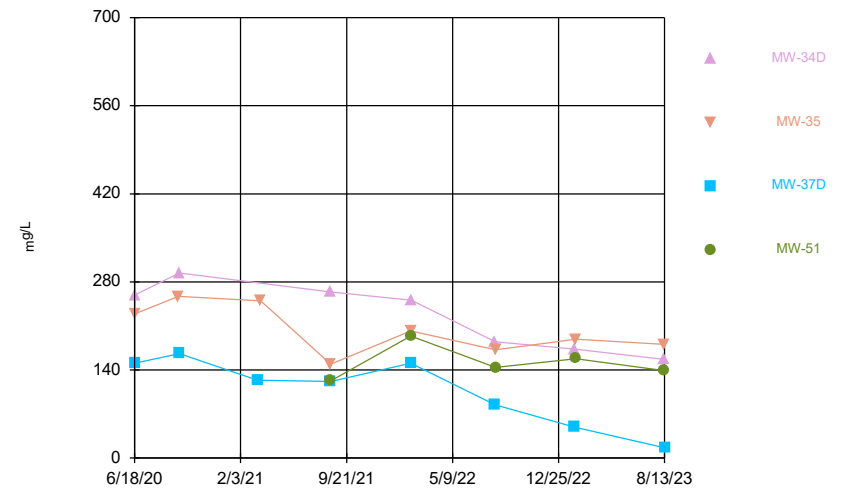
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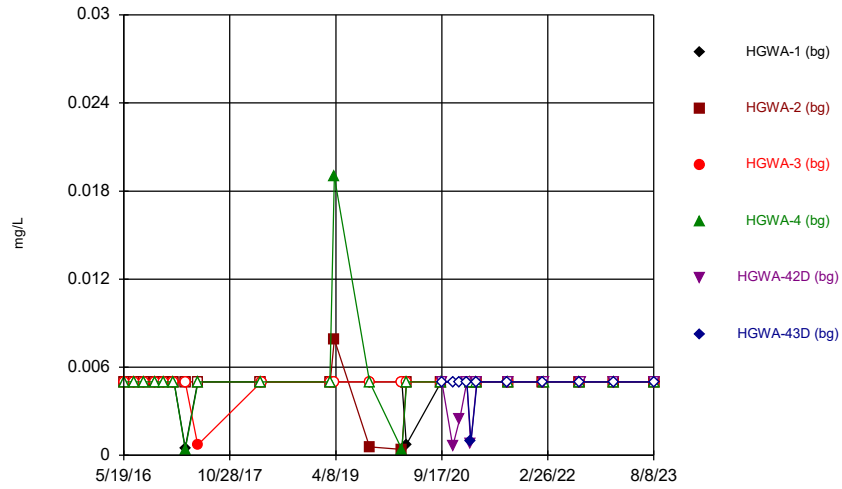
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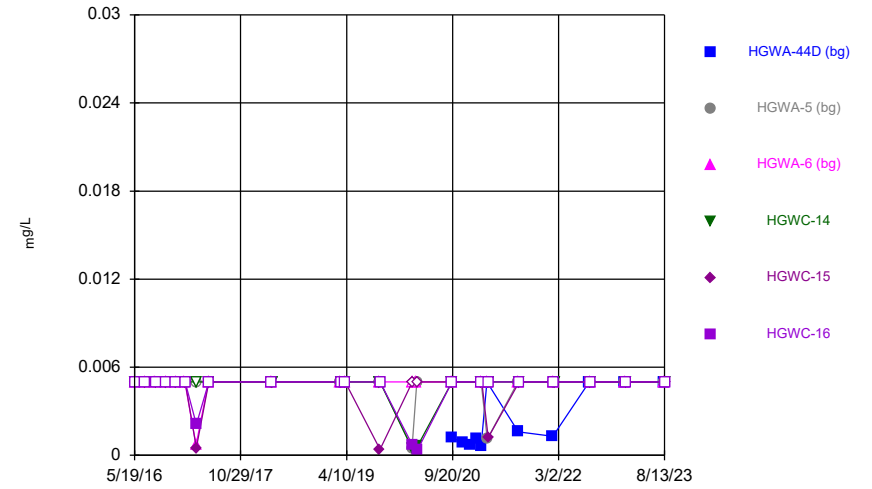
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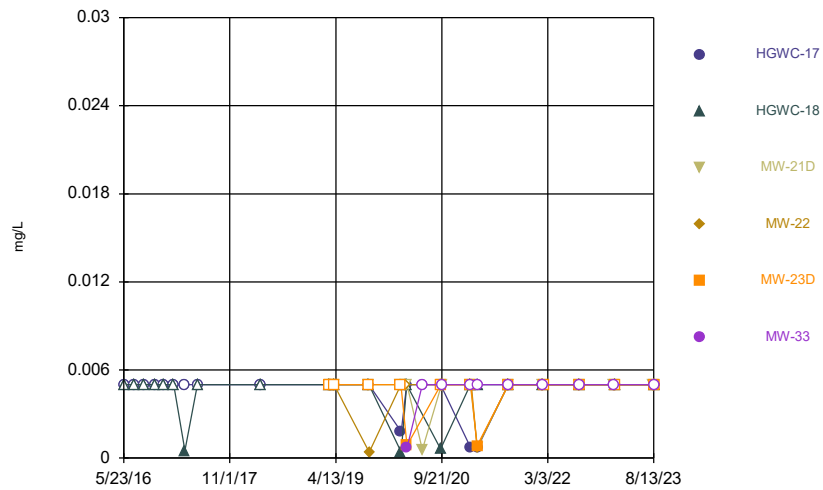
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### Time Series



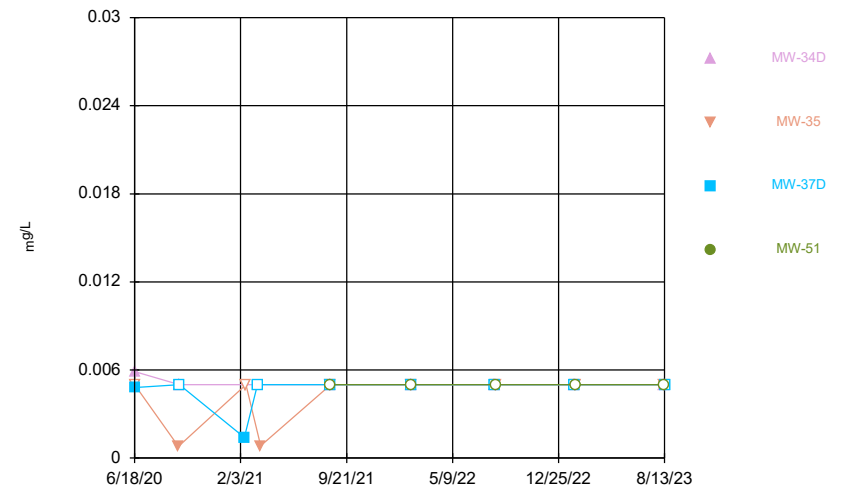
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Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



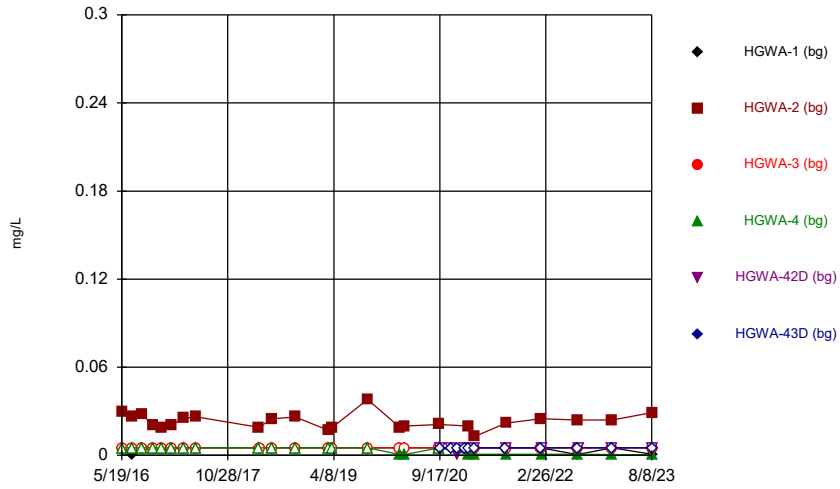
Constituent: Chromium Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



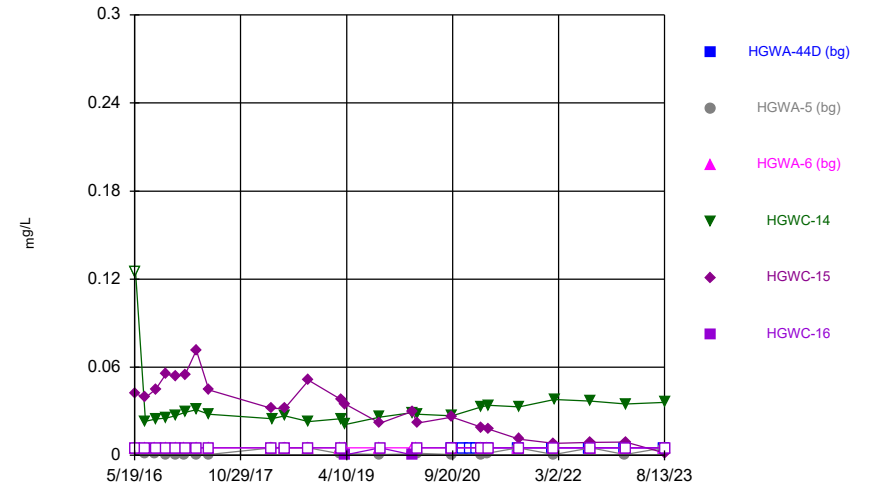
Constituent: Chromium Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



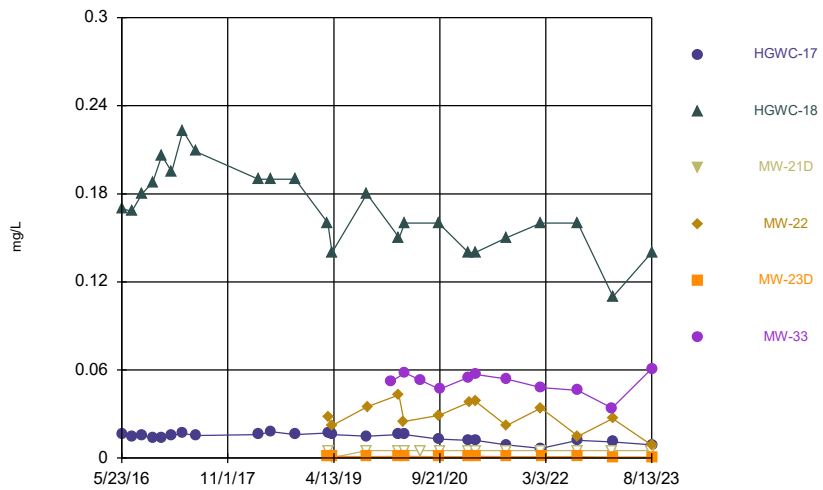
Constituent: Cobalt Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



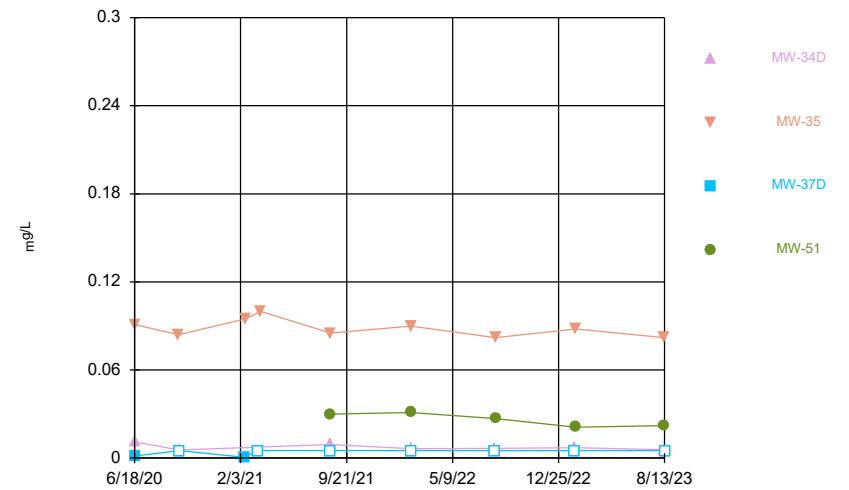
Constituent: Cobalt Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



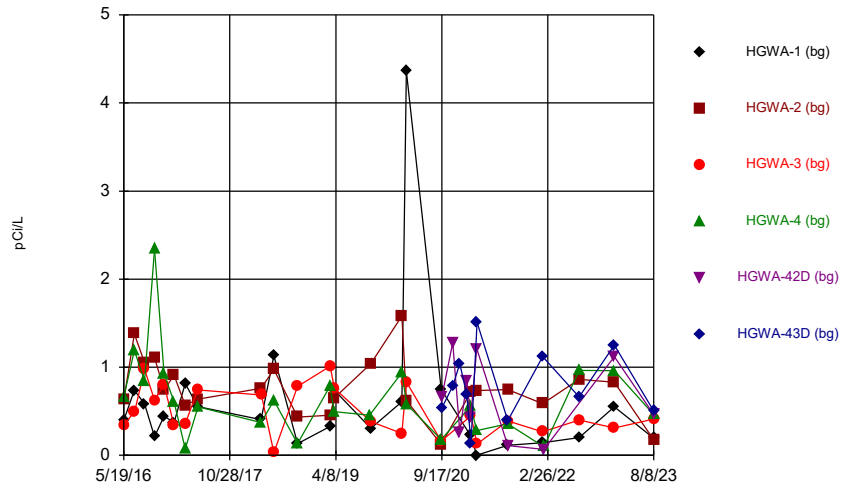
Constituent: Cobalt Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



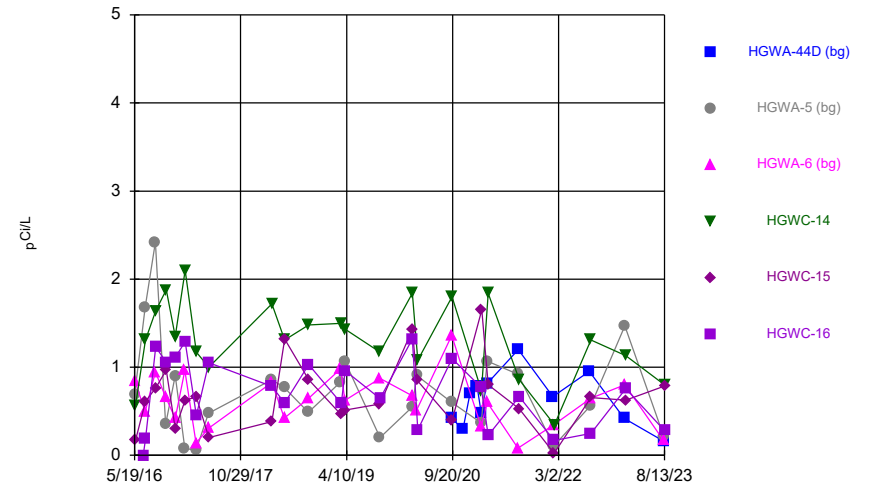
Constituent: Cobalt Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



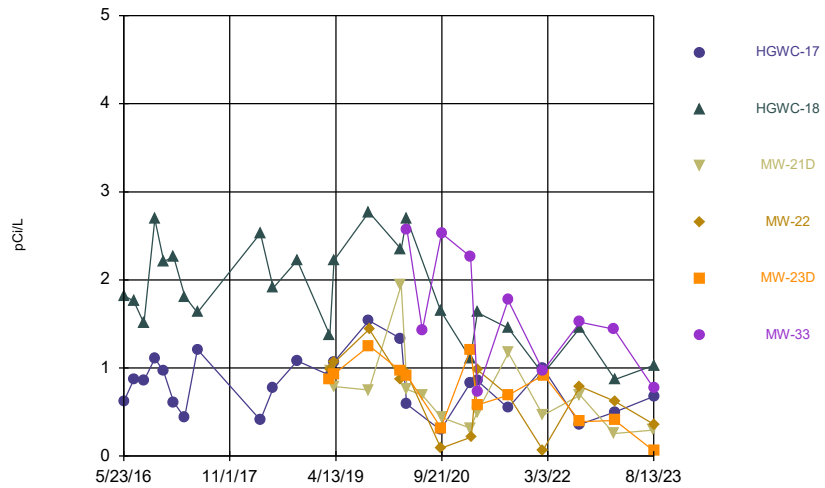
Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



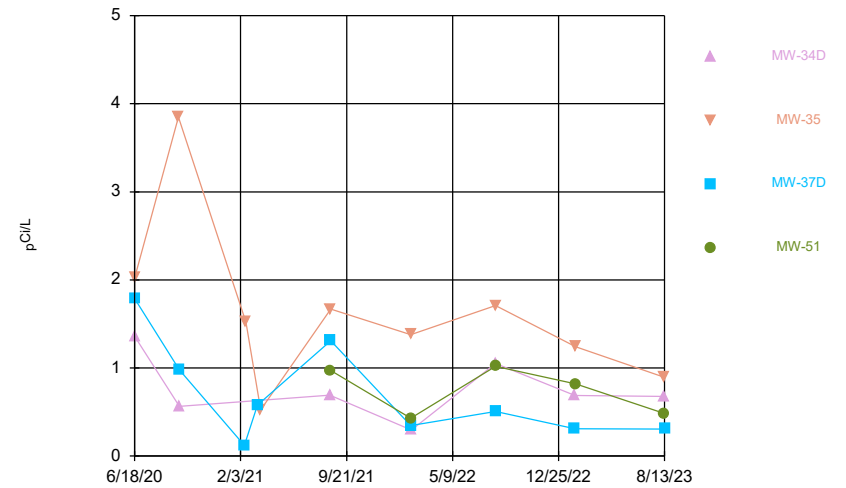
Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

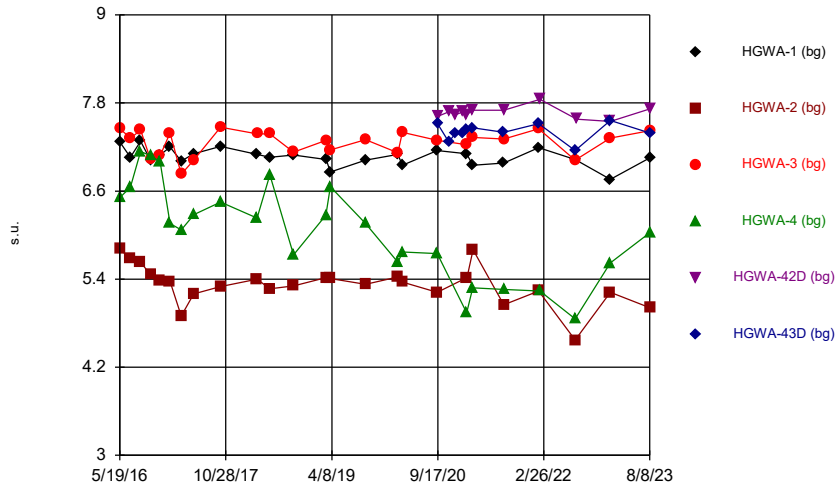
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

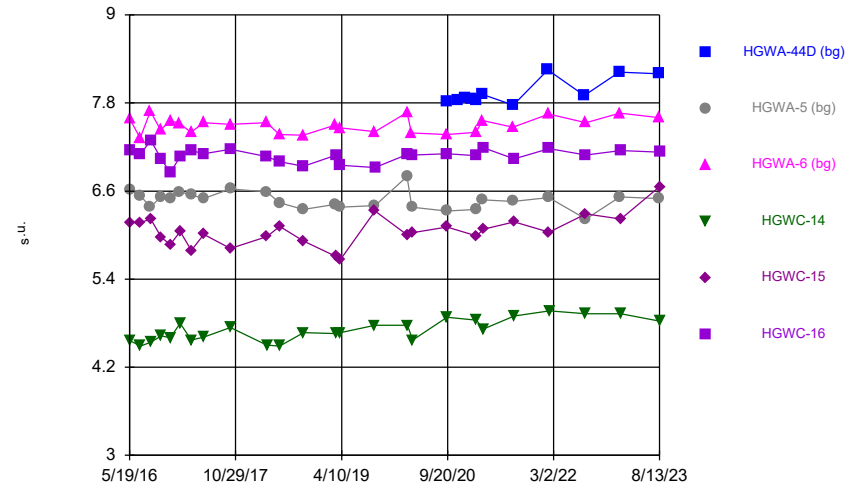


Time Series



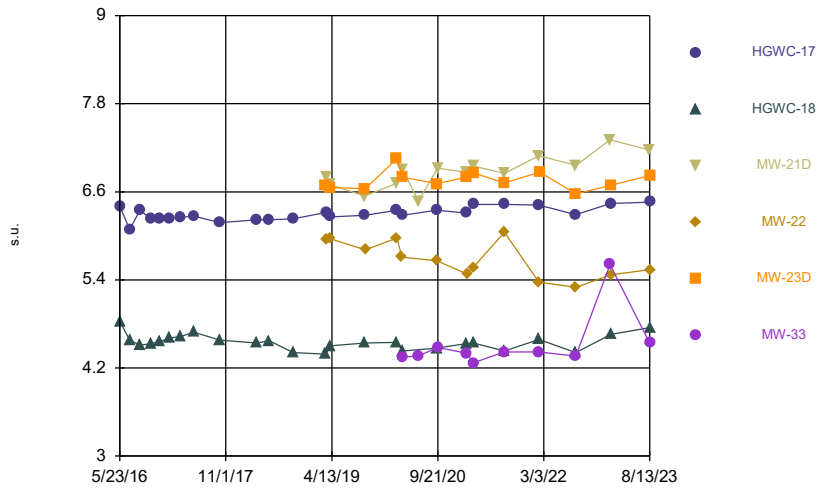
Constituent: Field pH Analysis Run 11/15/2023 1:25 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



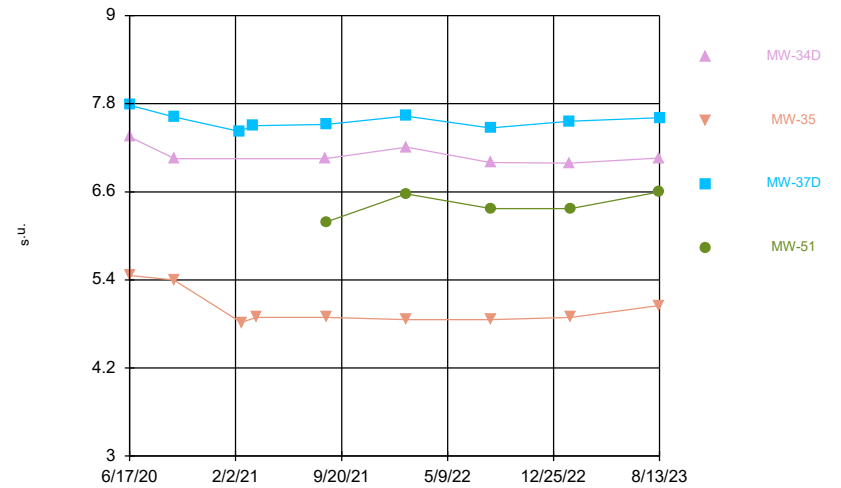
Constituent: Field pH Analysis Run 11/15/2023 1:25 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



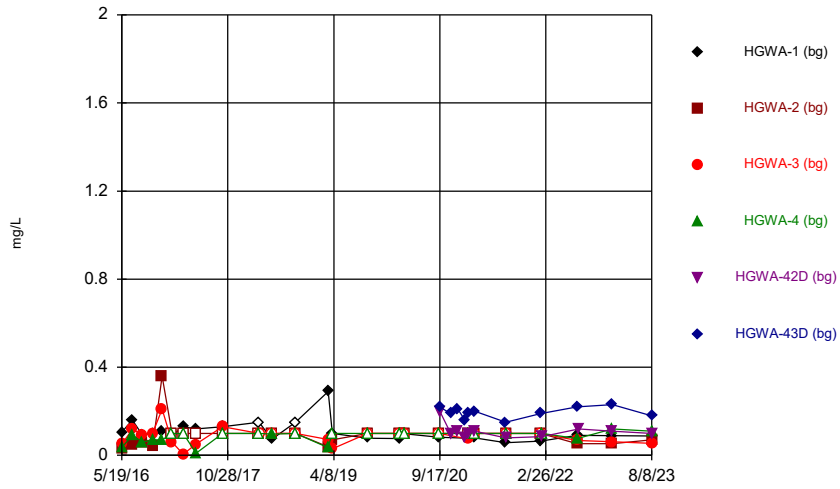
Constituent: Field pH Analysis Run 11/15/2023 1:25 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



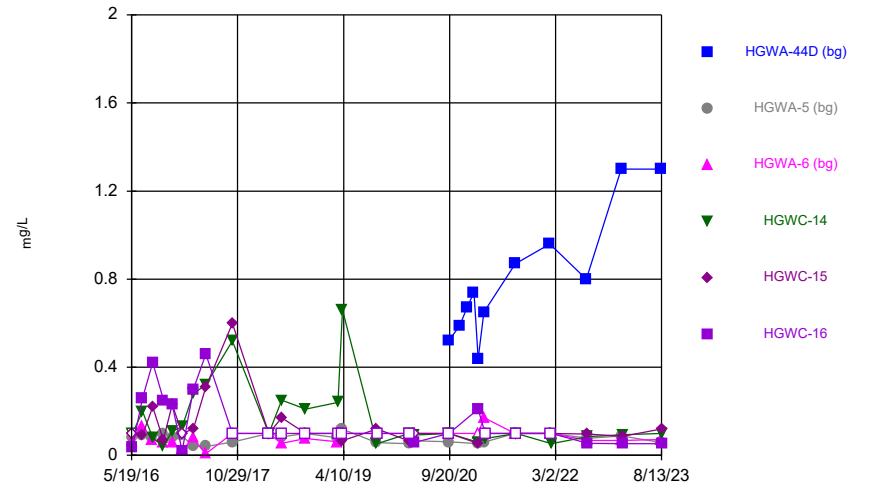
Constituent: Field pH Analysis Run 11/15/2023 1:25 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



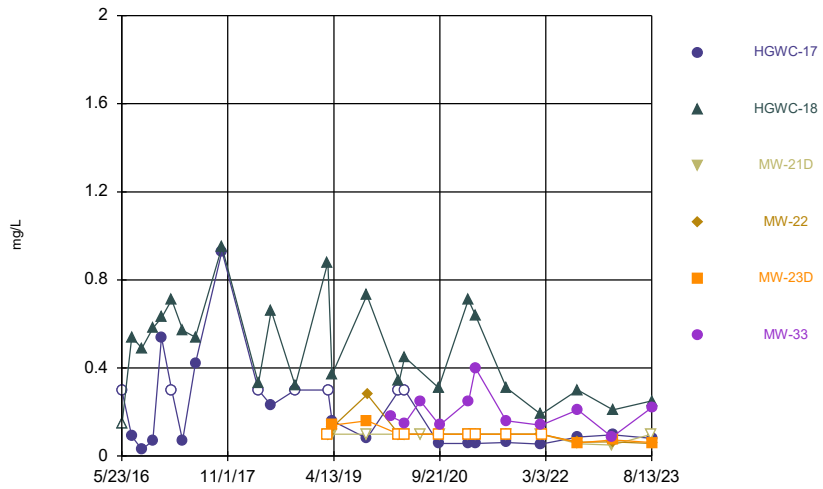
Constituent: Fluoride Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



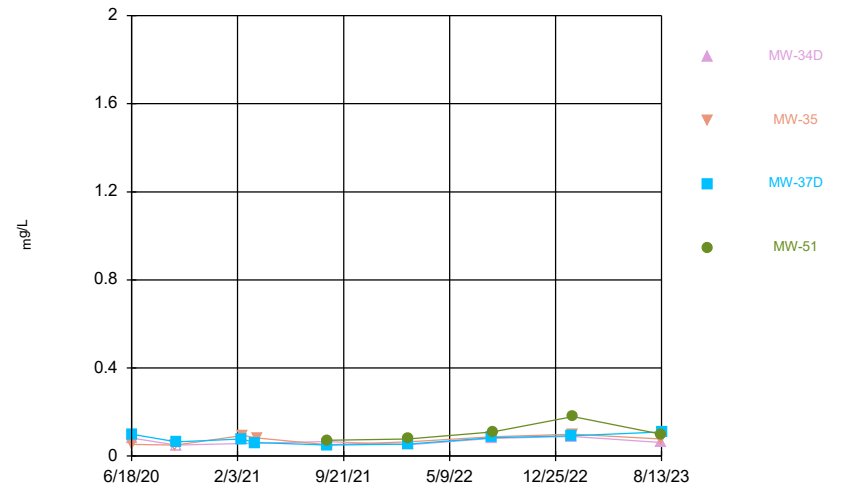
Constituent: Fluoride Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



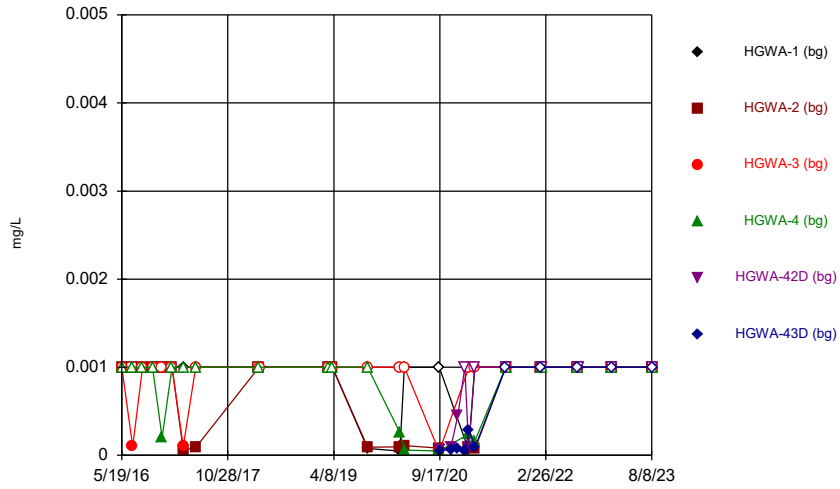
Constituent: Fluoride Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



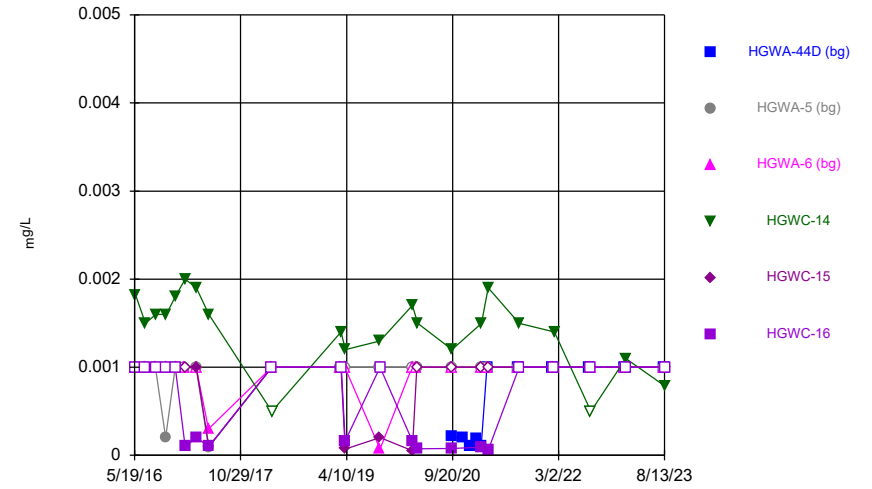
Constituent: Fluoride Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



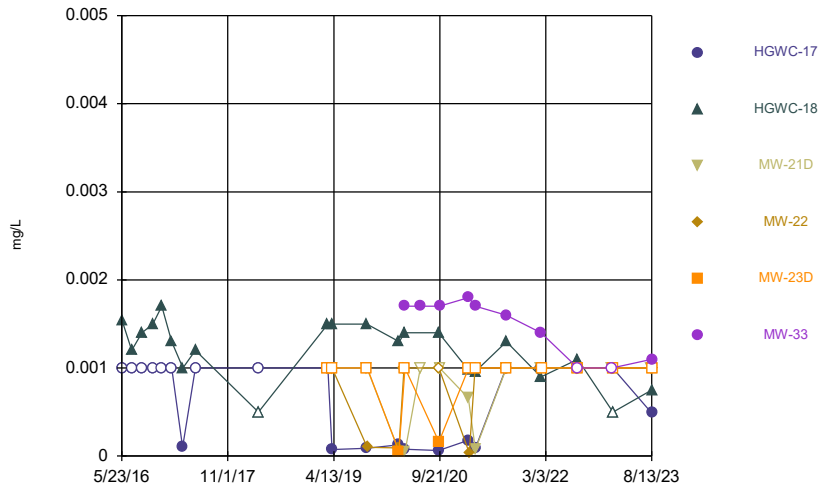
Constituent: Lead Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



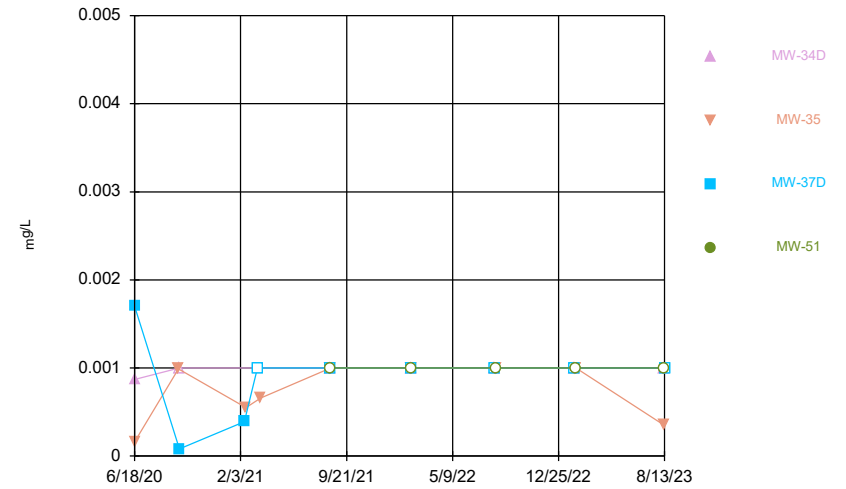
Constituent: Lead Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



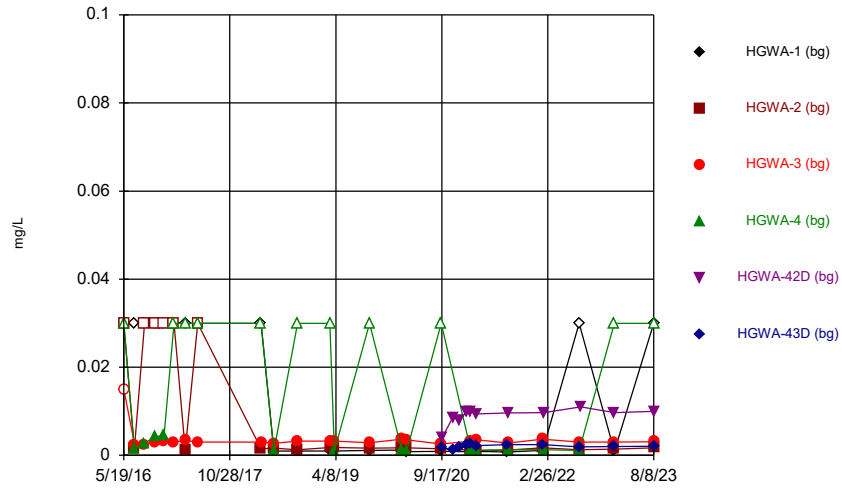
Constituent: Lead Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



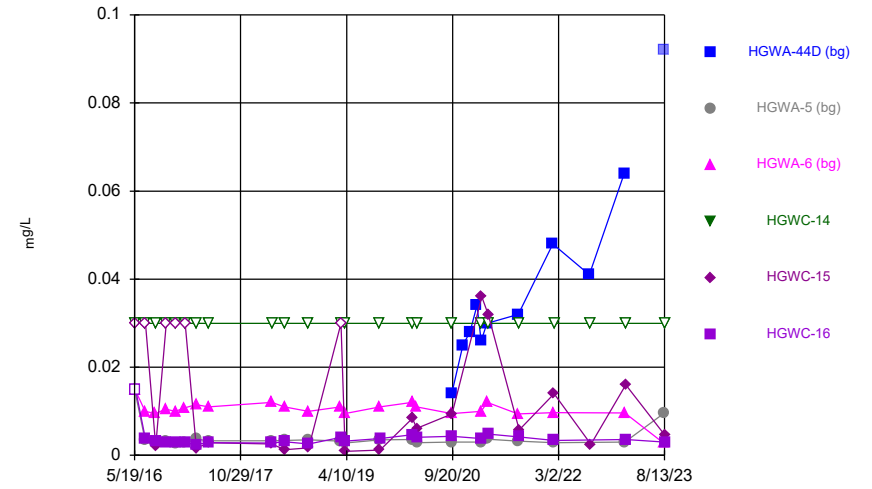
Constituent: Lead Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



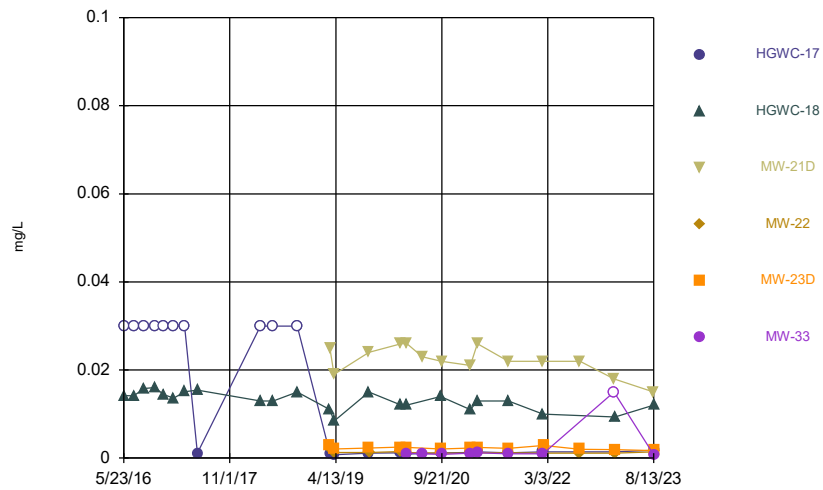
Constituent: Lithium Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



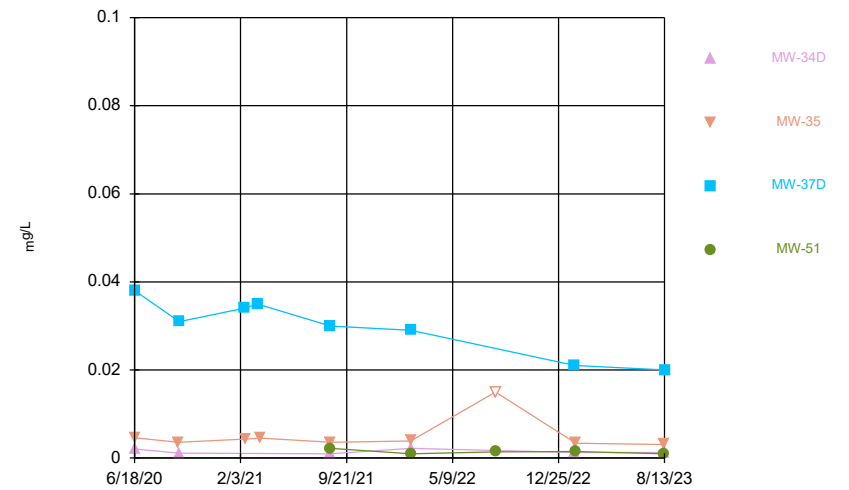
Constituent: Lithium Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



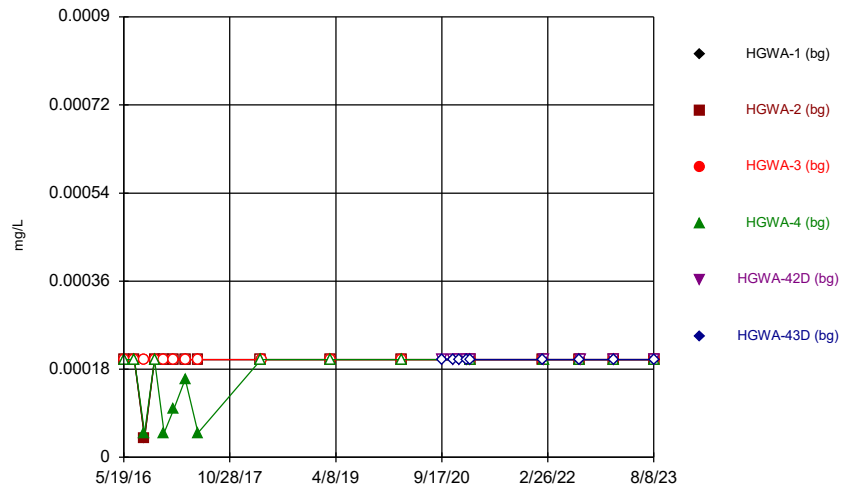
Constituent: Lithium Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



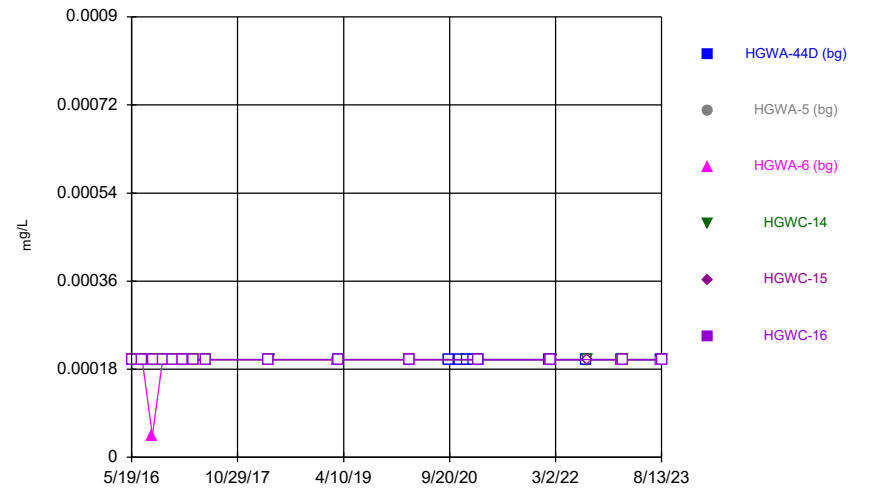
Constituent: Lithium Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



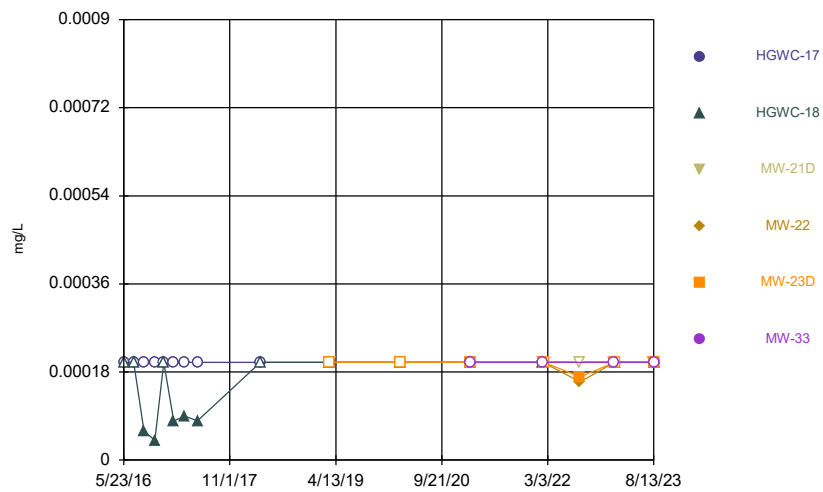
Constituent: Mercury Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



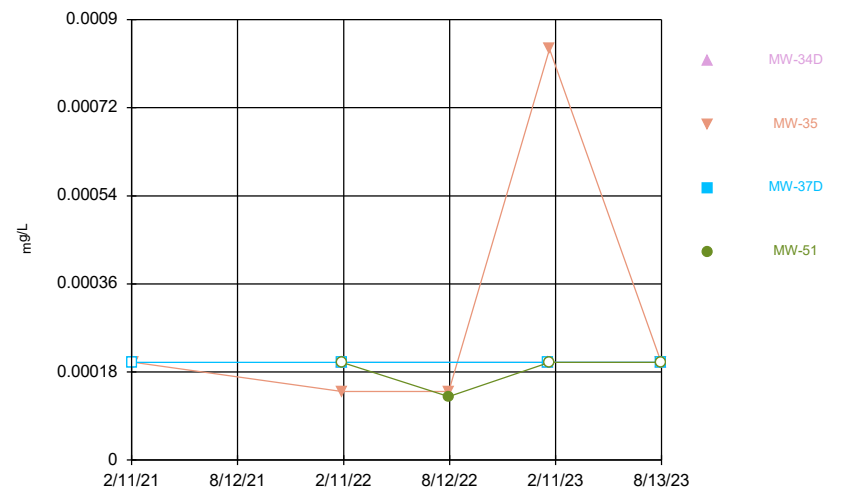
Constituent: Mercury Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



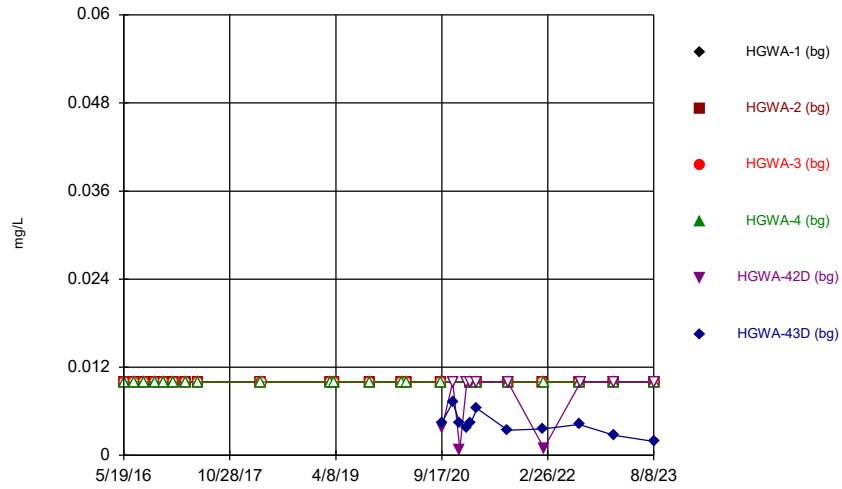
Constituent: Mercury Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



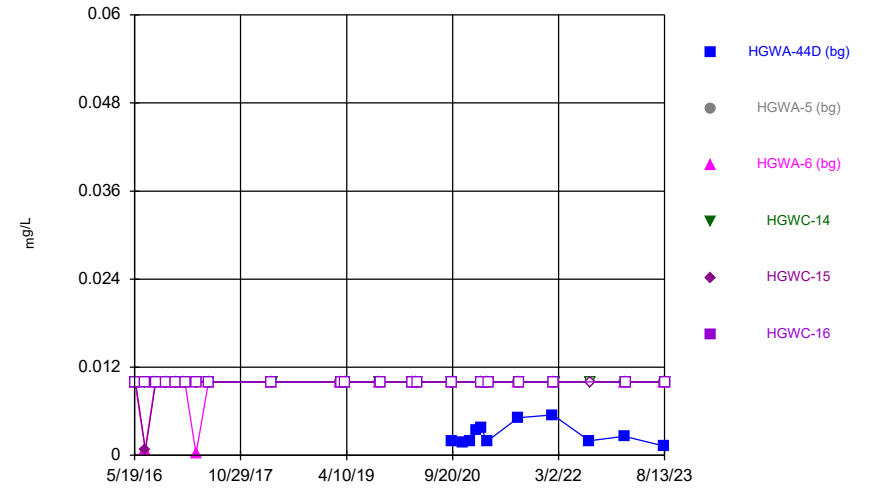
Constituent: Mercury Analysis Run 11/15/2023 1:25 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



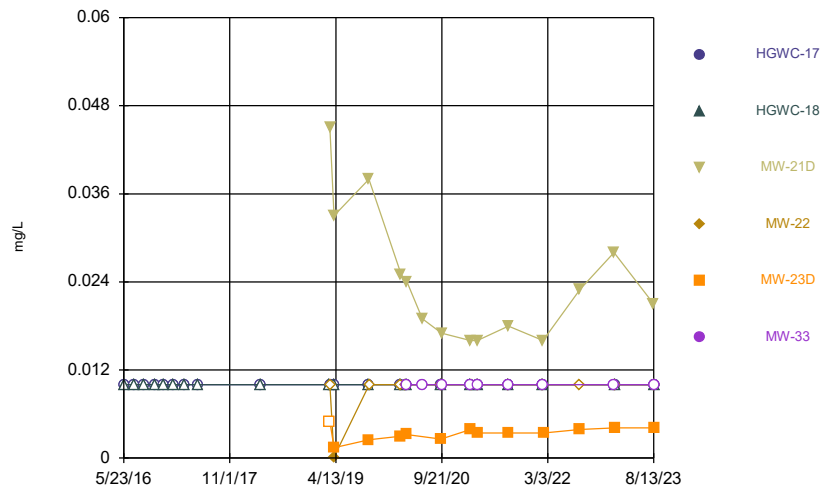
Constituent: Molybdenum Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



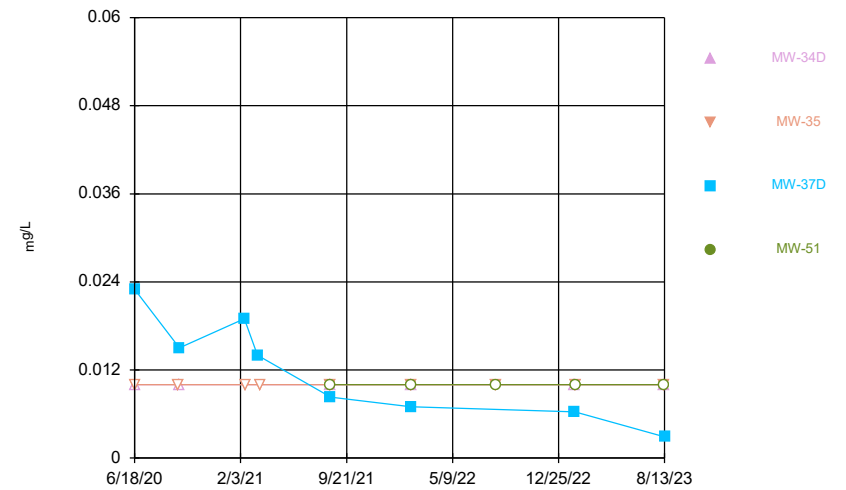
Constituent: Molybdenum Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



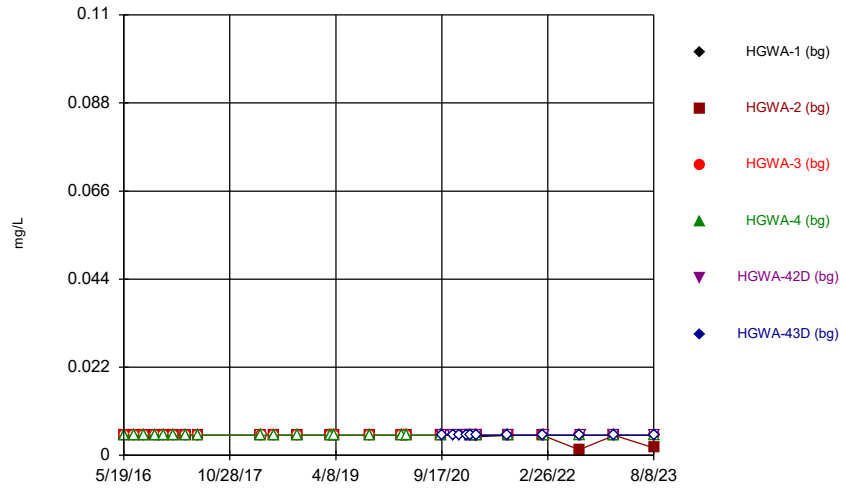
Constituent: Molybdenum Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



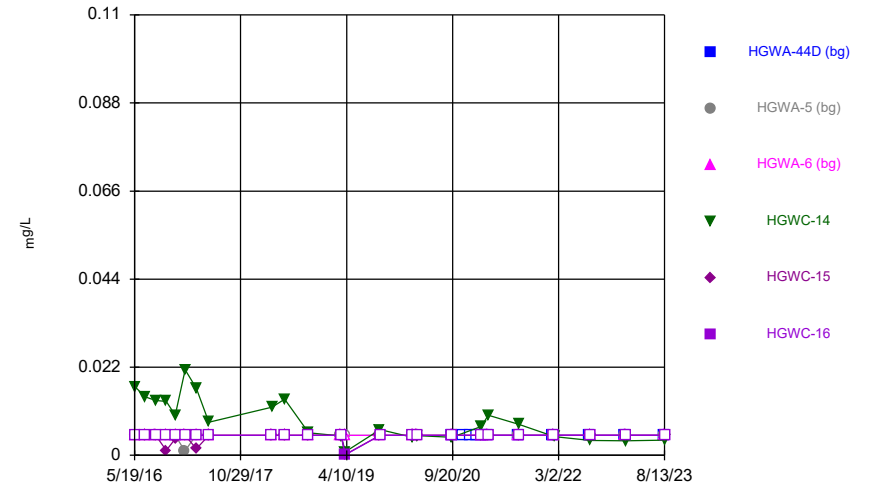
Constituent: Molybdenum Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



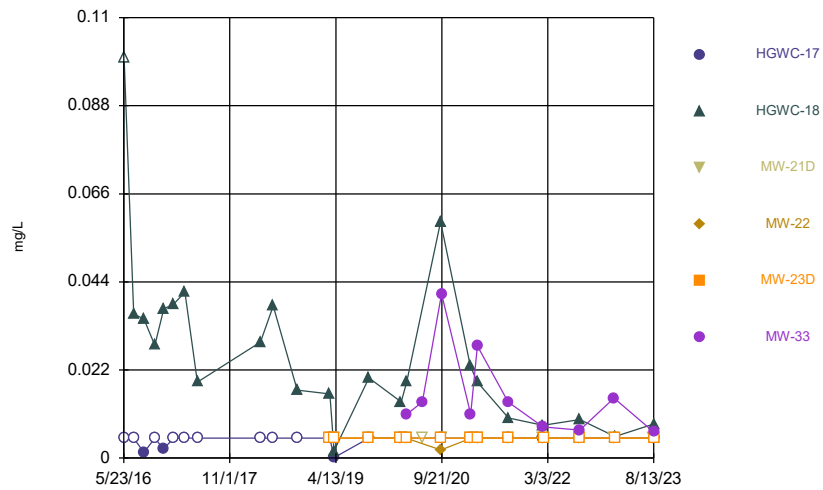
Constituent: Selenium Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



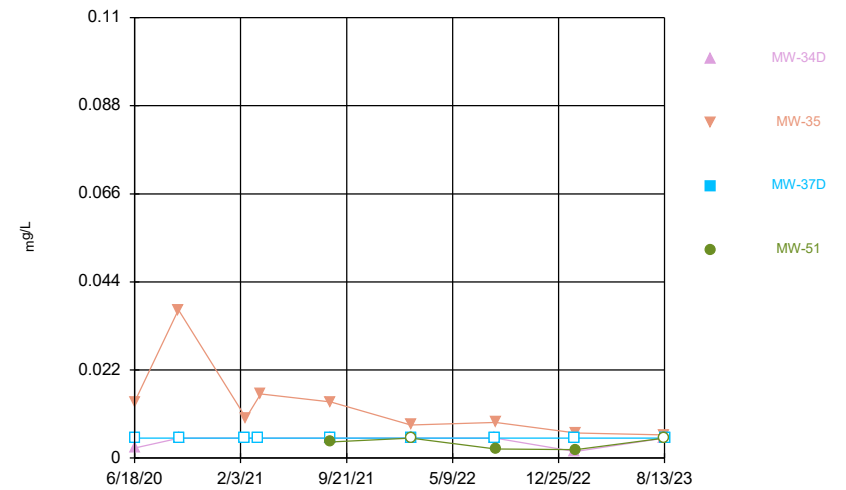
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



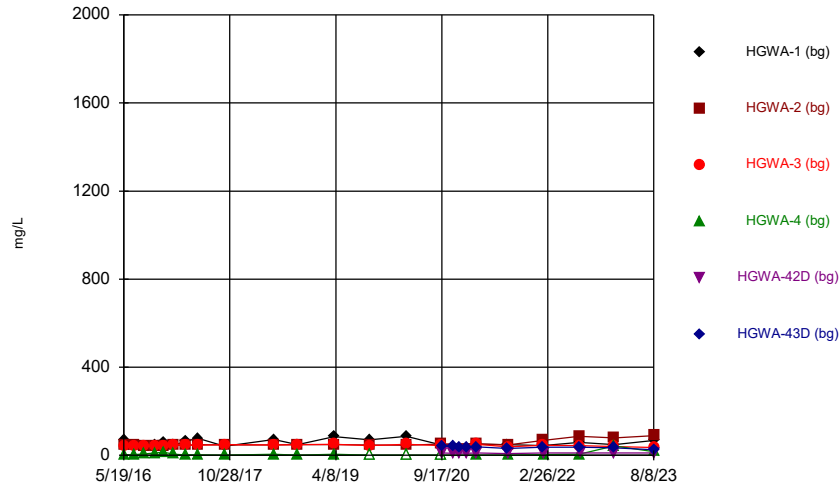
Constituent: Selenium Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



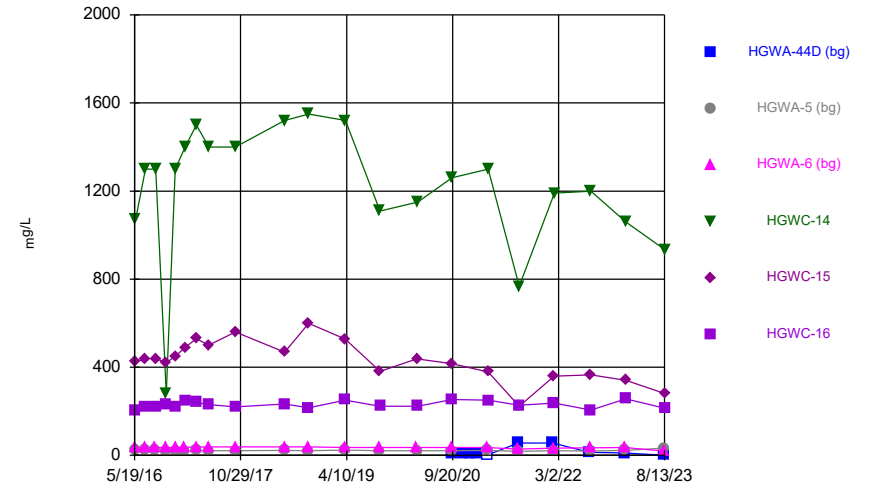
Constituent: Selenium Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



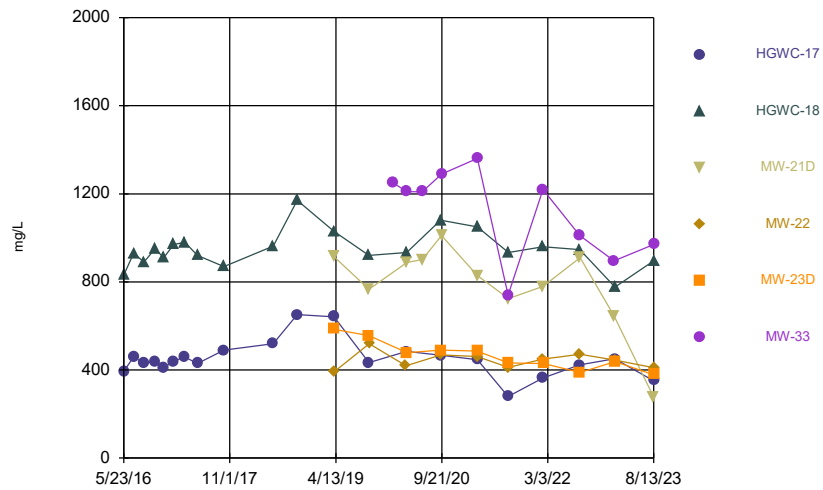
Constituent: Sulfate Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



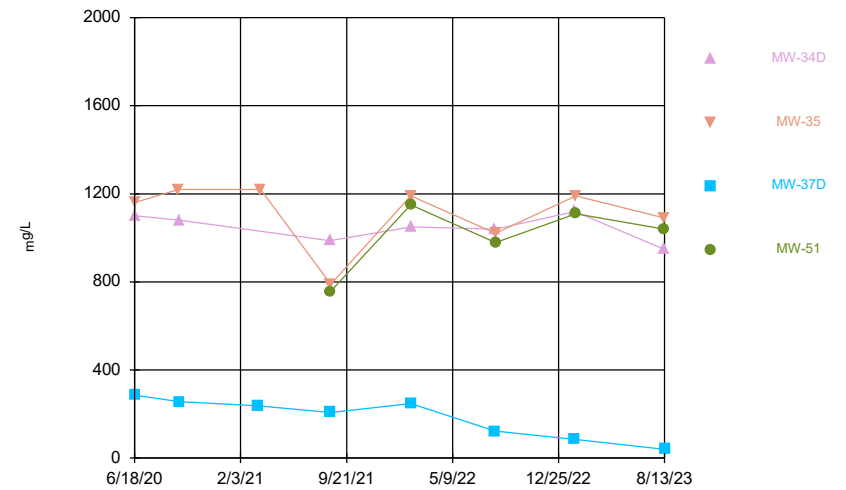
Constituent: Sulfate Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Time Series



Constituent: Sulfate Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

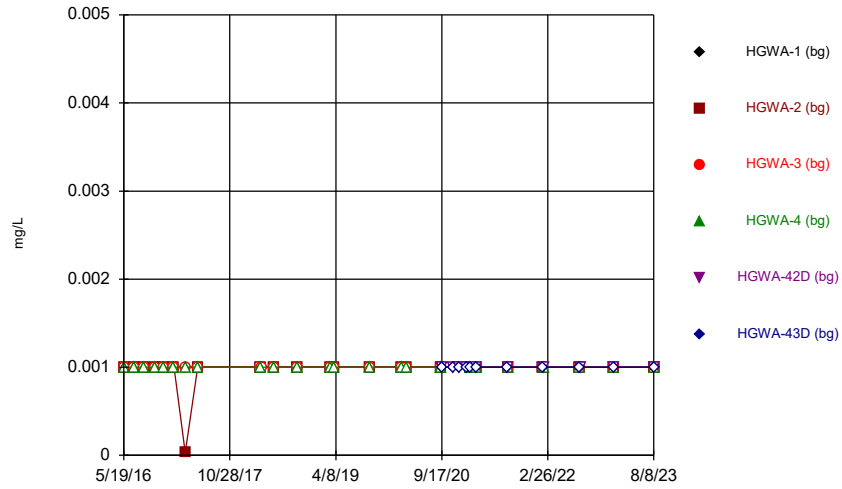
### Time Series



Constituent: Sulfate Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

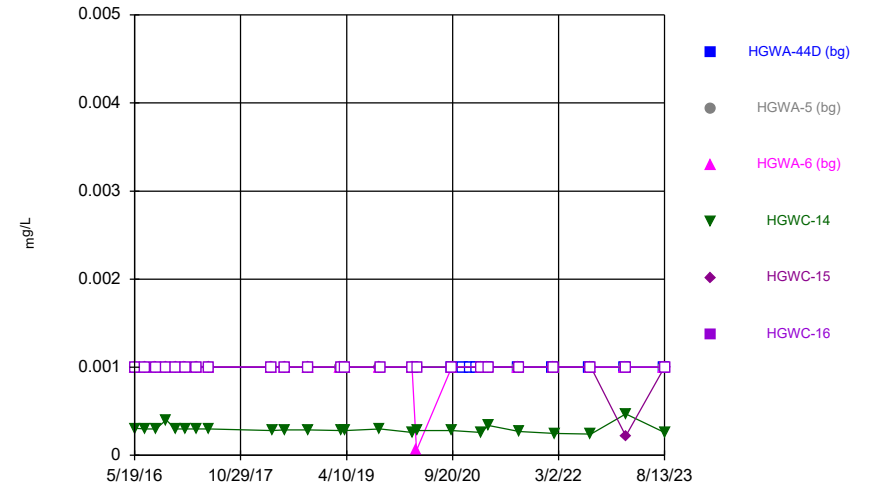


Time Series



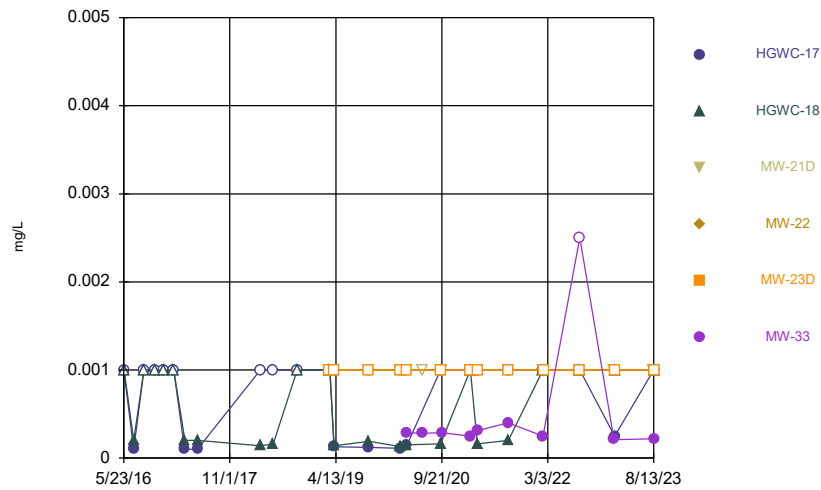
Constituent: Thallium Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



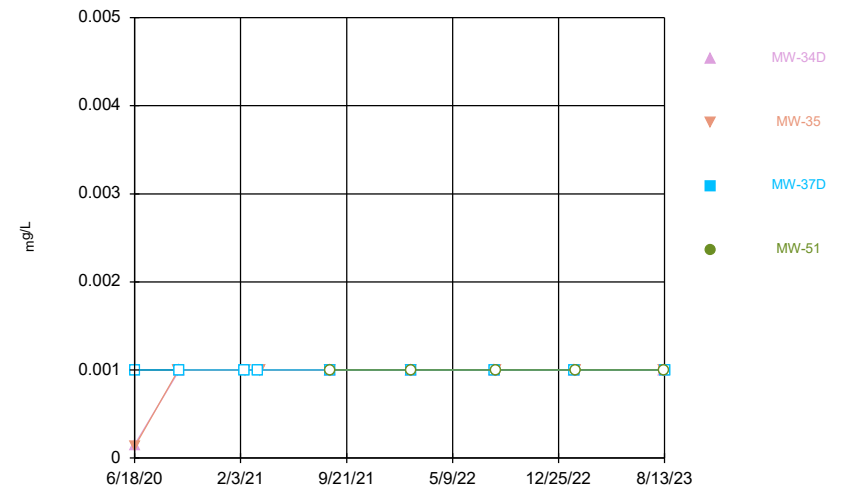
Constituent: Thallium Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



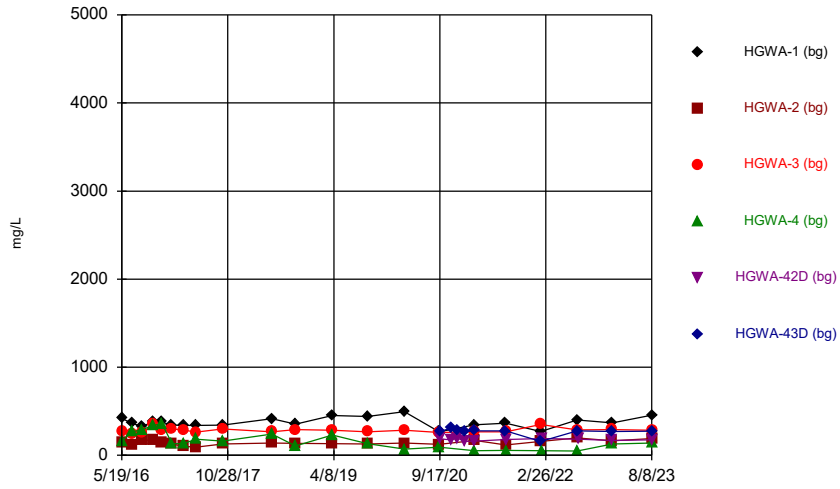
Constituent: Thallium Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



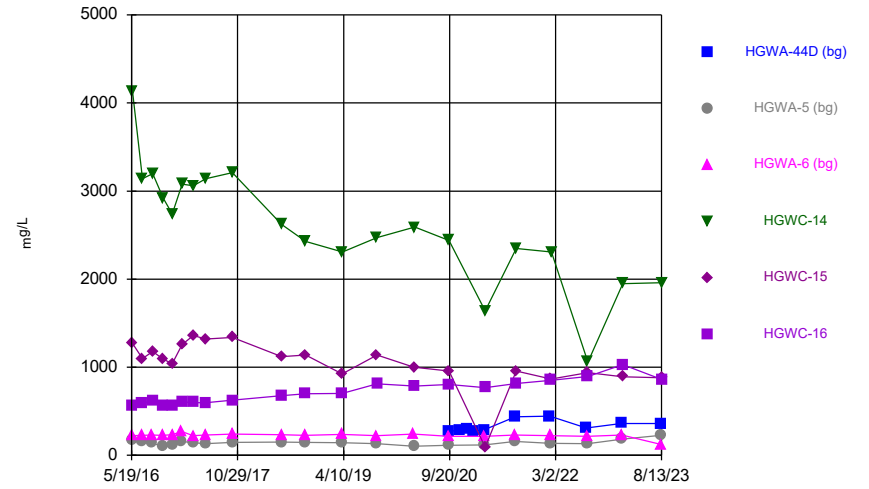
Constituent: Thallium Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



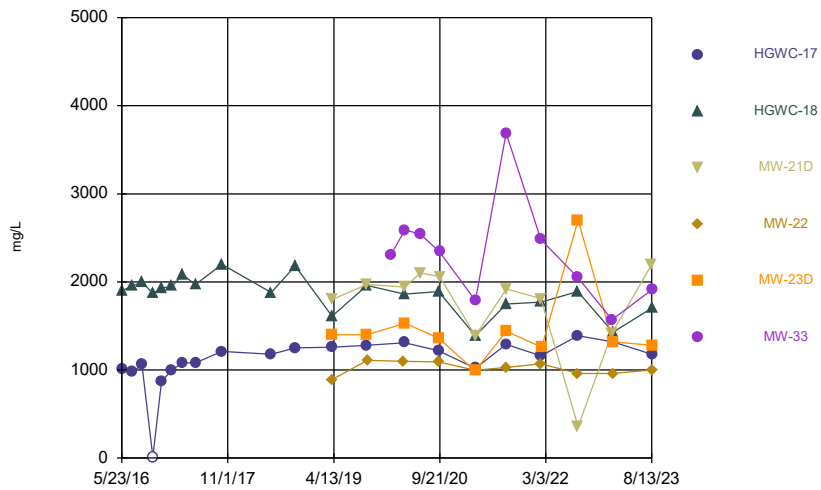
Constituent: Total Dissolved Solids Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



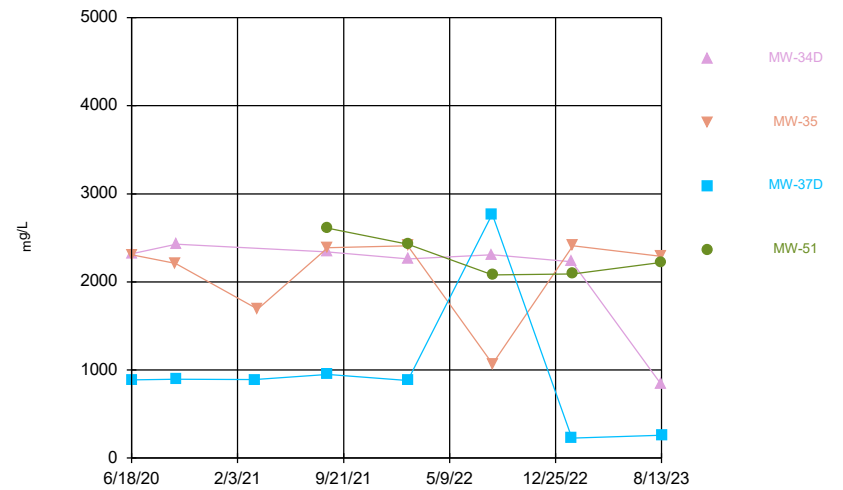
Constituent: Total Dissolved Solids Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 1:26 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.003	<0.003	<0.003	<0.003		
7/11/2016	<0.003	<0.003		<0.003		
7/12/2016			0.0003 (J)			
8/30/2016	<0.003	<0.003	<0.003	<0.003		
10/19/2016	0.0014 (J)	<0.003	<0.003	<0.003		
12/6/2016	<0.003	<0.003	<0.003	<0.003		
1/24/2017	<0.003	<0.003	<0.003	<0.003		
3/21/2017	<0.003	<0.003	<0.003	<0.003		
5/22/2017	<0.003	<0.003	<0.003			
5/23/2017				<0.003		
4/2/2018	<0.003	<0.003		<0.003		
4/3/2018			<0.003			
3/11/2019				<0.003		
3/12/2019	<0.003	<0.003	<0.003			
9/23/2019	<0.003	<0.003	<0.003			
3/2/2020	<0.003	<0.003	<0.003	<0.003		
9/16/2020						0.00051 (J)
9/17/2020					0.00055 (J)	
11/10/2020						0.00043 (J)
11/11/2020					<0.003	
12/15/2020					0.00035 (J)	0.00031 (J)
1/19/2021						0.00029 (J)
1/20/2021					<0.003	
2/8/2021	<0.003			<0.003	0.0019 (J)	
2/9/2021		0.00062 (J)	0.00031 (J)			0.00037 (J)
3/10/2021	<0.003			<0.003	<0.003	
3/11/2021		<0.003	<0.003			0.00057 (J)
8/11/2021	<0.003					<0.003
8/12/2021		<0.003	<0.003	<0.003	<0.003	
2/1/2022	<0.003	<0.003	<0.003			<0.003
2/7/2022				<0.003	<0.003	
8/2/2022	<0.003	<0.003	<0.003	<0.003		<0.003
8/9/2022					<0.003	
1/23/2023			<0.003	<0.003	0.0016 (J)	
1/24/2023	<0.003	<0.003				<0.003
8/8/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 1:26 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.003				
5/20/2016			<0.003			
5/23/2016				<0.003	<0.003	<0.003
7/11/2016		<0.003	0.001 (J)			
7/12/2016				0.0003 (J)	<0.003	<0.003
8/30/2016		<0.003	<0.003			
9/1/2016				<0.003	<0.003	<0.003
10/20/2016		0.0023 (J)	<0.003			
10/24/2016				<0.003	<0.003	
10/25/2016						<0.003
12/7/2016				<0.003	<0.003	<0.003
12/8/2016		<0.003	<0.003			
1/24/2017		<0.003	<0.003			
1/26/2017				<0.003	<0.003	<0.003
3/21/2017		<0.003	<0.003			
3/22/2017						<0.003
3/23/2017				<0.003	<0.003	
5/23/2017		<0.003	<0.003			
5/24/2017				<0.003	<0.003	<0.003
4/3/2018		<0.003	<0.003		<0.003	<0.003
4/4/2018				<0.003		
3/12/2019		<0.003	<0.003			
3/14/2019				<0.003	<0.003	
3/15/2019						<0.003
3/2/2020		<0.003	<0.003			
3/3/2020				<0.003	<0.003	<0.003
9/16/2020	0.00049 (J)					
11/10/2020	<0.003					
12/15/2020	0.00047 (J)					
1/19/2021	0.00067 (J)					
2/9/2021	0.00042 (J)	<0.003	<0.003			
2/10/2021						<0.003
2/11/2021				0.00043 (J)		
2/12/2021					<0.003	
3/10/2021	0.00037 (J)					
3/11/2021		<0.003	<0.003			
3/16/2021					<0.003	
3/17/2021				<0.003		<0.003
8/12/2021		0.0014 (J)	<0.003			
8/13/2021	<0.003					
8/18/2021				<0.003		
8/19/2021					<0.003	<0.003
2/1/2022	0.0013 (J)					
2/7/2022		<0.003	0.0014 (J)			
2/8/2022					0.002 (J)	<0.003
2/9/2022				<0.003		
8/2/2022	<0.003					
8/10/2022		<0.003	<0.003			<0.003
8/11/2022				0.001 (J)	0.0016 (J)	
1/24/2023	<0.003					
1/27/2023		<0.003	<0.003			
2/1/2023				<0.003	0.0021 (J)	<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/8/2023	<0.003	0.003	0.0013 (J)			
8/13/2023				0.0032	0.0027 (J)	<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 1:26 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.003					
5/24/2016		<0.003				
7/12/2016	<0.003	<0.003				
9/1/2016	<0.003	<0.003				
10/25/2016	<0.003	<0.003				
12/7/2016	<0.003					
12/8/2016		<0.003				
1/26/2017	<0.003	<0.003				
3/22/2017	<0.003					
3/23/2017		<0.003				
5/25/2017	<0.003	<0.003				
4/3/2018	<0.003	<0.003				
3/14/2019		<0.003			<0.003	
3/15/2019	<0.003		<0.003	<0.003		
3/2/2020				<0.003	<0.003	
3/3/2020	<0.003	<0.003	<0.003			
2/11/2021	<0.003	<0.003	<0.003			
2/12/2021					<0.003	0.00046 (J)
2/15/2021				<0.003		
3/17/2021				<0.003	<0.003	
3/18/2021	<0.003	<0.003	<0.003			<0.003
8/18/2021	<0.003					<0.003
8/19/2021		0.0008 (J)	<0.003	0.0016 (J)	<0.003	
2/8/2022	<0.003	<0.003	<0.003	<0.003		<0.003
2/10/2022					<0.003	
8/10/2022	<0.003	<0.003				<0.003
8/11/2022			<0.003	<0.003	<0.003	
1/27/2023			<0.003			<0.003
1/30/2023	<0.003			<0.003		
2/1/2023		<0.003			<0.003	
8/12/2023			<0.003			
8/13/2023	<0.003	<0.003		<0.003	<0.003	<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
2/11/2021			0.00079 (J)	
2/15/2021		0.00041 (J)		
3/12/2021			<0.003	
3/19/2021		<0.003		
8/16/2021	<0.003			
8/18/2021		<0.003	<0.003	<0.003
2/8/2022		0.0029 (J)	<0.003	<0.003
2/9/2022	<0.003			
8/10/2022	<0.003		<0.003	
8/11/2022		<0.003		<0.003
1/30/2023	0.0018 (J)		<0.003	
2/1/2023		<0.003		<0.003
8/12/2023	<0.003	<0.003		<0.003
8/13/2023			<0.003	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 1:26 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	0.00127 (J)	<0.005	<0.005		
7/11/2016	<0.005	0.002 (J)		<0.005		
7/12/2016			0.0008 (J)			
8/30/2016	<0.005	0.0017 (J)	<0.005	<0.005		
10/19/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016	<0.005	<0.005	<0.005	<0.005		
1/24/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017	0.0005 (J)	<0.005	0.0007 (J)	<0.005		
5/22/2017	<0.005	0.0006 (J)	0.0006 (J)			
5/23/2017				<0.005		
4/2/2018	<0.005	<0.005		<0.005		
4/3/2018			<0.005			
6/4/2018	<0.005	0.00088 (J)	0.0008 (J)	<0.005		
10/1/2018	<0.005	<0.005	0.0011 (J)	<0.005		
3/11/2019				<0.005		
3/12/2019	<0.005	0.00069 (J)	0.00063 (J)			
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005		<0.005		
9/23/2019	0.00046 (J)	0.00067 (J)	0.0011 (J)			
9/24/2019				<0.005		
3/2/2020	<0.005	0.00043 (J)	0.0004 (J)	<0.005		
3/25/2020	<0.005	<0.005	<0.005			
3/26/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020				<0.005		
11/10/2020						0.0021 (J)
11/11/2020				<0.005		
12/15/2020				<0.005		<0.005
1/19/2021						0.0011 (J)
1/20/2021				<0.005		
2/8/2021	<0.005			<0.005	<0.005	
2/9/2021		<0.005	<0.005			0.0017 (J)
3/10/2021	<0.005			<0.005	<0.005	
3/11/2021		<0.005	<0.005			0.0013 (J)
8/11/2021	<0.005					0.0015 (J)
8/12/2021		<0.005	<0.005	<0.005	<0.005	
2/1/2022	0.0016 (J)	0.0023 (J)	0.0024 (J)			0.0036 (J)
2/7/2022				<0.005	<0.005	
8/2/2022	<0.005	<0.005	<0.005	<0.005		<0.005
8/9/2022					<0.005	
1/23/2023			<0.005	<0.005	<0.005	
1/24/2023	<0.005	<0.005				<0.005
8/8/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005



# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 1:26 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				0.00268 (J)	<0.005	<0.005
7/11/2016		<0.005	<0.005			
7/12/2016				0.0059	<0.005	<0.005
8/30/2016		<0.005	<0.005			
9/1/2016				0.0056	<0.005	<0.005
10/20/2016		<0.005	<0.005			
10/24/2016				0.0058	<0.005	
10/25/2016						<0.005
12/7/2016				<0.005	<0.005	<0.005
12/8/2016		<0.005	<0.005			
1/24/2017		<0.005	<0.005			
1/26/2017				0.0089	<0.005	<0.005
3/21/2017		<0.005	<0.005			
3/22/2017						0.0005 (J)
3/23/2017				0.0069	0.0008 (J)	
5/23/2017		<0.005	<0.005			
5/24/2017				0.0048 (J)	<0.005	<0.005
4/3/2018		<0.005	<0.005		<0.005	<0.005
4/4/2018				0.0052		
6/5/2018		<0.005	<0.005			
6/6/2018				0.0059	<0.005	<0.005
10/2/2018		0.00064 (J)	<0.005			
10/3/2018				0.0032 (J)	<0.005	<0.005
3/12/2019		<0.005	<0.005			
3/14/2019				0.0029 (J)	<0.005	
3/15/2019						<0.005
4/2/2019		<0.005	<0.005			
4/4/2019					0.00017 (J)	0.0001 (J)
4/5/2019				<0.005		
9/24/2019		0.00055 (J)	<0.005	0.0039 (J)	0.00037 (J)	
9/25/2019						<0.005
3/2/2020		<0.005	<0.005			
3/3/2020				0.0035 (J)	<0.005	<0.005
3/25/2020			<0.005			
3/26/2020		<0.005			<0.005	
3/30/2020				0.0051		0.0011 (J)
9/15/2020		<0.005	<0.005			
9/16/2020	<0.005					
9/17/2020					<0.005	<0.005
9/18/2020				0.0029 (J)		
11/10/2020	<0.005					
12/15/2020	<0.005					
1/19/2021	<0.005					
2/9/2021	0.00083 (J)	<0.005	<0.005			
2/10/2021						0.0012 (J)
2/11/2021				0.0062		
2/12/2021					<0.005	
3/10/2021	<0.005					
3/11/2021		<0.005	<0.005			
3/16/2021					<0.005	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				<0.005		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	<0.005					
8/18/2021				0.0035 (J)		
8/19/2021					<0.005	<0.005
2/1/2022	0.0025 (J)					
2/7/2022		<0.005	<0.005			
2/8/2022					<0.005	<0.005
2/9/2022				0.0077		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				0.006	<0.005	
1/24/2023	0.0027 (J)					
1/27/2023		<0.005	<0.005			
2/1/2023				0.004 (J)	<0.005	<0.005
8/8/2023	<0.005	<0.005	<0.005			
8/13/2023				0.0048 (J)	<0.005	<0.005

# Time Series

Constituent: Arsenic (mg/L)    Analysis Run 11/15/2023 1:26 PM    View: Constituents View  
 Plant Hammond    Client: Southern Company    Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.005					
5/24/2016		0.00294 (J)				
7/12/2016	<0.005	0.0074				
9/1/2016	<0.005	0.0073				
10/25/2016	<0.005	0.006				
12/7/2016	<0.005					
12/8/2016		0.007				
1/26/2017	<0.005	0.0068				
3/22/2017	0.0007 (J)					
3/23/2017		0.0082				
5/25/2017	0.0007 (J)	0.006				
4/3/2018	<0.005	0.0062				
6/5/2018		0.008				
6/6/2018	0.00097 (J)					
10/3/2018	<0.005	0.0039 (J)				
3/14/2019		0.0036 (J)			<0.005	
3/15/2019	<0.005		<0.005	<0.005		
4/4/2019			0.00019 (J)			
4/5/2019	<0.005	0.0015 (J)		<0.005	<0.005	
9/25/2019	<0.005	0.0044 (J)	<0.005			
9/26/2019					<0.005	
9/27/2019				0.00045 (J)		
3/2/2020				<0.005	<0.005	
3/3/2020	<0.005	0.0057	<0.005			
3/27/2020				<0.005		
3/31/2020	0.0008 (J)	0.0056				
4/1/2020			0.0013 (J)		0.00082 (J)	0.0061
6/17/2020			<0.005			0.0031 (J)
9/15/2020		0.0074				
9/16/2020	<0.005					
9/17/2020				<0.005	<0.005	
9/21/2020			<0.005			0.0083
2/11/2021	0.0012 (J)	0.0069 (B)	0.001 (J)			
2/12/2021					0.001 (J)	0.0059
2/15/2021				<0.005		
3/17/2021				<0.005	<0.005	
3/18/2021	<0.005	0.0083 (J)	<0.005			0.0054 (J)
8/18/2021	<0.005					0.0058
8/19/2021		0.0045 (J)	<0.005	<0.005	<0.005	
2/8/2022	0.0017 (J)	0.005 (J)	<0.005	<0.005		0.0069
2/10/2022					<0.005	
8/10/2022	<0.005	0.0058				<0.005
8/11/2022			0.003 (J)	<0.005	<0.005	
1/27/2023			<0.005			0.0031 (J)
1/30/2023	0.0028 (J)			<0.005		
2/1/2023		0.0036 (J)			<0.005	
8/12/2023			<0.005			
8/13/2023	<0.005	0.0059 (J)		<0.005	<0.005	0.0059 (J)

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 1:26 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0032 (J)	0.005 (J)	0.0021 (J)	
9/21/2020		0.0059		
9/23/2020	0.001 (J)		0.00095 (J)	
2/11/2021			0.0023 (J)	
2/15/2021		0.005		
3/12/2021			<0.005	
3/19/2021		<0.005		
8/16/2021	0.0024 (J)			
8/18/2021		0.0043 (J)	<0.005	0.002 (J)
2/8/2022		0.0072	<0.005	0.0046 (J)
2/9/2022	0.0054			
8/10/2022	0.0045 (J)		<0.005	
8/11/2022		<0.005		0.0043 (J)
1/30/2023	0.0047 (J)		<0.005	
2/1/2023		0.006		0.0041 (J)
8/12/2023	<0.005	0.0045 (J)		<0.005
8/13/2023			<0.005	

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.0346	0.114	0.111	0.0266		
7/11/2016	0.0311	0.112		0.0309		
7/12/2016			0.115			
8/30/2016	0.0293	0.131	0.113	0.031		
10/19/2016	0.0293	0.111	0.123	0.0332		
12/6/2016	0.0304	0.108	0.127	0.0334		
1/24/2017	0.028	0.102	0.126	0.0192		
3/21/2017	0.0275	0.095	0.12	0.0175		
5/22/2017	0.0281	0.103	0.117			
5/23/2017				0.0227		
4/2/2018	0.026	0.099		0.022		
4/3/2018			0.11			
6/4/2018	0.035	0.11	0.12	0.027		
10/1/2018	0.029	0.11	0.14	0.018		
3/11/2019				0.029		
3/12/2019	0.042	0.12	0.13			
4/1/2019			0.13			
4/2/2019	0.04	0.13		0.03		
9/23/2019	0.042	0.13	0.13			
9/24/2019				0.03		
3/2/2020	0.034	0.11	0.14	0.023		
3/25/2020	0.043	0.12	0.13			
3/26/2020				0.026		
9/15/2020	0.035	0.12	0.12	0.024		
9/16/2020						0.26
9/17/2020				0.13		
11/10/2020						0.25
11/11/2020				0.18		
12/15/2020				0.19		0.29
1/19/2021						0.32
1/20/2021				0.2		
2/8/2021	0.032			0.04	0.19	
2/9/2021		0.12	0.13			0.34
3/10/2021	0.03			0.036	0.18	
3/11/2021		0.07	0.13			0.32
8/11/2021	0.03					0.28
8/12/2021		0.12	0.11	0.034	0.18	
2/1/2022	0.031	0.13	0.12			0.29
2/7/2022				0.028	0.18	
8/2/2022	0.039	0.11	0.16	0.041		0.35
8/9/2022					0.2	
1/23/2023			0.13	0.057	0.21	
1/24/2023	0.033	0.088				0.28
8/8/2023	0.039	0.068	0.12	0.039	0.21	0.3

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		0.0519				
5/20/2016			0.174			
5/23/2016				<0.25	0.0315 (J)	0.0841
7/11/2016		0.0565	0.134			
7/12/2016				0.0214	0.0372	0.0886
8/30/2016		0.0548	0.212			
9/1/2016				0.0208	0.0364	0.0934
10/20/2016		0.0539	0.157			
10/24/2016				0.0208	0.0326	
10/25/2016						0.0991
12/7/2016				0.022	0.0301	0.101
12/8/2016		0.0496	0.162			
1/24/2017		0.0478	0.168			
1/26/2017				0.0238	0.0287	0.105
3/21/2017		0.0453	0.186			
3/22/2017						0.11
3/23/2017				0.0244	0.0329	
5/23/2017		0.0496	0.187			
5/24/2017				0.0228	0.0283	0.106
4/3/2018		0.038	0.14		0.019	0.099
4/4/2018				0.021		
6/5/2018		0.046	0.21			
6/6/2018				0.022	0.022	0.11
10/2/2018		0.047	0.19			
10/3/2018				0.02	0.025	0.11
3/12/2019		0.05	0.2			
3/14/2019				0.019	0.021	
3/15/2019						0.13
4/2/2019		0.044	0.19			
4/4/2019					0.018	0.11
4/5/2019				0.016		
9/24/2019		0.053	0.22	0.021	0.019	
9/25/2019						0.11
3/2/2020		0.053	0.19			
3/3/2020				0.018	0.018	0.12
3/25/2020			0.19			
3/26/2020		0.045			0.016	
3/30/2020				0.02		0.11
9/15/2020		0.045	0.19			
9/16/2020	0.24					
9/17/2020					0.017	0.11
9/18/2020				0.019		
11/10/2020	0.38					
12/15/2020	0.39					
1/19/2021	0.41					
2/9/2021	0.46	0.046	0.21			
2/10/2021						0.11
2/11/2021				0.02		
2/12/2021					0.014	
3/10/2021	0.26					
3/11/2021		0.044	0.21			
3/16/2021					0.012	

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.023		0.12
8/12/2021		0.044	0.18			
8/13/2021	0.22					
8/18/2021				0.018		
8/19/2021					0.01	0.1
2/1/2022	0.23					
2/7/2022		0.038	0.18			
2/8/2022					0.0098	0.1
2/9/2022				0.017		
8/2/2022	0.37					
8/10/2022		0.053	0.18			0.1
8/11/2022				0.017	0.015	
1/24/2023	0.18					
1/27/2023		0.044	0.2			
2/1/2023				0.017	0.021	0.11
8/8/2023	0.12	0.18	0.048			
8/13/2023				0.016	0.011	0.099

# Time Series

Constituent: Barium (mg/L)    Analysis Run 11/15/2023 1:27 PM    View: Constituents View  
 Plant Hammond    Client: Southern Company    Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	0.0222 (J)					
5/24/2016		<0.2				
7/12/2016	0.0221	0.0346				
9/1/2016	0.0227	0.0336				
10/25/2016	0.0225	0.0349				
12/7/2016	0.0227					
12/8/2016		0.0339				
1/26/2017	0.0229	0.0293				
3/22/2017	0.0248					
3/23/2017		0.0313				
5/25/2017	0.0255	0.0336				
4/3/2018	0.025	0.028				
6/5/2018		0.03				
6/6/2018	0.028					
10/3/2018	0.028	0.032				
3/14/2019		0.029			0.082	
3/15/2019	0.029		0.09	0.044		
4/4/2019			0.075			
4/5/2019	0.022	0.021		0.036	0.061	
9/25/2019	0.025	0.03	0.066			
9/26/2019					0.064	
9/27/2019				0.028		
3/2/2020				0.027	0.06	
3/3/2020	0.026	0.026	0.058			
3/27/2020				0.025		
3/31/2020	0.029	0.029				
4/1/2020			0.066		0.065	0.027
6/17/2020			0.054			0.024
9/15/2020		0.03				
9/16/2020	0.025					
9/17/2020				0.02	0.057	
9/21/2020			0.049			0.024
2/11/2021	0.025	0.03	0.044			
2/12/2021					0.056	0.025
2/15/2021				0.017		
3/17/2021				0.018	0.058	
3/18/2021	0.027	0.031	0.047			0.029
8/18/2021	0.022					0.025
8/19/2021		0.031	0.042	0.018	0.05	
2/8/2022	0.021	0.02	0.033	0.014		0.02
2/10/2022					0.05	
8/10/2022	0.027	0.026				0.02 (J)
8/11/2022			0.037	0.014	0.05	
1/27/2023			0.031			0.018
1/30/2023	0.03			0.014		
2/1/2023		0.019			0.047	
8/12/2023			0.033			
8/13/2023	0.025	0.026		0.013	0.041	0.023



# Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.044	0.029	0.19	
9/21/2020		0.028		
9/23/2020	0.038		0.14	
2/11/2021			0.14	
2/15/2021		0.026		
3/12/2021			0.12	
3/19/2021		0.032		
8/16/2021	0.035			
8/18/2021		0.025	0.12	0.032
2/8/2022		0.023	0.11	0.046
2/9/2022	0.04			
8/10/2022	0.046		0.11	
8/11/2022		0.022 (J)		0.028
1/30/2023	0.04		0.13	
2/1/2023		0.022		0.033
8/12/2023	0.033	0.021		0.026
8/13/2023			0.15	

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.0005	<0.003	<0.0005	<0.003		
7/11/2016	<0.0005	0.0001 (J)		<0.003		
7/12/2016			<0.0005			
8/30/2016	<0.0005	<0.003	<0.0005	<0.003		
10/19/2016	<0.0005	0.0001 (J)	<0.0005	<0.003		
12/6/2016	<0.0005	0.0002 (J)	<0.0005	<0.003		
1/24/2017	<0.0005	0.0001 (J)	<0.0005	<0.003		
3/21/2017	<0.0005	0.0001 (J)	<0.0005	<0.003		
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/23/2017				<0.003		
4/2/2018	<0.0005	<0.003		<0.003		
4/3/2018			<0.0005			
3/11/2019				5E-05 (J)		
3/12/2019	<0.0005	0.00017 (J)	<0.0005			
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)		<0.003		
9/23/2019	<0.0005	0.00011 (J)	<0.0005			
9/24/2019				<0.003		
3/2/2020	<0.0005	0.00014 (J)	<0.0005	0.00019 (J)		
3/25/2020	<0.0005	0.00016 (J)	<0.0005			
3/26/2020				7.6E-05 (J)		
9/15/2020	<0.0005	0.00013 (J)	<0.0005	<0.003		
9/16/2020						<0.0005
9/17/2020				<0.0005		
11/10/2020						<0.0005
11/11/2020				<0.0005		
12/15/2020				<0.0005		<0.0005
1/19/2021						<0.0005
1/20/2021				<0.0005		
2/8/2021	<0.0005			0.00023 (J)	<0.0005	
2/9/2021		0.00014 (J)	<0.0005			<0.0005
3/10/2021	<0.0005			0.00017 (J)	<0.0005	
3/11/2021		8.6E-05 (J)	<0.0005			<0.0005
8/11/2021	<0.0005					<0.0005
8/12/2021		0.00014 (J)	<0.0005	0.00021 (J)	<0.0005	
2/1/2022	<0.0005	0.0002 (J)	<0.0005			<0.0005
2/7/2022				0.00017 (J)	<0.0005	
8/2/2022	<0.0005	0.00019 (J)	<0.0005	0.00019 (J)		<0.0005
8/9/2022				<0.0005		
1/23/2023			<0.0005	0.0001 (J)	<0.0005	
1/24/2023	<0.0005	0.00016 (J)				<0.0005
8/8/2023	<0.0005	0.00022 (J)	<0.0005	6.7E-05 (J)	<0.0005	<0.0005

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.0005				
5/20/2016			<0.0005			
5/23/2016				<0.003	<0.0005	<0.0005
7/11/2016		<0.0005	<0.0005			
7/12/2016				0.0005 (J)	<0.0005	<0.0005
8/30/2016		<0.0005	<0.0005			
9/1/2016				0.0005 (J)	<0.0005	<0.0005
10/20/2016		<0.0005	<0.0005			
10/24/2016				0.0005 (J)	<0.0005	
10/25/2016						<0.0005
12/7/2016				0.0006 (J)	<0.0005	<0.0005
12/8/2016		<0.0005	<0.0005			
1/24/2017		<0.0005	<0.0005			
1/26/2017				0.0005 (J)	<0.0005	<0.0005
3/21/2017		<0.0005	<0.0005			
3/22/2017						<0.0005
3/23/2017				0.0006 (J)	<0.0005	
5/23/2017		<0.0005	<0.0005			
5/24/2017				0.0005 (J)	<0.0005	<0.0005
4/3/2018		<0.0005	<0.0005		<0.0005	<0.0005
4/4/2018				<0.003		
3/12/2019		<0.0005	<0.0005			
3/14/2019				0.00043 (J)	<0.0005	
3/15/2019						<0.0005
4/2/2019		<0.0005	<0.0005			
4/4/2019					<0.0005	<0.0005
4/5/2019				0.00027 (J)		
9/24/2019		<0.0005	<0.0005	0.00044 (J)	<0.0005	
9/25/2019						<0.0005
3/2/2020		<0.0005	<0.0005			
3/3/2020				0.00043 (J)	<0.0005	<0.0005
3/25/2020			<0.0005			
3/26/2020		<0.0005			<0.0005	
3/30/2020				0.00043 (J)		<0.0005
9/15/2020		<0.0005	<0.0005			
9/16/2020	<0.0005					
9/17/2020					<0.0005	<0.0005
9/18/2020				0.00043 (J)		
11/10/2020	<0.0005					
12/15/2020	<0.0005					
1/19/2021	<0.0005					
2/9/2021	<0.0005	<0.0005	<0.0005			
2/10/2021						<0.0005
2/11/2021				0.00044 (J)		
2/12/2021					<0.0005	
3/10/2021	<0.0005					
3/11/2021		<0.0005	<0.0005			
3/16/2021					<0.0005	
3/17/2021				0.00058		<0.0005
8/12/2021		<0.0005	<0.0005			
8/13/2021	<0.0005					
8/18/2021				0.00039 (J)		

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.0005	<0.0005
2/1/2022	<0.0005					
2/7/2022		<0.0005	<0.0005			
2/8/2022					<0.0005	<0.0005
2/9/2022				0.00056		
8/2/2022	<0.0005					
8/10/2022		<0.0005	<0.0005			<0.0005
8/11/2022				0.00039 (J)	<0.0005	
1/24/2023	<0.0005					
1/27/2023		<0.0005	<0.0005			
2/1/2023				0.00039 (J)	<0.0005	<0.0005
8/8/2023	<0.0005	<0.0005	<0.0005			
8/13/2023				0.0004 (J)	<0.0005	<0.0005

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.0005					
5/24/2016		0.00278 (J)				
7/12/2016	<0.0005	0.0032				
9/1/2016	<0.0005	0.0034				
10/25/2016	<0.0005	0.0034				
12/7/2016	<0.0005					
12/8/2016		0.0033				
1/26/2017	<0.0005	0.0034				
3/22/2017	<0.0005					
3/23/2017		0.0036				
5/25/2017	<0.0005	0.0036				
4/3/2018	<0.0005	<0.003				
3/14/2019		0.0026 (J)			<0.0005	
3/15/2019	<0.0005		<0.0025	<0.0005		
4/4/2019			<0.0025			
4/5/2019	<0.0005	0.0022 (J)		<0.0005	<0.0005	
9/25/2019	<0.0005	0.0031	<0.0025			
9/26/2019					<0.0005	
9/27/2019				<0.0005		
3/2/2020				<0.0005	<0.0005	
3/3/2020	<0.0005	0.0029 (J)	<0.0025			
3/27/2020				<0.0005		
3/31/2020	<0.0005	0.003				
4/1/2020			<0.0025		<0.0005	0.0011 (J)
6/17/2020			<0.0025			0.00099 (J)
9/15/2020		0.0033				
9/16/2020	<0.0005					
9/17/2020				4.7E-05 (J)	<0.0005	
9/21/2020			<0.0025			0.0009 (J)
2/11/2021	6.7E-05 (J)	0.0036	<0.0025			
2/12/2021					<0.0005	0.001 (J)
2/15/2021				6.2E-05 (J)		
3/17/2021				8.2E-05 (J)	<0.0005	
3/18/2021	4.8E-05 (J)	0.0038	<0.0025			0.0011
8/18/2021	<0.0005					0.00097
8/19/2021		0.0034	<0.0025	7E-05 (J)	<0.0005	
2/8/2022	<0.0005	0.0026	<0.0025	7.9E-05 (J)		0.00087 (J)
2/10/2022					<0.0005	
8/10/2022	6E-05 (J)	0.0032				0.0008
8/11/2022			<0.0025	<0.0005	<0.0005	
1/27/2023			<0.0025			0.00019 (J)
1/30/2023	5.7E-05 (J)			8.1E-05 (J)		
2/1/2023		0.002			<0.0005	
8/12/2023			<0.0025			
8/13/2023	0.0001 (J)	0.003		<0.0005	<0.0005	0.00099

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.00015 (J)	0.00032 (J)	0.00012 (J)	
9/21/2020		0.0004 (J)		
9/23/2020	<0.0005		<0.0005	
2/11/2021			<0.0005	
2/15/2021		0.0006 (J)		
3/12/2021			<0.0005	
3/19/2021		0.00061		
8/16/2021	<0.0005			
8/18/2021		0.00061	<0.0005	0.00042 (J)
2/8/2022		0.0007 (J)	<0.0005	0.00011 (J)
2/9/2022	6.5E-05 (J)			
8/10/2022	<0.0005		<0.0005	
8/11/2022		0.00066 (J)		0.00028 (J)
1/30/2023	<0.0005		<0.0005	
2/1/2023		0.00049 (J)		0.00028 (J)
8/12/2023	<0.0005	0.00041 (J)		0.00012 (J)
8/13/2023			<0.0005	

# Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.0214 (J)	0.0321 (J)	<0.04	<0.1		
7/11/2016	0.0142 (J)	0.0337 (J)		0.0175 (J)		
7/12/2016			0.0074 (J)			
8/30/2016	0.0074 (J)	0.0173 (J)	<0.04	0.0072 (J)		
10/19/2016	0.0224 (J)	0.0341 (J)	0.0085 (J)	0.018 (J)		
12/6/2016	0.0211 (J)	0.0326 (J)	0.0085 (J)	0.0158 (J)		
1/24/2017	0.0165 (J)	0.0365 (J)	0.01 (J)	0.0145 (J)		
3/21/2017	0.0187 (J)	0.0349 (J)	0.0079 (J)	0.0101 (J)		
5/22/2017	0.0782	0.0475	0.0131 (J)			
5/23/2017				0.0159 (J)		
10/3/2017	0.0198 (J)	0.0386 (J)	0.0097 (J)	0.0162 (J)		
6/4/2018	0.02 (J)	0.036 (J)	0.017 (J)	0.014 (J)		
10/1/2018	0.013 (J)	0.035 (J)	0.0061 (J)	0.0093 (J)		
4/1/2019			0.0066 (J)			
4/2/2019	0.016 (J)	0.034 (J)		0.01 (J)		
9/23/2019	0.021 (J)	0.04 (J)	0.0081 (J)			
9/24/2019				0.013 (J)		
3/25/2020	0.025 (J)	0.039 (J)	0.0096 (J)			
3/26/2020				0.012 (J)		
9/15/2020	0.017 (J)	0.044 (J)	0.0071 (J)	0.013 (J)		
9/16/2020						0.061 (J)
9/17/2020				0.098 (J)		
11/10/2020						0.057 (J)
11/11/2020				0.058 (J)		
12/15/2020				0.043 (J)		0.052 (J)
1/19/2021						0.049 (J)
1/20/2021					0.045 (J)	
3/10/2021	0.015 (J)			0.012 (J)	0.048	
3/11/2021		0.056	0.015 (J)			0.06
8/11/2021	0.02 (J)					0.042
8/12/2021		0.044	<0.04	0.014 (J)	0.044	
2/1/2022	0.016 (J)	0.056	0.011 (J)			0.05
2/7/2022				0.017 (J)	0.047	
8/2/2022	0.012 (J)	0.047	<0.04	0.02 (J)		0.043
8/9/2022					0.055	
1/23/2023			0.012 (J)	0.023 (J)	0.052	
1/24/2023	0.015 (J)	0.046				0.037 (J)
8/8/2023	0.023 (J)	0.06	0.011 (J)	0.029 (J)	0.048	0.038 (J)

# Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.04				
5/20/2016			0.0363 (J)			
5/23/2016				15.4	2.02	1.36
7/11/2016		0.0052 (J)	0.0179 (J)			
7/12/2016				16	1.65	1.62
8/30/2016		0.0068 (J)	0.014 (J)			
9/1/2016				12.3	1.93	1.31
10/20/2016		0.0135 (J)	0.0197 (J)			
10/24/2016				13.7	1.93	
10/25/2016						1.27
12/7/2016				16.5	2.23	1.42
12/8/2016		0.0083 (J)	0.0159 (J)			
1/24/2017		0.0072 (J)	<0.2			
1/26/2017				19.2	2.31	1.19
3/21/2017		<0.04	0.0166 (J)			
3/22/2017						1.32
3/23/2017				23.1	2.72	
5/23/2017		0.0095 (J)	0.0167 (J)			
5/24/2017				25.8	2.26	1.67
10/3/2017		0.0071 (J)	0.017 (J)			
10/4/2017				20.5	2	1.43
6/5/2018		0.0066 (J)	0.016 (J)			
6/6/2018				16.7	2.4	1.9
10/2/2018		0.0081 (J)	0.014 (J)			
10/3/2018				16.4	2.4	1.7
4/2/2019		0.0052 (J)	0.013 (J)			
4/4/2019					2.3	2.1
4/5/2019				12.5		
9/24/2019		0.0088 (J)	0.016 (J)	14.7	2.9	
9/25/2019						2.7
3/25/2020			0.021 (J)			
3/26/2020		0.0072 (J)			2.1	
3/30/2020				11.7		2.4
9/15/2020		0.012 (J)	0.016 (J)			
9/16/2020	0.23					
9/17/2020					2.2	2.4
9/18/2020				11		
11/10/2020	0.29					
12/15/2020	0.31					
1/19/2021	0.4					
3/10/2021	0.39					
3/11/2021		0.0075 (J)	0.018 (J)			
3/16/2021					2.4	
3/17/2021				11.8		2.7
8/12/2021		0.0092 (J)	0.014 (J)			
8/13/2021	0.31					
8/18/2021				8.6		
8/19/2021					2.1	2.5
2/1/2022	0.44					
2/7/2022		<0.04	0.019 (J)			
2/8/2022					1.9	2.6
2/9/2022				9.9		



# Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	0.31					
8/10/2022		0.011 (J)	0.015 (J)			2.2
8/11/2022				8.8	2.1	
1/24/2023	0.44					
1/27/2023		<0.04	0.013 (J)			
2/1/2023				7.7	2	2.8
8/8/2023	0.55	0.025 (J)	0.017 (J)			
8/13/2023				6.9	1.6	2.2

# Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	5.7					
5/24/2016		9.33				
7/12/2016	9.58	11.9				
9/1/2016	5.76	8.8				
10/25/2016	5.38	8.5				
12/7/2016	5.74					
12/8/2016		7.15				
1/26/2017	5.78	9.17				
3/22/2017	5.52					
3/23/2017		10.6				
5/25/2017	8.58	13.2				
10/4/2017	6.8	10				
6/5/2018		8.4				
6/6/2018	6.3					
10/3/2018	6.9	9.3				
4/4/2019			5.2			
4/5/2019	5.9	6.4		2.1	3	
9/25/2019	8.1	11.7	6.4			
9/26/2019					3.8	
9/27/2019				2.9		
1/22/2020						11.2
3/27/2020				2.4		
3/31/2020	6.9	9.4				
4/1/2020			6.3		3.5	11.6
6/17/2020			5.8			10.3
9/15/2020		9.4				
9/16/2020	6.7					
9/17/2020				2.3	2.7	
9/21/2020			5.6			9
3/17/2021				2.7	3.4	
3/18/2021	6.8	8.9	5.7			10.2
8/18/2021	5.3					9.1
8/19/2021		8.6	5.4	2.5	3.4	
2/8/2022	7.8	8.1	5.9	3.2		8.4
2/10/2022					3.2	
8/10/2022	6.9	8.4				8
8/11/2022			5	2.5	3.3	
1/27/2023			3.6			4.6
1/30/2023	6.8			2.4		
2/1/2023		5.9			3	
8/12/2023			2.8			
8/13/2023	6.2	7.7		2.3	2.7	6.6

# Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	9.4	11.9	0.14	
9/21/2020		12.3		
9/23/2020	10.2		0.12	
3/12/2021			0.15	
3/19/2021		11.9		
8/16/2021	8.2			
8/18/2021		11.2	0.2	9.7
2/8/2022		10.8	0.14	10.5
2/9/2022	9.6			
8/10/2022	10.2		0.11	
8/11/2022		9.6		8.2
1/30/2023	8		0.15	
2/1/2023		8.7		8.3
8/12/2023	7.2	8.4		7.4
8/13/2023			0.14	

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.0005	<0.0005	<0.0005	<0.0005		
7/11/2016	<0.0005	<0.0005		<0.0005		
7/12/2016			<0.0005			
8/30/2016	<0.0005	<0.0005	<0.0005	<0.0005		
10/19/2016	<0.0005	<0.0005	<0.0005	<0.0005		
12/6/2016	<0.0005	<0.0005	<0.0005	<0.0005		
1/24/2017	<0.0005	0.0001 (J)	<0.0005	<0.0005		
3/21/2017	<0.0005	7E-05 (J)	<0.0005	<0.0005		
5/22/2017	<0.0005	0.0001 (J)	<0.0005			
5/23/2017				<0.0005		
4/2/2018	<0.0005	<0.0005		<0.0005		
4/3/2018			<0.0005			
6/4/2018	<0.0005	0.00014 (J)	<0.0005	<0.0005		
10/1/2018	<0.0005	<0.0005	<0.0005	<0.0005		
3/11/2019				<0.0005		
3/12/2019	<0.0005	0.00013 (J)	<0.0005			
4/1/2019			<0.0005			
4/2/2019	<0.0005	0.00015 (J)		<0.0005		
9/23/2019	<0.0005	<0.0005	<0.0005			
9/24/2019				<0.0005		
3/2/2020	<0.0005	<0.0005	<0.0005	<0.0005		
3/25/2020	<0.0005	0.00014 (J)	<0.0005			
3/26/2020				<0.0005		
9/15/2020	<0.0005	0.00012 (J)	<0.0005	<0.0005		
9/16/2020						<0.0005
9/17/2020				<0.0005		
11/10/2020						<0.0005
11/11/2020				<0.0005		
12/15/2020				<0.0005		<0.0005
1/19/2021						<0.0005
1/20/2021				<0.0005		
2/8/2021	<0.0005			<0.0005	<0.0005	
2/9/2021		0.00016 (J)	<0.0005			<0.0005
3/10/2021	<0.0005			<0.0005	<0.0005	
3/11/2021		<0.0005	<0.0005			<0.0005
8/11/2021	<0.0005					<0.0005
8/12/2021		0.00014 (J)	<0.0005	<0.0005	<0.0005	
2/1/2022	<0.0005	0.00017 (J)	<0.0005			<0.0005
2/7/2022				<0.0005	<0.0005	
8/2/2022	<0.0005	0.00023 (J)	<0.0005	<0.0005		<0.0005
8/9/2022					<0.0005	
1/23/2023			<0.0005	<0.0005	<0.0005	
1/24/2023	<0.0005	0.00021 (J)				<0.0005
8/8/2023	<0.0005	0.00026 (J)	<0.0005	<0.0005	<0.0005	<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.0005				
5/20/2016			<0.0005			
5/23/2016				0.000139 (J)	0.00271 (J)	<0.0005
7/11/2016		<0.0005	<0.0005			
7/12/2016				<0.0005	0.0019	<0.0005
8/30/2016		<0.0005	<0.0005			
9/1/2016				0.0001 (J)	0.0017	<0.0005
10/20/2016		<0.0005	<0.0005			
10/24/2016				0.0002 (J)	0.0018	
10/25/2016						<0.0005
12/7/2016				0.0001 (J)	0.0018	<0.0005
12/8/2016		<0.0005	<0.0005			
1/24/2017		<0.0005	<0.0005			
1/26/2017				0.0001 (J)	0.0013	<0.0005
3/21/2017		<0.0005	<0.0005			
3/22/2017						<0.0005
3/23/2017				0.0002 (J)	0.002	
5/23/2017		<0.0005	<0.0005			
5/24/2017				0.0001 (J)	0.0041	<0.0005
4/3/2018		<0.0005	<0.0005		0.0022	<0.0005
4/4/2018				<0.0005		
6/5/2018		<0.0005	<0.0005			
6/6/2018				0.00012 (J)	0.0021	<0.0005
10/2/2018		<0.0005	<0.0005			
10/3/2018				0.0001 (J)	0.0026	<0.0005
3/12/2019		<0.0005	<0.0005			
3/14/2019				<0.0005	0.0024	
3/15/2019						<0.0005
4/2/2019		<0.0005	<0.0005			
4/4/2019					0.0018	<0.0005
4/5/2019				7.9E-05 (J)		
9/24/2019		<0.0005	<0.0005	<0.0005	0.0014 (J)	
9/25/2019						<0.0005
3/2/2020		<0.0005	<0.0005			
3/3/2020				<0.0005	0.0015 (J)	<0.0005
3/25/2020			<0.0005			
3/26/2020		<0.0005			0.0016 (J)	
3/30/2020				<0.0005		<0.0005
9/15/2020		<0.0005	<0.0005			
9/16/2020	<0.0005					
9/17/2020					0.0016 (J)	<0.0005
9/18/2020				<0.0005		
11/10/2020	<0.0005					
12/15/2020	<0.0005					
1/19/2021	<0.0005					
2/9/2021	<0.0005	<0.0005	<0.0005			
2/10/2021						<0.0005
2/11/2021				<0.0005		
2/12/2021					0.0014 (J)	
3/10/2021	<0.0005					
3/11/2021		<0.0005	<0.0005			
3/16/2021					0.0011	

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				<0.0005		<0.0005
8/12/2021		<0.0005	<0.0005			
8/13/2021	<0.0005					
8/18/2021				0.00013 (J)		
8/19/2021					0.0012	<0.0005
2/1/2022	<0.0005					
2/7/2022		<0.0005	<0.0005			
2/8/2022					0.0011	<0.0005
2/9/2022				<0.0005		
8/2/2022	<0.0005					
8/10/2022		<0.0005	<0.0005			<0.0005
8/11/2022				<0.0005	0.00095	
1/24/2023	<0.0005					
1/27/2023		<0.0005	<0.0005			
2/1/2023				<0.0005	0.00088	<0.0005
8/8/2023	<0.0005	<0.0005	<0.0005			
8/13/2023				<0.0005	0.00033 (J)	<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.0005					
5/24/2016		<0.02				
7/12/2016	<0.0005	0.0022				
9/1/2016	<0.0005	0.0024				
10/25/2016	<0.0005	0.0022				
12/7/2016	<0.0005					
12/8/2016		0.0024				
1/26/2017	<0.0005	0.0025				
3/22/2017	7E-05 (J)					
3/23/2017		0.0025				
5/25/2017	<0.0005	0.0027				
4/3/2018	<0.0005	0.0022				
6/5/2018		0.0022				
6/6/2018	<0.0005					
10/3/2018	<0.0005	0.0027				
3/14/2019		0.0019			<0.0025	
3/15/2019	<0.0005		<0.0005	0.00082 (J)		
4/4/2019			<0.0005			
4/5/2019	<0.0005	0.0017		0.00064 (J)	<0.0025	
9/25/2019	<0.0005	0.0023 (J)	<0.0005			
9/26/2019					<0.0025	
9/27/2019				0.0014 (J)		
3/2/2020				0.0021 (J)	<0.0025	
3/3/2020	<0.0005	0.0021 (J)	<0.0005			
3/27/2020				0.0019 (J)		
3/31/2020	<0.0005	0.0017 (J)				
4/1/2020			<0.0005		<0.0025	0.00022 (J)
6/17/2020			<0.0005			0.00021 (J)
9/15/2020		0.0019 (J)				
9/16/2020	<0.0005					
9/17/2020				0.0021 (J)	0.0006 (J)	
9/21/2020			<0.0005			0.00016 (J)
2/11/2021	<0.0005	0.0016 (J)	<0.0005			
2/12/2021					0.00045 (J)	0.00017 (J)
2/15/2021				0.002 (J)		
3/17/2021				0.0022	0.00057	
3/18/2021	<0.0005	0.0015	<0.0005			0.00019 (J)
8/18/2021	<0.0005					0.00017 (J)
8/19/2021		0.0014	<0.0005	0.0021	0.00012 (J)	
2/8/2022	<0.0005	0.00076	<0.0005	0.002		0.00013 (J)
2/10/2022					0.00024 (J)	
8/10/2022	<0.0005	0.0017				<0.0025
8/11/2022			<0.0005	0.002	0.00021 (J)	
1/27/2023			<0.0005			0.00017 (J)
1/30/2023	<0.0005			0.0017		
2/1/2023		0.001			0.00012 (J)	
8/12/2023			<0.0005			
8/13/2023	<0.0005	0.0017		0.002	0.00015 (J)	0.0002 (J)

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	<0.0025	0.00053 (J)	<0.0005	
9/21/2020		0.001 (J)		
9/23/2020	<0.0025		<0.0005	
2/11/2021			<0.0005	
2/15/2021		0.0017 (J)		
3/12/2021			<0.0005	
3/19/2021		0.0018		
8/16/2021	0.00023 (J)			
8/18/2021		0.0015	<0.0005	0.00094
2/8/2022		0.0015	<0.0005	0.00024 (J)
2/9/2022	0.00072			
8/10/2022	0.00041 (J)		<0.0005	
8/11/2022		0.0013 (J)		0.00045 (J)
1/30/2023	0.00047 (J)		<0.0005	
2/1/2023		0.0017		0.0016
8/12/2023	0.0029	0.0012		0.00019 (J)
8/13/2023			<0.0005	



# Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	138	22.9	76.2	48.4		
7/11/2016	97.2	22.3		73		
7/12/2016			61.5			
8/30/2016	97.5	26.4	65.1	85.7		
10/19/2016	99.2	21.7	73.2	89.7		
12/6/2016	105	18.2	74.9	80		
1/24/2017	95.7	18.5	69.6	30.8		
3/21/2017	106	18.6	75.7	34		
5/22/2017	107	17.8	71.5			
5/23/2017				43		
10/3/2017	102	20.2	76.3	46.9		
6/4/2018	124	19.1	73.4	81.9		
10/1/2018	108	20.5 (J)	80.9	22 (J)		
4/1/2019			80.5			
4/2/2019	132	22.5 (J)		76		
9/23/2019	118	19.5	71			
9/24/2019				36.6		
3/25/2020	127	23	89.8			
3/26/2020				14.9		
9/15/2020	103	21.1	73.1	20.4		
9/16/2020						56
9/17/2020				43.8		
11/10/2020						63.3
11/11/2020				44.4		
12/15/2020				47.3		62.6
1/19/2021						60.1
1/20/2021				41.8		
3/10/2021	111			5.9	43.4	
3/11/2021		43.8	83.8			59.6
8/11/2021	113					61
8/12/2021		21.9	84	5.4	43.6	
2/1/2022	106	27.2	85.1			55.9
2/7/2022				5.9	48.7	
8/2/2022	117	31.2	84.6	6		54.1
8/9/2022					44.1	
1/23/2023			85	24	43.7	
1/24/2023	117	29.4				56.6
8/8/2023	118	30.7	78.3	35.7	40.7	52.8

# Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		35.5				
5/20/2016			56.1			
5/23/2016				664	184	146
7/11/2016		35.4	49.3			
7/12/2016				528	186	142
8/30/2016		28	53.9			
9/1/2016				586	189	141
10/20/2016		26.7	50.7			
10/24/2016				564	200	
10/25/2016						138
12/7/2016				590	203	146
12/8/2016		23.5	49.2			
1/24/2017		24.5	48.3			
1/26/2017				558	212	139
3/21/2017		30.8	51.3			
3/22/2017						150
3/23/2017				652	229	
5/23/2017		24.2	49.1			
5/24/2017				617	265	153
10/3/2017		29	55.1			
10/4/2017				644	230	156
6/5/2018		27.8	54.5			
6/6/2018				606	250	177
10/2/2018		28.9	54.7			
10/3/2018				558	234	160
4/2/2019		26.3	49.7			
4/4/2019					214	196
4/5/2019				606		
9/24/2019		29.3	52.5	507	202	
9/25/2019						185
3/25/2020			58.1			
3/26/2020		27.8			240	
3/30/2020				600		208
9/15/2020		27.9	49.9			
9/16/2020	30					
9/17/2020					188	190
9/18/2020				623		
11/10/2020	33.6					
12/15/2020	28.7					
1/19/2021	33					
3/10/2021	18.3					
3/11/2021		28.3	53.1			
3/16/2021					196	
3/17/2021				572		198
8/12/2021		32	54.7			
8/13/2021	28.9					
8/18/2021				583		
8/19/2021					203	207
2/1/2022	24.8					
2/7/2022		30	53.4			
2/8/2022					186	218
2/9/2022				571		

# Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	20.9					
8/10/2022		27.4	55.7			207
8/11/2022				519	210	
1/24/2023	13.2					
1/27/2023		28.5	55.4			
2/1/2023				464	174	216
8/8/2023	8.1	54.4	27.9			
8/13/2023				418	182	187

# Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	225					
5/24/2016		403				
7/12/2016	199	328				
9/1/2016	213	379				
10/25/2016	206	362				
12/7/2016	212					
12/8/2016		366				
1/26/2017	198	394				
3/22/2017	239					
3/23/2017		440				
5/25/2017	292	492				
10/4/2017	305	470				
6/5/2018		425				
6/6/2018	299					
10/3/2018	286	421				
4/4/2019			427			
4/5/2019	340	400		178	352	
9/25/2019	305	437	420			
9/26/2019					306	
9/27/2019				202		
1/22/2020						638
3/27/2020				212		
3/31/2020	328	418				
4/1/2020			438		342	567
6/17/2020			434			561
9/15/2020		430				
9/16/2020	277					
9/17/2020				203	361	
9/21/2020			428			562
3/17/2021				200	341	
3/18/2021	266	407	382			574
8/18/2021	281					549
8/19/2021		416	365	203	307	
2/8/2022	280	418	366	221		548
2/10/2022					288	
8/10/2022	316	433				498
8/11/2022			430	198	315	
1/27/2023			281			371
1/30/2023	286			189		
2/1/2023		288			294	
8/12/2023			167			
8/13/2023	261	355		305	343	418

# Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	584	517	165	
9/21/2020		503		
9/23/2020	556		158	
3/12/2021			170	
3/19/2021		552		
8/16/2021	554			
8/18/2021		546	180	532
2/8/2022		519	167	537
2/9/2022	557			
8/10/2022	585		113	
8/11/2022		499		521
1/30/2023	558		74.6	
2/1/2023		503		492
8/12/2023	469	455		485
8/13/2023			57	

# Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	9.94	6.14	5.93	4.56		
7/11/2016	6.3	5.9		5		
7/12/2016			6.2			
8/30/2016	6	6.2	6.4	4.9		
10/19/2016	5.8	6.1	6.5	4.6		
12/6/2016	5.4	6	7.2	4.5		
1/24/2017	5.2	6.1	6.4	4.7		
3/21/2017	4.6	5.9	7.5	4.3		
5/22/2017	4.6	5.9	6.5			
5/23/2017				4.5		
10/3/2017	5.6	6.3	6.5	4.8		
6/4/2018	13.1	6.1	6.3	4.5		
10/1/2018	6.6	6.4	6.4	3.8		
4/1/2019			6.5			
4/2/2019	20.3	5.8		4.4		
9/23/2019	17.7	5.1	5.9			
9/24/2019				3.6		
3/25/2020	20.4	5.2	6.1			
3/26/2020				3.4		
9/15/2020	13.4	5	6	3.3		
9/16/2020						4.1
9/17/2020					5.8	
11/10/2020						4.4
11/11/2020					3.1	
12/15/2020					3.2	4.7
1/19/2021						4.1
1/20/2021					2.8	
3/10/2021	7.4			2.9	3	
3/11/2021		5.1	5.9			4.5
8/11/2021	9.6					3.5
8/12/2021		5.2	4.8	2.4	2.6	
2/1/2022	7.5	7	5.7			4.1
2/7/2022				2.4	3.1	
8/2/2022	14.1	7.8	5.9	2.9		4.3
8/9/2022					3.7	
1/23/2023			5.6	1.6	3.3	
1/24/2023	9	7.1				4.3
8/8/2023	26	6.6	5.3	2.6	3.2	3.5

# Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		1.57				
5/20/2016			1.35			
5/23/2016				659	209	25.8
7/11/2016		2	1.7			
7/12/2016				620	190	34
8/30/2016		2	1.6			
9/1/2016				510	200	34
10/20/2016		2.2	1.6			
10/24/2016				110	200	
10/25/2016						35
12/7/2016				510	240	38
12/8/2016		2	1.6			
1/24/2017		1.6	1.9			
1/26/2017				640	260	41
3/21/2017		2	1.3			
3/22/2017						41
3/23/2017				600	280	
5/23/2017		1.7	1.2			
5/24/2017				510	240	44
10/3/2017		1.7	2.1			
10/4/2017				420	210	50
6/5/2018		1.6	1.2			
6/6/2018				357	196	50.6
10/2/2018		2.4	1.7			
10/3/2018				368	200	49.9
4/2/2019		1.7	1.6			
4/4/2019					138	76.8
4/5/2019				227		
9/24/2019		1.7	1.3	188	120	
9/25/2019						84.4
3/25/2020			1.2			
3/26/2020		1.4			142	
3/30/2020				236		80.2
9/15/2020		1.7	1.2			
9/16/2020	7.2					
9/17/2020					108	99.3
9/18/2020				288		
11/10/2020	7.8					
12/15/2020	9.4					
1/19/2021	9.5					
3/10/2021	12.3					
3/11/2021		1.4	1.2			
3/16/2021					103	
3/17/2021				233		93.8
8/12/2021		1.4	0.94 (J)			
8/13/2021	39.9					
8/18/2021				141		
8/19/2021					89.9	90.1
2/1/2022	44.8					
2/7/2022		1.4	1.1			
2/8/2022					76.6	96.4
2/9/2022				174		

# Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	19.8					
8/10/2022		2.1	1.3			98.3
8/11/2022				147	89.2	
1/24/2023	24.9					
1/27/2023		1.6	1.4			
2/1/2023				108	85	112
8/8/2023	27	1.3	2.1			
8/13/2023				95.8	78.2	89.1



# Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	94					
5/24/2016		280				
7/12/2016	100	300				
9/1/2016	95	270				
10/25/2016	98	290				
12/7/2016	89					
12/8/2016		300				
1/26/2017	99	340				
3/22/2017	100					
3/23/2017		350				
5/25/2017	99	290				
10/4/2017	130	260				
6/5/2018		261				
6/6/2018	166					
10/3/2018	193	302				
4/4/2019			299			
4/5/2019	195	217		131	195	
9/25/2019	139	181	245			
9/26/2019					204	
9/27/2019				176		
1/22/2020						231
3/27/2020				141		
3/31/2020	161	126				
4/1/2020			236		166	242
6/17/2020			223			250
9/15/2020		150				
9/16/2020	156					
9/17/2020				153	171	
9/21/2020			236			273
3/17/2021				127	151	
3/18/2021	138	90.2	208			199
8/18/2021	90.7					118
8/19/2021		95.8	173	118	137	
2/8/2022	117	105	196	110		166
2/10/2022					138	
8/10/2022	148	95.2				120
8/11/2022			216	125	124	
1/27/2023			167			83.4
1/30/2023	154			109		
2/1/2023		92.7			137	
8/12/2023			76.2			
8/13/2023	109	104		101	119	99

# Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	259	229	151	
9/21/2020		257		
9/23/2020	294		166	
3/12/2021			124	
3/19/2021		250		
8/16/2021	264			
8/18/2021		149	122	123
2/8/2022		202	151	194
2/9/2022	251			
8/10/2022	185		84.8	
8/11/2022		172		144
1/30/2023	173		49.2	
2/1/2023		189		158
8/12/2023	157	181		139
8/13/2023			16.5	

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	<0.005	<0.005	<0.005		
7/11/2016	<0.005	<0.005		<0.005		
7/12/2016			<0.005			
8/30/2016	<0.005	<0.005	<0.005	<0.005		
10/19/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016	<0.005	<0.005	<0.005	<0.005		
1/24/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017	0.0005 (J)	<0.005	<0.005	0.0004 (J)		
5/22/2017	<0.005	<0.005	0.0007 (J)			
5/23/2017				<0.005		
4/2/2018	<0.005	<0.005		<0.005		
4/3/2018			<0.005			
3/11/2019				<0.005		
3/12/2019	<0.005	<0.005	<0.005			
4/1/2019			<0.005			
4/2/2019	<0.005	0.0079 (J)		0.019		
9/23/2019	<0.005	0.00058 (J)	<0.005			
9/24/2019				<0.005		
3/2/2020	<0.005	0.00041 (J)	<0.005	0.0004 (J)		
3/25/2020	0.00072 (J)	<0.005	<0.005			
3/26/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020				<0.005		
11/10/2020						<0.005
11/11/2020					0.00063 (J)	
12/15/2020					0.0025 (J)	<0.005
1/19/2021						<0.005
1/20/2021					<0.005	
2/8/2021	<0.005			<0.005	0.00078 (J)	
2/9/2021		<0.005	<0.005			0.00095 (J)
3/10/2021	<0.005			<0.005	<0.005	
3/11/2021		<0.005	<0.005			<0.005
8/11/2021	<0.005					<0.005
8/12/2021		<0.005	<0.005	<0.005	<0.005	
2/1/2022	<0.005	<0.005	<0.005			<0.005
2/7/2022				<0.005	<0.005	
8/2/2022	<0.005	<0.005	<0.005	<0.005		<0.005
8/9/2022					<0.005	
1/23/2023			<0.005	<0.005	<0.005	
1/24/2023	<0.005	<0.005				<0.005
8/8/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				<0.005	<0.005	<0.005
7/11/2016		<0.005	<0.005			
7/12/2016				<0.005	<0.005	<0.005
8/30/2016		<0.005	<0.005			
9/1/2016				<0.005	<0.005	<0.005
10/20/2016		<0.005	<0.005			
10/24/2016				<0.005	<0.005	
10/25/2016						<0.005
12/7/2016				<0.005	<0.005	<0.005
12/8/2016		<0.005	<0.005			
1/24/2017		<0.005	<0.005			
1/26/2017				<0.005	<0.005	<0.005
3/21/2017		<0.005	0.0007 (J)			
3/22/2017						0.0021 (J)
3/23/2017				<0.005	0.0005 (J)	
5/23/2017		<0.005	<0.005			
5/24/2017				<0.005	<0.005	<0.005
4/3/2018		<0.005	<0.005		<0.005	<0.005
4/4/2018				<0.005		
3/12/2019		<0.005	<0.005			
3/14/2019				<0.005	<0.005	
3/15/2019						<0.005
4/2/2019		<0.005	<0.005			
4/4/2019					<0.005	<0.005
4/5/2019				<0.005		
9/24/2019		<0.005	<0.005	<0.005	0.00041 (J)	
9/25/2019						<0.005
3/2/2020		0.0005 (J)	<0.005			
3/3/2020				0.00042 (J)	<0.005	0.00071 (J)
3/25/2020			<0.005			
3/26/2020		<0.005			<0.005	
3/30/2020				0.00066 (J)		0.0004 (J)
9/15/2020		<0.005	<0.005			
9/16/2020	0.0012 (J)					
9/17/2020					<0.005	<0.005
9/18/2020				<0.005		
11/10/2020	0.00089 (J)					
12/15/2020	0.00072 (J)					
1/19/2021	0.0011 (J)					
2/9/2021	0.00066 (J)	<0.005	<0.005			
2/10/2021						<0.005
2/11/2021				<0.005		
2/12/2021					<0.005	
3/10/2021	<0.005					
3/11/2021		0.0011 (J)	<0.005			
3/16/2021					0.0012 (J)	
3/17/2021				<0.005		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	0.0016 (J)					
8/18/2021				<0.005		

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.005	<0.005
2/1/2022	0.0013 (J)					
2/7/2022		<0.005	<0.005			
2/8/2022					<0.005	<0.005
2/9/2022				<0.005		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				<0.005	<0.005	
1/24/2023	<0.005					
1/27/2023		<0.005	<0.005			
2/1/2023				<0.005	<0.005	<0.005
8/8/2023	<0.005	<0.005	<0.005			
8/13/2023				<0.005	<0.005	<0.005

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.005					
5/24/2016		<0.005				
7/12/2016	<0.005	<0.005				
9/1/2016	<0.005	<0.005				
10/25/2016	<0.005	<0.005				
12/7/2016	<0.005					
12/8/2016		<0.005				
1/26/2017	<0.005	<0.005				
3/22/2017	<0.005					
3/23/2017		0.0005 (J)				
5/25/2017	<0.005	<0.005				
4/3/2018	<0.005	<0.005				
3/14/2019		<0.005			<0.005	
3/15/2019	<0.005		<0.005	<0.005		
4/4/2019			<0.005			
4/5/2019	<0.005	<0.005		<0.005	<0.005	
9/25/2019	<0.005	<0.005	<0.005			
9/26/2019					<0.005	
9/27/2019				0.0004 (J)		
3/2/2020				<0.005	<0.005	
3/3/2020	0.0018 (J)	0.0004 (J)	<0.005			
3/27/2020				<0.005		
3/31/2020	<0.005	<0.005				
4/1/2020			<0.005		0.00086 (J)	0.00069 (J)
6/17/2020			0.00057 (J)			<0.005
9/15/2020		0.00063 (J)				
9/16/2020	<0.005					
9/17/2020				<0.005	<0.005	
9/21/2020			<0.005			<0.005
2/11/2021	0.00074 (J)	<0.005	<0.005			
2/12/2021					<0.005	<0.005
2/15/2021				<0.005		
3/17/2021				0.00075 (J)	0.00083 (J)	
3/18/2021	0.00069 (J)	<0.005	0.00074 (J)			<0.005
8/18/2021	<0.005					<0.005
8/19/2021		<0.005	<0.005	<0.005	<0.005	
2/8/2022	<0.005	<0.005	<0.005	<0.005		<0.005
2/10/2022					<0.005	
8/10/2022	<0.005	<0.005				<0.005
8/11/2022			<0.005	<0.005	<0.005	
1/27/2023			<0.005			<0.005
1/30/2023	<0.005			<0.005		
2/1/2023		<0.005			<0.005	
8/12/2023			<0.005			
8/13/2023	<0.005	<0.005		<0.005	<0.005	<0.005

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0059 (J)	<0.005	0.0048 (J)	
9/21/2020		0.00079 (J)		
9/23/2020	<0.005		<0.005	
2/11/2021			0.0014 (J)	
2/15/2021		<0.005		
3/12/2021			<0.005	
3/19/2021		0.00083 (J)		
8/16/2021	<0.005			
8/18/2021		<0.005	<0.005	<0.005
2/8/2022		<0.005	<0.005	<0.005
2/9/2022	<0.005			
8/10/2022	<0.005		<0.005	
8/11/2022		<0.005		<0.005
1/30/2023	<0.005		<0.005	
2/1/2023		<0.005		<0.005
8/12/2023	<0.005	<0.005		<0.005
8/13/2023			<0.005	

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	0.0293	<0.005	<0.005		
7/11/2016	0.0004 (J)	0.0267		<0.005		
7/12/2016			<0.005			
8/30/2016	<0.005	0.028	<0.005	<0.005		
10/19/2016	<0.005	0.0201	<0.005	<0.005		
12/6/2016	<0.005	0.0184	<0.005	<0.005		
1/24/2017	<0.005	0.0206	<0.005	<0.005		
3/21/2017	<0.005	0.0251	<0.005	<0.005		
5/22/2017	<0.005	0.0263	<0.005			
5/23/2017				<0.005		
4/2/2018	<0.005	0.019		<0.005		
4/3/2018			<0.005			
6/4/2018	<0.005	0.025	<0.005	<0.005		
10/1/2018	<0.005	0.026	<0.005	<0.005		
3/11/2019				<0.005		
3/12/2019	<0.005	0.017	<0.005			
4/1/2019			<0.005			
4/2/2019	<0.005	0.019		<0.005		
9/23/2019	<0.005	0.038	<0.005			
9/24/2019				<0.005		
3/2/2020	<0.005	0.019	<0.005	0.00063 (J)		
3/25/2020	<0.005	0.02	<0.005			
3/26/2020				0.00058 (J)		
9/15/2020	<0.005	0.021	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020				<0.005		
11/10/2020						<0.005
11/11/2020				<0.005		
12/15/2020				0.00049 (J)		<0.005
1/19/2021						<0.005
1/20/2021				<0.005		
2/8/2021	<0.005			0.00074 (J)	<0.005	
2/9/2021		0.02	<0.005			<0.005
3/10/2021	<0.005			0.00065 (J)	<0.005	
3/11/2021		0.013	<0.005			<0.005
8/11/2021	<0.005					<0.005
8/12/2021		0.022	<0.005	0.0007 (J)	<0.005	
2/1/2022	<0.005	0.025	<0.005			<0.005
2/7/2022				0.00068 (J)	<0.005	
8/2/2022	0.00054 (J)	0.024	<0.005	0.00066 (J)		<0.005
8/9/2022				<0.005		
1/23/2023			<0.005	0.00049 (J)	<0.005	
1/24/2023	<0.005	0.024				<0.005
8/8/2023	0.0008 (J)	0.029	<0.005	0.00041 (J)	<0.005	<0.005



# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				<0.25	0.0419 (J)	<0.005
7/11/2016		0.001 (J)	<0.005			
7/12/2016				0.0232	0.0393	<0.005
8/30/2016		0.001 (J)	<0.005			
9/1/2016				0.0248	0.045	<0.005
10/20/2016		0.0008 (J)	<0.005			
10/24/2016				0.0253	0.0557	
10/25/2016						<0.005
12/7/2016				0.0269	0.0536	<0.005
12/8/2016		0.0006 (J)	<0.005			
1/24/2017		0.0006 (J)	<0.005			
1/26/2017				0.0294	0.055	<0.005
3/21/2017		0.0008 (J)	<0.005			
3/22/2017						<0.005
3/23/2017				0.0311	0.0715	
5/23/2017		0.0006 (J)	<0.005			
5/24/2017				0.0279	0.0446	<0.005
4/3/2018		<0.005	<0.005		0.032	<0.005
4/4/2018				0.025		
6/5/2018		<0.005	<0.005			
6/6/2018				0.027	0.032	<0.005
10/2/2018		<0.005	<0.005			
10/3/2018				0.023	0.051	<0.005
3/12/2019		0.00099 (J)	<0.005			
3/14/2019				0.025	0.038	
3/15/2019						<0.005
4/2/2019		0.0012 (J)	<0.005			
4/4/2019					0.035	0.00028 (J)
4/5/2019				0.021		
9/24/2019		0.00063 (J)	<0.005	0.026	0.022	
9/25/2019						<0.005
3/2/2020		0.00093 (J)	<0.005			
3/3/2020				0.029	0.03	0.00037 (J)
3/25/2020			<0.005			
3/26/2020		0.0013 (J)			0.022	
3/30/2020				0.028		<0.005
9/15/2020		0.00047 (J)	<0.005			
9/16/2020	<0.005					
9/17/2020					0.026	<0.005
9/18/2020				0.027		
11/10/2020	<0.005					
12/15/2020	<0.005					
1/19/2021	<0.005					
2/9/2021	<0.005	0.00071 (J)	<0.005			
2/10/2021						<0.005
2/11/2021				0.033		
2/12/2021					0.019	
3/10/2021	<0.005					
3/11/2021		0.0013 (J)	<0.005			
3/16/2021					0.018	

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.034		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	<0.005					
8/18/2021				0.033		
8/19/2021					0.011	<0.005
2/1/2022	<0.005					
2/7/2022		0.00055 (J)	<0.005			
2/8/2022					0.0081	<0.005
2/9/2022				0.038		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				0.037	0.0088	
1/24/2023	<0.005					
1/27/2023		0.00063 (J)	<0.005			
2/1/2023				0.035	0.0091	<0.005
8/8/2023	<0.005	<0.005	<0.005			
8/13/2023				0.036	0.0016 (J)	<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	0.0167					
5/24/2016		0.17 (J)				
7/12/2016	0.0148	0.168				
9/1/2016	0.0151	0.18				
10/25/2016	0.0141	0.188				
12/7/2016	0.0141					
12/8/2016		0.206				
1/26/2017	0.0154	0.195				
3/22/2017	0.0169					
3/23/2017		0.223				
5/25/2017	0.0154	0.209				
4/3/2018	0.016	0.19				
6/5/2018		0.19				
6/6/2018	0.018					
10/3/2018	0.016	0.19				
3/14/2019		0.16			0.0013 (J)	
3/15/2019	0.017		<0.005	0.028		
4/4/2019			0.00034 (J)			
4/5/2019	0.016	0.14		0.022	0.0012 (J)	
9/25/2019	0.015	0.18	<0.005			
9/26/2019					0.00098 (J)	
9/27/2019				0.035		
1/22/2020						0.052
3/2/2020				0.043	0.0011 (J)	
3/3/2020	0.016	0.15	<0.005			
3/27/2020				0.025		
3/31/2020	0.016	0.16				
4/1/2020			<0.005		0.0011 (J)	0.058
6/17/2020			<0.005			0.053
9/15/2020		0.16				
9/16/2020	0.013					
9/17/2020				0.029	0.00096 (J)	
9/21/2020			<0.005			0.047
2/11/2021	0.012	0.14	<0.005			
2/12/2021					0.001 (J)	0.055
2/15/2021				0.038		
3/17/2021				0.039	0.0011 (J)	
3/18/2021	0.012	0.14	<0.005			0.057
8/18/2021	0.009					0.054
8/19/2021		0.15	<0.005	0.022	0.00089 (J)	
2/8/2022	0.0066	0.16	<0.005	0.034		0.048
2/10/2022					0.001 (J)	
8/10/2022	0.012	0.16				0.046
8/11/2022			<0.005	0.015	0.00088 (J)	
1/27/2023			<0.005			0.034
1/30/2023	0.011			0.027		
2/1/2023		0.11			0.00081 (J)	
8/12/2023			<0.005			
8/13/2023	0.009	0.14		0.0089	0.00073 (J)	0.061

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.011	0.091	0.0015 (J)	
9/21/2020		0.084		
9/23/2020	0.0056		<0.005	
2/11/2021			0.00048 (J)	
2/15/2021		0.095		
3/12/2021			<0.005	
3/19/2021		0.1		
8/16/2021	0.0093			
8/18/2021		0.085	<0.005	0.03
2/8/2022		0.09	<0.005	0.031
2/9/2022	0.0065			
8/10/2022	0.0066		<0.005	
8/11/2022		0.082		0.027
1/30/2023	0.0071		<0.005	
2/1/2023		0.088		0.021 (J)
8/12/2023	0.0058	0.082		0.022
8/13/2023			<0.005	

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.397 (U)	0.627 (U)	0.342 (U)	0.662 (U)		
7/11/2016	0.738 (U)	1.38		1.19		
7/12/2016			0.499 (U)			
8/30/2016	0.581 (U)	1.05 (U)	0.976 (U)	0.847 (U)		
10/19/2016	0.213 (U)	1.11 (U)	0.626 (U)	2.34		
12/6/2016	0.444 (U)	0.741 (U)	0.805 (U)	0.925 (U)		
1/24/2017	0.373 (U)	0.908 (U)	0.336 (U)	0.607 (U)		
3/21/2017	0.816 (U)	0.567 (U)	0.358 (U)	0.074 (U)		
5/22/2017	0.554 (U)	0.638 (U)	0.744 (U)			
5/23/2017				0.55 (U)		
4/2/2018	0.405 (U)	0.761 (U)		0.371 (U)		
4/3/2018			0.684 (U)			
6/4/2018	1.13 (U)	0.975 (U)	0.0291 (U)	0.622 (U)		
10/1/2018	0.132 (U)	0.434 (U)	0.781 (U)	0.132 (U)		
3/11/2019				0.781 (U)		
3/12/2019	0.327 (U)	0.454 (U)	1.01 (U)			
4/1/2019			0.76 (U)			
4/2/2019	0.739 (U)	0.651 (U)		0.494 (U)		
9/24/2019				0.455 (U)		
9/30/2019	0.306 (U)	1.04 (U)	0.384 (U)			
3/2/2020	0.61 (U)	1.58	0.249 (U)	0.937 (U)		
3/25/2020	4.36	0.621 (U)	0.833 (U)			
3/26/2020				0.578 (U)		
9/15/2020	0.748 (U)	0.124 (U)	0.161 (U)	0.179 (U)		
9/16/2020						0.531 (U)
9/17/2020				0.665 (U)		
11/10/2020						0.788 (U)
11/11/2020				1.28		
12/15/2020				0.261 (U)		1.04 (U)
1/19/2021						0.685 (U)
1/20/2021				0.845 (U)		
2/8/2021	0.223 (U)			0.558 (U)	0.429 (U)	
2/9/2021		0.721 (U)	0.447 (U)			0.138 (U)
3/10/2021	0 (U)			0.281 (U)	1.21	
3/11/2021		0.737 (U)	0.128 (U)			1.51 (U)
8/11/2021	0.115 (U)					0.394 (U)
8/12/2021		0.746 (U)	0.389 (U)	0.359 (U)	0.11 (U)	
2/1/2022	0.143 (U)	0.588 (U)	0.266 (U)			1.12
2/7/2022				0.0978 (U)	0.066 (U)	
8/2/2022	0.203 (U)	0.861 (U)	0.4 (U)	0.963 (U)		0.662 (U)
1/23/2023			0.311 (U)	0.961	1.12	
1/24/2023	0.549 (U)	0.829 (U)				1.25
8/8/2023	0.195 (U)	0.175 (U)	0.411 (U)	0.463 (U)	0.463 (U)	0.503 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		0.685 (U)				
5/20/2016			0.843 (U)			
5/23/2016				0.568 (U)	0.171 (U)	
7/1/2016						0 (U)
7/11/2016		1.68	0.494 (U)			
7/12/2016				1.31	0.611 (U)	0.182 (U)
8/30/2016		2.42	0.946 (U)			
9/1/2016				1.64	0.766 (U)	1.23
10/20/2016		0.351 (U)	0.664 (U)			
10/24/2016				1.88	0.969	
10/25/2016						1.05 (U)
12/7/2016				1.35	0.302 (U)	1.11 (U)
12/8/2016		0.905 (U)	0.421 (U)			
1/24/2017		0.0774 (U)	0.965 (U)			
1/26/2017				2.1	0.626 (U)	1.29 (U)
3/21/2017		0.0599 (U)	0.139 (U)			
3/22/2017						0.453 (U)
3/23/2017				1.17	0.662 (U)	
5/23/2017		0.477 (U)	0.308 (U)			
5/24/2017				1 (U)	0.202 (U)	1.05 (U)
4/3/2018		0.858 (U)	0.828 (U)		0.384 (U)	0.783 (U)
4/4/2018				1.72		
6/5/2018		0.767 (U)	0.424 (U)			
6/6/2018				1.31 (U)	1.32 (U)	0.595 (U)
10/2/2018		0.489 (U)	0.643 (U)			
10/3/2018				1.48	0.858 (U)	1.03 (U)
3/12/2019		0.833 (U)	0.982 (U)			
3/14/2019				1.5	0.462 (U)	
3/15/2019						0.591 (U)
4/2/2019		1.07 (U)	0.621 (U)			
4/4/2019					0.512 (U)	0.96 (U)
4/5/2019				1.43 (U)		
9/24/2019		0.201 (U)	0.874 (U)	1.17	0.582 (U)	
9/25/2019						0.643 (U)
3/2/2020		0.547 (U)	0.676 (U)			
3/3/2020				1.84	1.43	1.32 (U)
3/25/2020			0.509 (U)			
3/26/2020		0.907 (U)			0.855 (U)	
3/30/2020				1.08 (U)		0.288 (U)
9/15/2020		0.601 (U)	1.36 (U)			
9/16/2020	0.422 (U)					
9/17/2020					0.395 (U)	1.1 (U)
9/18/2020				1.8 (U)		
11/10/2020	0.293 (U)					
12/15/2020	0.7 (U)					
1/19/2021	0.79 (U)					
2/9/2021	0.486 (U)	0.37 (U)	0.324 (U)			
2/10/2021						0.773 (U)
2/11/2021				0.73 (U)		
2/12/2021					1.65	
3/10/2021	0.811 (U)					
3/11/2021		1.07 (U)	0.601 (U)			

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/16/2021					0.801 (U)	
3/17/2021				1.84		0.228 (U)
8/12/2021		0.922 (U)	0.0804 (U)			
8/13/2021	1.2					
8/18/2021				0.858 (U)		
8/19/2021					0.527 (U)	0.668 (U)
2/1/2022	0.665 (U)					
2/7/2022		0.106 (U)	0.346 (U)			
2/8/2022					0.0242 (U)	0.168 (U)
2/9/2022				0.346 (U)		
8/2/2022	0.952 (U)					
8/10/2022		0.568 (U)	0.648 (U)			
8/11/2022				1.31	0.656 (U)	0.249 (U)
1/24/2023	0.421 (U)					
1/27/2023		1.47 (U)	0.801 (U)			
2/1/2023				1.13	0.626 (U)	0.757 (U)
8/8/2023	0.163 (U)	0.222 (U)	0.168 (U)			
8/13/2023				0.801 (U)	0.785 (U)	0.281 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	0.618 (U)					
5/24/2016		1.82				
7/12/2016	0.867	1.76				
9/1/2016	0.857 (U)	1.51				
10/25/2016	1.11 (U)	2.69				
12/7/2016	0.964 (U)					
12/8/2016		2.21				
1/26/2017	0.612 (U)	2.26				
3/22/2017	0.437 (U)					
3/23/2017		1.81				
5/25/2017	1.21 (U)	1.63				
4/3/2018	0.409 (U)	2.53				
6/5/2018		1.91				
6/6/2018	0.772 (U)					
10/3/2018	1.08 (U)	2.22				
3/14/2019		1.37 (U)			0.872 (U)	
3/15/2019	0.917 (U)		0.972 (U)	0.977		
4/4/2019			0.791 (U)			
4/5/2019	1.07 (U)	2.22		1.06 (U)	0.932 (U)	
9/25/2019	1.54	2.77	0.751 (U)			
9/26/2019					1.25	
9/27/2019				1.44 (U)		
3/2/2020				0.872 (U)	0.964 (U)	
3/3/2020	1.33	2.35	1.94			
3/27/2020				0.96 (U)		
3/31/2020	0.591 (U)	2.7				
4/1/2020			0.758 (U)		0.914 (U)	2.57
6/17/2020			0.691 (U)			1.43 (U)
9/15/2020		1.65				
9/16/2020	0.295 (U)					
9/17/2020				0.0879 (U)	0.32 (U)	
9/21/2020			0.436 (U)			2.53
2/11/2021	0.831 (U)	1.11	0.317 (U)			
2/12/2021					1.21 (U)	2.26
2/15/2021				0.215 (U)		
3/17/2021				0.981 (U)	0.579 (U)	
3/18/2021	0.856 (U)	1.63	0.5 (U)			0.733 (U)
8/18/2021	0.548 (U)					1.77
8/19/2021		1.45	1.17	0.689 (U)	0.69 (U)	
2/8/2022	1 (U)	0.93 (U)	0.463 (U)	0.0657 (U)		0.967 (U)
2/10/2022					0.919 (U)	
8/11/2022	0.361 (U)	1.46	0.691 (U)	0.789 (U)	0.39 (U)	1.52
1/27/2023			0.256 (U)			1.44 (U)
1/30/2023	0.5 (U)			0.621 (U)		
2/1/2023		0.871			0.406 (U)	
8/12/2023			0.297 (U)			
8/13/2023	0.678 (U)	1.03		0.361 (U)	0.0608 (U)	0.773 (U)



# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	1.36	2.02	1.79	
9/21/2020		3.85		
9/23/2020	0.563 (U)		0.98 (U)	
2/11/2021			0.12 (U)	
2/15/2021		1.52		
3/12/2021			0.578 (U)	
3/19/2021		0.524 (U)		
8/16/2021	0.693 (U)			
8/18/2021		1.67	1.31	0.973 (U)
2/8/2022		1.38	0.345 (U)	0.431 (U)
2/9/2022	0.297 (U)			
8/11/2022	1.05	1.71	0.505 (U)	1.02
1/30/2023	0.689 (U)		0.309 (U)	
2/1/2023		1.24		0.82 (U)
8/12/2023	0.676 (U)	0.897 (U)		0.484 (U)
8/13/2023			0.308 (U)	

# Time Series

Constituent: Field pH (s.u.) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	7.27	5.81	7.45	6.51		
7/11/2016	7.06	5.68		6.65		
7/12/2016			7.32			
8/30/2016	7.28	5.63	7.43	7.14		
10/19/2016	7.02	5.46	7.03	7.08		
12/6/2016	7.09	5.38	7.08	7		
1/24/2017	7.2	5.37	7.39	6.16		
3/21/2017	7.01	4.9	6.83	6.07		
5/22/2017	7.11	5.2	7.02			
5/23/2017				6.28		
10/3/2017	7.21	5.3	7.47	6.45		
4/2/2018	7.1	5.4		6.23		
4/3/2018			7.38			
6/4/2018	7.06	5.27	7.38	6.82		
10/1/2018	7.09	5.31	7.13	5.73		
3/11/2019				6.27		
3/12/2019	7.03	5.42	7.29			
4/1/2019			7.16			
4/2/2019	6.86	5.41		6.66		
9/23/2019	7.02	5.33	7.3			
9/24/2019				6.16		
3/2/2020	7.1	5.43	7.12	5.63		
3/25/2020	6.95	5.36	7.4			
3/26/2020				5.77		
9/15/2020	7.15	5.22	7.29	5.75		
9/16/2020						7.52
9/17/2020				7.62		
11/10/2020						7.27
11/11/2020				7.68		
12/15/2020				7.64		7.39
1/19/2021						7.39
1/20/2021				7.68		
2/8/2021	7.11			4.94	7.64	
2/9/2021		5.42	7.23			7.44
3/10/2021	6.95			5.28	7.7	
3/11/2021		5.8	7.33			7.46
8/11/2021	6.98					7.4
8/12/2021		5.05	7.31	5.26	7.7	
2/1/2022	7.19	5.24	7.45			7.52
2/7/2022				5.24	7.85	
8/2/2022	7.03	4.57	7.02	4.86		7.15
8/9/2022					7.58	
1/23/2023			7.32	5.62	7.55	
1/24/2023	6.76	5.22				7.56
8/8/2023	7.05	5.01	7.42	6.03	7.72	7.39

# Time Series

Constituent: Field pH (s.u.) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		6.62				
5/20/2016			7.58			
5/23/2016				4.56	6.17	7.15
7/11/2016		6.54	7.32			
7/12/2016				4.49	6.17	7.1
8/30/2016		6.38	7.69			
9/1/2016				4.54	6.22	7.29
10/20/2016		6.52	7.43			
10/24/2016				4.63	5.97	
10/25/2016						7.03
12/7/2016				4.6	5.87	6.85
12/8/2016		6.5	7.56			
1/24/2017		6.59	7.52			
1/26/2017				4.8	6.05	7.07
3/21/2017		6.55	7.4			
3/22/2017						7.15
3/23/2017				4.57	5.79	
5/23/2017		6.5	7.53			
5/24/2017				4.61	6.01	7.11
10/3/2017		6.63	7.51			
10/4/2017				4.74	5.82	7.17
4/3/2018		6.59	7.53		5.98	7.07
4/4/2018				4.5		
6/5/2018		6.44	7.37			
6/6/2018				4.49	6.12	7
10/2/2018		6.35	7.36			
10/3/2018				4.67	5.92	6.94
3/12/2019		6.42	7.5			
3/14/2019				4.66	5.71	
3/15/2019						7.09
4/2/2019		6.38	7.46			
4/4/2019					5.66	6.95
4/5/2019				4.67		
9/24/2019		6.4	7.41	4.77	6.33	
9/25/2019						6.92
3/2/2020		6.8	7.67			
3/3/2020				4.77	6	7.1
3/25/2020			7.39			
3/26/2020		6.38			6.03	
3/30/2020				4.57		7.09
9/15/2020		6.33	7.37			
9/16/2020	7.83					
9/17/2020					6.11	7.11
9/18/2020				4.88		
11/10/2020	7.84					
12/15/2020	7.87					
1/19/2021	7.86					
2/9/2021	7.84	6.35	7.4			
2/10/2021						7.08
2/11/2021				4.84		
2/12/2021					5.99	
3/10/2021	7.92					

# Time Series

Constituent: Field pH (s.u.) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/11/2021		6.48	7.56			
3/16/2021					6.08	
3/17/2021				4.72		7.19
8/12/2021		6.46	7.47			
8/13/2021	7.77					
8/18/2021				4.9		
8/19/2021					6.18	7.04
2/1/2022	8.25					
2/7/2022		6.51	7.65			
2/8/2022					6.04	7.18
2/9/2022				4.97		
8/2/2022	7.9					
8/10/2022		6.22	7.53			7.09
8/11/2022				4.93	6.29	
1/24/2023	8.22					
1/27/2023		6.52	7.66			
2/1/2023				4.93	6.22	7.15
8/8/2023	8.2	6.5	7.6			
8/13/2023				4.83	6.66	7.13

# Time Series

Constituent: Field pH (s.u.) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	6.4					
5/24/2016		4.83				
7/12/2016	6.09	4.58				
9/1/2016	6.35	4.51				
10/25/2016	6.23	4.53				
12/7/2016	6.23					
12/8/2016		4.56				
1/26/2017	6.24	4.61				
3/22/2017	6.25					
3/23/2017		4.63				
5/25/2017	6.27	4.69				
10/4/2017	6.18	4.58				
4/3/2018	6.22	4.54				
6/5/2018		4.57				
6/6/2018	6.22					
10/3/2018	6.23	4.41				
3/14/2019		4.39			6.68	
3/15/2019	6.32		6.81	5.95		
4/4/2019			6.7			
4/5/2019	6.26	4.5		5.96	6.66	
9/25/2019	6.28	4.54	6.54			
9/26/2019					6.64	
9/27/2019				5.81		
3/2/2020				5.97	7.05	
3/3/2020	6.35	4.55	6.72			
3/27/2020				5.71		
3/31/2020	6.28	4.43				
4/1/2020			6.9		6.8	4.35
6/17/2020			6.47			4.36
9/15/2020		4.47				
9/16/2020	6.35					
9/17/2020				5.66	6.71	
9/21/2020			6.92			4.48
2/11/2021	6.31	4.53	6.87			
2/12/2021					6.8	4.4
2/15/2021				5.48		
3/17/2021				5.57	6.86	
3/18/2021	6.43	4.54	6.95			4.27
8/18/2021	6.43					4.42
8/19/2021		4.43	6.85	6.05	6.72	
2/8/2022	6.42	4.59	7.09	5.37		4.42
2/10/2022					6.87	
8/10/2022	6.29	4.41				4.36
8/11/2022			6.96	5.3	6.57	
1/27/2023			7.31			5.61
1/30/2023	6.44			5.47		
2/1/2023		4.66			6.69	
8/12/2023			7.17			
8/13/2023	6.46	4.75		5.54	6.82	4.54

# Time Series

Constituent: Field pH (s.u.) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/17/2020	7.35	5.46	7.78	
9/21/2020		5.4		
9/23/2020	7.05		7.62	
2/11/2021			7.42	
2/15/2021		4.82		
3/12/2021			7.5	
3/19/2021		4.89		
8/16/2021	7.05			
8/18/2021		4.89	7.52	6.19
2/8/2022		4.86	7.63	6.57
2/9/2022	7.21			
8/10/2022	7		7.47	
8/11/2022		4.86		6.37
1/30/2023	6.99		7.56	
2/1/2023		4.89		6.37
8/12/2023	7.06	5.05		6.6
8/13/2023			7.61	

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	0.105 (J)	0.0303 (J)	0.0513 (J)	0.036 (J)		
7/11/2016	0.16 (J)	0.05 (J)		0.09 (J)		
7/12/2016			0.12 (J)			
8/30/2016	0.09 (J)	0.06 (J)	0.09 (J)	0.06 (J)		
10/19/2016	0.1 (J)	0.04 (J)	0.1 (J)	0.07 (J)		
12/6/2016	0.11 (J)	0.36	0.21 (J)	0.07 (J)		
1/24/2017	0.09 (J)	<0.1	0.06 (J)	<0.1		
3/21/2017	0.13 (J)	<0.1	0.005 (J)	<0.1		
5/22/2017	0.12 (J)	<0.1	0.05 (J)			
5/23/2017				0.01 (J)		
10/3/2017	0.13 (J)	<0.1	0.13 (J)	<0.1		
4/2/2018	<0.3	<0.1		<0.1		
4/3/2018			<0.1			
6/4/2018	0.074 (J)	<0.1	<0.1	0.097 (J)		
10/1/2018	<0.3	<0.1	<0.1	<0.1		
3/11/2019				0.035 (J)		
3/12/2019	0.29 (J)	0.038 (J)	0.072 (J)			
4/1/2019			0.029 (J)			
4/2/2019	0.1 (J)	0.071 (J)		<0.1		
9/23/2019	0.078 (J)	<0.1	<0.1			
9/24/2019				<0.1		
3/2/2020	0.076 (J)	<0.1	<0.1	<0.1		
3/25/2020	0.098 (J)	<0.1	<0.1			
3/26/2020				<0.1		
9/15/2020	0.082 (J)	<0.1	<0.1	<0.1		
9/16/2020						0.22
9/17/2020				0.2		
11/10/2020						0.19
11/11/2020				0.1		
12/15/2020				0.11		0.21
1/19/2021						0.16
1/20/2021					0.082 (J)	
2/8/2021	0.078 (J)			<0.1	0.096 (J)	
2/9/2021		<0.1	0.074 (J)			0.19
3/10/2021	0.079 (J)			<0.1	0.11	
3/11/2021		0.1	<0.1			0.2
8/11/2021	0.058 (J)					0.15
8/12/2021		<0.1	<0.1	<0.1	0.079 (J)	
2/1/2022	0.064 (J)	<0.1	<0.1			0.19
2/7/2022				<0.1	0.085 (J)	
8/2/2022	0.09 (J)	0.053 (J)	0.067 (J)	0.076 (J)		0.22
8/9/2022					0.12	
1/23/2023			0.061 (J)	0.12	0.11	
1/24/2023	0.089 (J)	0.053 (J)				0.23
8/8/2023	0.088 (J)	0.07 (J)	0.055 (J)	0.11	0.1	0.18

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		0.08 (J)				
5/20/2016			0.065 (J)			
5/23/2016				<0.1	<0.1	0.038 (J)
7/11/2016		0.09 (J)	0.13 (J)			
7/12/2016				0.2 (J)	0.09 (J)	0.26 (J)
8/30/2016		0.08 (J)	0.07 (J)			
9/1/2016				0.08 (J)	0.22 (J)	0.42
10/20/2016		0.1 (J)	0.06 (J)			
10/24/2016				0.04 (J)	0.07 (J)	
10/25/2016						0.25 (J)
12/7/2016				0.11 (J)	0.23 (J)	0.23 (J)
12/8/2016		0.08 (J)	0.06 (J)			
1/24/2017		0.09 (J)	0.02 (J)			
1/26/2017				0.13 (J)	<0.1	0.02 (J)
3/21/2017		0.04 (J)	0.08 (J)			
3/22/2017						0.3
3/23/2017				0.28 (J)	0.12 (J)	
5/23/2017		0.04 (J)	0.006 (J)			
5/24/2017				0.32	0.31	0.46
10/3/2017		0.06 (J)	<0.1			
10/4/2017				0.52	0.6	<0.1
4/3/2018		<0.1	<0.1		<0.1	<0.1
4/4/2018				<0.1		
6/5/2018		0.083 (J)	0.055 (J)			
6/6/2018				0.25 (J)	0.17 (J)	<0.1
10/2/2018		<0.1	0.076 (J)			
10/3/2018				0.21 (J)	<0.1	<0.1
3/12/2019		0.079 (J)	0.061 (J)			
3/14/2019				0.24 (J)	<0.1	
3/15/2019						<0.1
4/2/2019		0.12 (J)	<0.1			
4/4/2019					0.066 (J)	<0.1
4/5/2019				0.66		
9/24/2019		0.058 (J)	<0.1	0.053 (J)	0.12 (J)	
9/25/2019						<0.1
3/2/2020		0.053 (J)	<0.1			
3/3/2020				<0.1	0.064 (J)	<0.1
3/25/2020			<0.1			
3/26/2020		0.066 (J)			<0.1	
3/30/2020				0.092 (J)		0.059 (J)
9/15/2020		0.061 (J)	<0.1			
9/16/2020	0.52					
9/17/2020					<0.1	<0.1
9/18/2020				<0.1		
11/10/2020	0.59					
12/15/2020	0.67					
1/19/2021	0.74					
2/9/2021	0.44	0.053 (J)	<0.1			
2/10/2021						0.21
2/11/2021				0.059 (J)		
2/12/2021					0.053 (J)	
3/10/2021	0.65					



# Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/11/2021		0.06 (J)	0.17			
3/16/2021					<0.1	
3/17/2021				0.076 (J)		<0.1
8/12/2021		<0.1	<0.1			
8/13/2021	0.87					
8/18/2021				<0.1		
8/19/2021					<0.1	<0.1
2/1/2022	0.96					
2/7/2022		<0.1	<0.1			
2/8/2022					<0.1	<0.1
2/9/2022				0.053 (J)		
8/2/2022	0.8					
8/10/2022		0.078 (J)	0.067 (J)			0.054 (J)
8/11/2022				0.085 (J)	0.097 (J)	
1/24/2023	1.3					
1/27/2023		0.088 (J)	0.067 (J)			
2/1/2023				0.094 (J)	0.086 (J)	0.053 (J)
8/8/2023	1.3	0.059 (J)	0.072 (J)			
8/13/2023				0.1	0.12	0.053 (J)

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.3					
5/24/2016		<0.3				
7/12/2016	0.09 (J)	0.54				
9/1/2016	0.03 (J)	0.49				
10/25/2016	0.07 (J)	0.58				
12/7/2016	0.54					
12/8/2016		0.63				
1/26/2017	<0.3	0.71				
3/22/2017	0.07 (J)					
3/23/2017		0.57				
5/25/2017	0.42	0.54				
10/4/2017	0.93	0.95				
4/3/2018	<0.3	0.33				
6/5/2018		0.66				
6/6/2018	0.23 (J)					
10/3/2018	<0.3	0.32				
3/14/2019		0.88			<0.1	
3/15/2019	<0.3		<0.1	<0.1		
4/4/2019			0.1 (J)			
4/5/2019	0.16 (J)	0.37		0.13 (J)	0.14 (J)	
9/25/2019	0.081 (J)	0.73	<0.1			
9/26/2019					0.16 (J)	
9/27/2019				0.28 (J)		
1/22/2020						0.18 (J)
3/2/2020				<0.1	<0.1	
3/3/2020	<0.3	0.34	<0.1			
3/27/2020				<0.1		
3/31/2020	<0.3	0.45				
4/1/2020			<0.1		<0.1	0.15 (J)
6/17/2020			<0.1			0.25
9/15/2020		0.31				
9/16/2020	0.058 (J)					
9/17/2020				<0.1	<0.1	
9/21/2020			<0.1			0.14
2/11/2021	0.058 (J)	0.71	<0.1			
2/12/2021					<0.1	0.25
2/15/2021				<0.1		
3/17/2021				<0.1	<0.1	
3/18/2021	0.057 (J)	0.64	<0.1			0.4
8/18/2021	0.062 (J)					0.16
8/19/2021		0.31	<0.1	<0.1	<0.1	
2/8/2022	0.055 (J)	0.19	<0.1	<0.1		0.14
2/10/2022					<0.1	
8/10/2022	0.086 (J)	0.3				0.21
8/11/2022			0.056 (J)	0.063 (J)	0.06 (J)	
1/27/2023			0.05 (J)			0.087 (J)
1/30/2023	0.097 (J)			0.064 (J)		
2/1/2023		0.21			0.074 (J)	
8/12/2023			<0.1			
8/13/2023	0.081 (J)	0.25		0.057 (J)	0.061 (J)	0.22

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.082 (J)	0.053 (J)	0.1	
9/21/2020		<0.1		
9/23/2020	<0.1		0.065 (J)	
2/11/2021			0.077 (J)	
2/15/2021		0.093 (J)		
3/12/2021			0.061 (J)	
3/19/2021		0.082 (J)		
8/16/2021	0.066 (J)			
8/18/2021		0.052 (J)	0.05 (J)	0.072 (J)
2/8/2022		0.065 (J)	0.055 (J)	0.078 (J)
2/9/2022	0.051 (J)			
8/10/2022	0.081 (J)		0.084 (J)	
8/11/2022		0.088 (J)		0.11
1/30/2023	0.089 (J)		0.092 (J)	
2/1/2023		0.1		0.18
8/12/2023	0.062 (J)	0.077 (J)		0.1
8/13/2023			0.11	

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.001	<0.001	<0.001	<0.001		
7/11/2016	<0.001	<0.001		<0.001		
7/12/2016			0.0001 (J)			
8/30/2016	<0.001	<0.001	<0.001	<0.001		
10/19/2016	<0.001	<0.001	<0.001	<0.001		
12/6/2016	<0.001	<0.001	<0.001	0.0002 (J)		
1/24/2017	<0.001	<0.001	<0.001	<0.001		
3/21/2017	<0.001	6E-05 (J)	0.0001 (J)	<0.001		
5/22/2017	<0.001	9E-05 (J)	<0.001			
5/23/2017				<0.001		
4/2/2018	<0.001	<0.001		<0.001		
4/3/2018			<0.001			
3/11/2019				<0.001		
3/12/2019	<0.001	<0.001	<0.001			
4/1/2019			<0.001			
4/2/2019	<0.001	<0.001		<0.001		
9/23/2019	7.8E-05 (J)	9.2E-05 (J)	<0.001			
9/24/2019				<0.001		
3/2/2020	4.8E-05 (J)	9.5E-05 (J)	<0.001	0.00026 (J)		
3/25/2020	<0.001	0.00011 (J)	<0.001			
3/26/2020				5.9E-05 (J)		
9/15/2020	<0.001	8E-05 (J)	4.2E-05 (J)	4.9E-05 (J)		
9/16/2020						5E-05 (J)
9/17/2020				6.2E-05 (J)		
11/10/2020						6.9E-05 (J)
11/11/2020				8.4E-05 (J)		
12/15/2020				0.00045 (J)		8.2E-05 (J)
1/19/2021						4.4E-05 (J)
1/20/2021				<0.001		
2/8/2021	5.8E-05 (J)			0.00024 (J)	8.1E-05 (J)	
2/9/2021		9.4E-05 (J)	<0.001			0.00029 (J)
3/10/2021	<0.001			0.00016 (J)	<0.001	
3/11/2021		7.6E-05 (J)	<0.001			9.4E-05 (J)
8/11/2021	<0.001					<0.001
8/12/2021		<0.001	<0.001	<0.001	<0.001	
2/1/2022	<0.001	<0.001	<0.001			<0.001
2/7/2022				<0.001	<0.001	
8/2/2022	<0.001	<0.001	<0.001	<0.001		<0.001
8/9/2022					<0.001	
1/23/2023			<0.001	<0.001	<0.001	
1/24/2023	<0.001	<0.001				<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.001				
5/20/2016			<0.001			
5/23/2016				0.00182 (J)	<0.001	<0.001
7/11/2016		<0.001	<0.001			
7/12/2016				0.0015 (J)	<0.001	<0.001
8/30/2016		<0.001	<0.001			
9/1/2016				0.0016 (J)	<0.001	<0.001
10/20/2016		0.0002 (J)	<0.001			
10/24/2016				0.0016 (J)	<0.001	
10/25/2016						<0.001
12/7/2016				0.0018 (J)	<0.001	<0.001
12/8/2016		<0.001	<0.001			
1/24/2017		<0.001	<0.001			
1/26/2017				0.002 (J)	<0.001	0.0001 (J)
3/21/2017		<0.001	<0.001			
3/22/2017						0.0002 (J)
3/23/2017				0.0019 (J)	0.001 (J)	
5/23/2017		9E-05 (J)	0.0003 (J)			
5/24/2017				0.0016 (J)	0.0001 (J)	0.0001 (J)
4/3/2018		<0.001	<0.001		<0.001	<0.001
4/4/2018				<0.001		
3/12/2019		<0.001	<0.001			
3/14/2019				0.0014 (J)	<0.001	
3/15/2019						<0.001
4/2/2019		<0.001	<0.001			
4/4/2019					7.2E-05 (J)	0.00016 (J)
4/5/2019				0.0012 (J)		
9/24/2019		<0.001	7.1E-05 (J)	0.0013 (J)	0.0002 (J)	
9/25/2019						<0.001
3/2/2020		<0.001	<0.001			
3/3/2020				0.0017 (J)	5.3E-05 (J)	0.00016 (J)
3/25/2020			<0.001			
3/26/2020		<0.001			<0.001	
3/30/2020				0.0015 (J)		7.3E-05 (J)
9/15/2020		<0.001	<0.001			
9/16/2020	0.00021 (J)					
9/17/2020					<0.001	7.8E-05 (J)
9/18/2020				0.0012 (J)		
11/10/2020	0.0002 (J)					
12/15/2020	0.00011 (J)					
1/19/2021	0.00019 (J)					
2/9/2021	0.0001 (J)	<0.001	<0.001			
2/10/2021						9.4E-05 (J)
2/11/2021				0.0015 (J)		
2/12/2021					<0.001	
3/10/2021	<0.001					
3/11/2021		<0.001	<0.001			
3/16/2021					<0.001	
3/17/2021				0.0019		5.8E-05 (J)
8/12/2021		<0.001	<0.001			
8/13/2021	<0.001					
8/18/2021				0.0015		

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.001	<0.001
2/1/2022	<0.001					
2/7/2022		<0.001	<0.001			
2/8/2022					<0.001	<0.001
2/9/2022				0.0014		
8/2/2022	<0.001					
8/10/2022		<0.001	<0.001			<0.001
8/11/2022				<0.001	<0.001	
1/24/2023	<0.001					
1/27/2023		<0.001	<0.001			
2/1/2023				0.0011	<0.001	<0.001
8/8/2023	<0.001	<0.001	<0.001			
8/13/2023				0.00079 (J)	<0.001	<0.001

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.001					
5/24/2016		0.00154 (J)				
7/12/2016	<0.001	0.0012 (J)				
9/1/2016	<0.001	0.0014 (J)				
10/25/2016	<0.001	0.0015 (J)				
12/7/2016	<0.001					
12/8/2016		0.0017 (J)				
1/26/2017	<0.001	0.0013 (J)				
3/22/2017	0.0001 (J)					
3/23/2017		0.001 (J)				
5/25/2017	<0.001	0.0012 (J)				
4/3/2018	<0.001	<0.001				
3/14/2019		0.0015 (J)			<0.001	
3/15/2019	<0.001		<0.001	<0.001		
4/4/2019			<0.001			
4/5/2019	7.6E-05 (J)	0.0015 (J)		<0.001	<0.001	
9/25/2019	8.9E-05 (J)	0.0015 (J)	<0.001			
9/26/2019					<0.001	
9/27/2019				0.0001 (J)		
3/2/2020				9.4E-05 (J)	5.1E-05 (J)	
3/3/2020	0.00013 (J)	0.0013 (J)	4.7E-05 (J)			
3/27/2020				<0.001		
3/31/2020	7.7E-05 (J)	0.0014 (J)				
4/1/2020			4.8E-05 (J)		<0.001	0.0017 (J)
6/17/2020			<0.001			0.0017 (J)
9/15/2020		0.0014 (J)				
9/16/2020	6.5E-05 (J)					
9/17/2020				<0.001	0.00016 (J)	
9/21/2020			<0.001			0.0017 (J)
2/11/2021	0.00018 (J)	0.00098 (J)	0.00066 (J)			
2/12/2021					<0.001	0.0018 (J)
2/15/2021				3.6E-05 (J)		
3/17/2021				<0.001	<0.001	
3/18/2021	8.8E-05 (J)	0.00096 (J)	7.3E-05 (J)			0.0017
8/18/2021	<0.001					0.0016
8/19/2021		0.0013	<0.001	<0.001	<0.001	
2/8/2022	<0.001	0.0009 (J)	<0.001	<0.001		0.0014
2/10/2022					<0.001	
8/10/2022	<0.001	0.0011				<0.001
8/11/2022			<0.001	<0.001	<0.001	
1/27/2023			<0.001			<0.001
1/30/2023	<0.001			<0.001		
2/1/2023		<0.001			<0.001	
8/12/2023			<0.001			
8/13/2023	0.00049 (J)	0.00075 (J)		<0.001	<0.001	0.0011

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.00087 (J)	0.00016 (J)	0.0017 (J)	
9/21/2020		0.00099 (J)		
9/23/2020	<0.001		8.2E-05 (J)	
2/11/2021			0.00039 (J)	
2/15/2021		0.00055 (J)		
3/12/2021			<0.001	
3/19/2021		0.00066 (J)		
8/16/2021	<0.001			
8/18/2021		<0.001	<0.001	<0.001
2/8/2022		<0.001	<0.001	<0.001
2/9/2022	<0.001			
8/10/2022	<0.001		<0.001	
8/11/2022		<0.001		<0.001
1/30/2023	<0.001		<0.001	
2/1/2023		<0.001		<0.001
8/12/2023	<0.001	0.00035 (J)		<0.001
8/13/2023			<0.001	



# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.03	<0.03	<0.03	<0.03		
7/11/2016	<0.03	0.0014 (J)		0.0015 (J)		
7/12/2016			0.0024 (J)			
8/30/2016	<0.03	<0.03	0.0025 (J)	0.0027 (J)		
10/19/2016	<0.03	<0.03	0.003 (J)	0.0042 (J)		
12/6/2016	<0.03	<0.03	0.0033 (J)	0.0046 (J)		
1/24/2017	<0.03	<0.03	0.003 (J)	<0.03		
3/21/2017	<0.03	0.0012 (J)	0.0034 (J)	<0.03		
5/22/2017	<0.03	<0.03	0.003 (J)			
5/23/2017				<0.03		
4/2/2018	<0.03	0.0015 (J)		<0.03		
4/3/2018			0.003 (J)			
6/4/2018	0.001 (J)	0.0016 (J)	0.0027 (J)	0.00097 (J)		
10/1/2018	0.00099 (J)	0.0013 (J)	0.0032 (J)	<0.03		
3/11/2019				<0.03		
3/12/2019	0.001 (J)	0.0018 (J)	0.0032 (J)			
4/1/2019			0.0032 (J)			
4/2/2019	0.001 (J)	0.0018 (J)		0.00098 (J)		
9/23/2019	0.0011 (J)	0.0016 (J)	0.0029 (J)			
9/24/2019				<0.03		
3/2/2020	0.0012 (J)	0.0017 (J)	0.0037 (J)	0.0012 (J)		
3/25/2020	0.00083 (J)	0.0017 (J)	0.0035 (J)			
3/26/2020				0.00095 (J)		
9/15/2020	0.00087 (J)	0.0015 (J)	0.0026 (J)	<0.03		
9/16/2020						0.0018 (J)
9/17/2020				0.0039 (J)		
11/10/2020						0.0013 (J)
11/11/2020				0.0086 (J)		
12/15/2020				0.008 (J)		0.0019 (J)
1/19/2021						0.0025 (J)
1/20/2021				0.01 (J)		
2/8/2021	0.00086 (J)			0.0013 (J)	0.0098 (J)	
2/9/2021		0.0012 (J)	0.0032 (J)			0.0026 (J)
3/10/2021	0.0009 (J)			0.0011 (J)	0.0094 (J)	
3/11/2021		0.0011 (J)	0.0035 (J)			0.0022 (J)
8/11/2021	0.00078 (J)					0.0024 (J)
8/12/2021		0.0012 (J)	0.0028 (J)	0.0013 (J)	0.0096 (J)	
2/1/2022	0.0011 (J)	0.0017 (J)	0.0037 (J)			0.0024 (J)
2/7/2022				0.0013 (J)	0.0097 (J)	
8/2/2022	<0.03	0.0013 (J)	0.003 (J)	0.0011 (J)		0.0019 (J)
8/9/2022					0.011 (J)	
1/23/2023			0.003 (J)	<0.03	0.0097 (J)	
1/24/2023	0.00092 (J)	0.0014 (J)				0.002 (J)
8/8/2023	<0.03	0.0017 (J)	0.0031 (J)	<0.03	0.01 (J)	0.0021 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.03				
5/20/2016			<0.03			
5/23/2016				<0.03	<0.03	<0.03
7/11/2016		0.0034 (J)	0.01 (J)			
7/12/2016				<0.03	<0.03	0.0037 (J)
8/30/2016		0.003 (J)	0.0095 (J)			
9/1/2016				<0.03	0.0021 (J)	0.0033 (J)
10/20/2016		0.0031 (J)	0.0105 (J)			
10/24/2016				<0.03	<0.03	
10/25/2016						0.0029 (J)
12/7/2016				<0.03	<0.03	0.0029 (J)
12/8/2016		0.0027 (J)	0.01 (J)			
1/24/2017		0.0028 (J)	0.0108 (J)			
1/26/2017				<0.03	<0.03	0.0028 (J)
3/21/2017		0.0037 (J)	0.0115 (J)			
3/22/2017						0.0025 (J)
3/23/2017				<0.03	0.0016 (J)	
5/23/2017		0.0033 (J)	0.011 (J)			
5/24/2017				<0.03	0.0029 (J)	0.0029 (J)
4/3/2018		0.0033 (J)	0.012 (J)		0.0026 (J)	0.0028 (J)
4/4/2018				<0.03		
6/5/2018		0.0034 (J)	0.011 (J)			
6/6/2018				<0.03	0.0013 (J)	0.0031 (J)
10/2/2018		0.0035 (J)	0.01 (J)			
10/3/2018				<0.03	0.0017 (J)	0.0026 (J)
3/12/2019		0.0032 (J)	0.011 (J)			
3/14/2019				<0.03	<0.03	
3/15/2019						0.0041 (J)
4/2/2019		0.0028 (J)	0.0095 (J)			
4/4/2019					0.0009 (J)	0.0032 (J)
4/5/2019				<0.03		
9/24/2019		0.0035 (J)	0.011 (J)	<0.03	0.0012 (J)	
9/25/2019						0.0038 (J)
3/2/2020		0.0036 (J)	0.012			
3/3/2020				<0.03	0.0084 (J)	0.0047 (J)
3/25/2020			0.011 (J)			
3/26/2020		0.0029 (J)			0.0061 (J)	
3/30/2020				<0.03		0.0041 (J)
9/15/2020		0.003 (J)	0.0095 (J)			
9/16/2020	0.014 (J)					
9/17/2020					0.0094 (J)	0.0043 (J)
9/18/2020				<0.03		
11/10/2020	0.025 (J)					
12/15/2020	0.028 (J)					
1/19/2021	0.034					
2/9/2021	0.026 (J)	0.003 (J)	0.01 (J)			
2/10/2021						0.0038 (J)
2/11/2021				<0.03		
2/12/2021					0.036	
3/10/2021	0.03					
3/11/2021		0.0037 (J)	0.012 (J)			
3/16/2021					0.032	

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				<0.03		0.0048 (J)
8/12/2021		0.0032 (J)	0.0094 (J)			
8/13/2021	0.032					
8/18/2021				<0.03		
8/19/2021					0.0058 (J)	0.0042 (J)
2/1/2022	0.048					
2/7/2022		0.0029 (J)	0.0097 (J)			
2/8/2022					0.014 (J)	0.0034 (J)
2/9/2022				<0.03		
8/2/2022	0.041					
8/11/2022				<0.03	0.0025 (J)	
1/24/2023	0.064					
1/27/2023		0.003 (J)	0.0096 (J)			
2/1/2023				<0.03	0.016 (J)	0.0036 (J)
8/8/2023	0.092 (o)	0.0095 (J)	0.0028 (J)			
8/13/2023				<0.03	0.0047 (J)	0.003 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.03					
5/24/2016		0.0142 (J)				
7/12/2016	<0.03	0.0141 (J)				
9/1/2016	<0.03	0.0158 (J)				
10/25/2016	<0.03	0.016 (J)				
12/7/2016	<0.03					
12/8/2016		0.0144 (J)				
1/26/2017	<0.03	0.0136 (J)				
3/22/2017	<0.03					
3/23/2017		0.0151 (J)				
5/25/2017	0.0011 (J)	0.0154 (J)				
4/3/2018	<0.03	0.013 (J)				
6/5/2018		0.013 (J)				
6/6/2018	<0.03					
10/3/2018	<0.03	0.015 (J)				
3/14/2019		0.011 (J)			0.0028 (J)	
3/15/2019	0.0011 (J)		0.025 (J)	0.002 (J)		
4/4/2019			0.019 (J)			
4/5/2019	0.00074 (J)	0.0084 (J)		0.0013 (J)	0.0021 (J)	
9/25/2019	0.0011 (J)	0.015 (J)	0.024 (J)			
9/26/2019					0.0023 (J)	
9/27/2019				0.0013 (J)		
3/2/2020				0.0015 (J)	0.0025 (J)	
3/3/2020	0.0012 (J)	0.012 (J)	0.026 (J)			
3/27/2020				0.0013 (J)		
3/31/2020	0.0009 (J)	0.012 (J)				
4/1/2020			0.026 (J)		0.0024 (J)	0.0011 (J)
6/17/2020			0.023 (J)			0.00097 (J)
9/15/2020		0.014 (J)				
9/16/2020	0.0012 (J)					
9/17/2020				0.0011 (J)	0.0021 (J)	
9/21/2020			0.022 (J)			0.00086 (J)
2/11/2021	0.0013 (J)	0.011 (J)	0.021 (J)			
2/12/2021					0.0023 (J)	0.0011 (J)
2/15/2021				0.0011 (J)		
3/17/2021				0.0012 (J)	0.0024 (J)	
3/18/2021	0.0014 (J)	0.013 (J)	0.026 (J)			0.0012 (J)
8/18/2021	0.0012 (J)					0.00097 (J)
8/19/2021		0.013 (J)	0.022 (J)	0.0012 (J)	0.0022 (J)	
2/8/2022	0.0014 (J)	0.01 (J)	0.022 (J)	0.0011 (J)		0.001 (J)
2/10/2022					0.0029 (J)	
8/11/2022			0.022 (J)	0.0011 (J)	0.002 (J)	
1/27/2023			0.018 (J)			<0.03
1/30/2023	0.0014 (J)			0.0011 (J)		
2/1/2023		0.0093 (J)			0.0019 (J)	
8/12/2023			0.015 (J)			
8/13/2023	0.0018 (J)	0.012 (J)		0.0014 (J)	0.0017 (J)	0.00077 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0021 (J)	0.0046 (J)	0.038 (J)	
9/21/2020		0.0036 (J)		
9/23/2020	0.0011 (J)		0.031	
2/11/2021			0.034	
2/15/2021		0.0043 (J)		
3/12/2021			0.035	
3/19/2021		0.0045 (J)		
8/16/2021	0.001 (J)			
8/18/2021		0.0036 (J)	0.03	0.0022 (J)
2/8/2022		0.0039 (J)	0.029 (J)	0.001 (J)
2/9/2022	0.0022 (J)			
8/11/2022		<0.03		0.0014 (J)
1/30/2023	0.0013 (J)		0.021 (J)	
2/1/2023		0.0034 (J)		0.0015 (J)
8/12/2023	0.0013 (J)	0.0031 (J)		0.00098 (J)
8/13/2023			0.02 (J)	

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.0002	<0.0002	<0.0002	<0.0002		
7/11/2016	<0.0002	<0.0002		<0.0002		
7/12/2016			<0.0002			
8/30/2016	4E-05 (J)	4E-05 (J)	<0.0002	5E-05 (J)		
10/19/2016	<0.0002	<0.0002	<0.0002	<0.0002		
12/6/2016	<0.0002	<0.0002	<0.0002	5E-05 (J)		
1/24/2017	<0.0002	<0.0002	<0.0002	0.0001 (J)		
3/21/2017	<0.0002	<0.0002	<0.0002	0.00016 (J)		
5/22/2017	<0.0002	<0.0002	<0.0002			
5/23/2017				5E-05 (J)		
4/2/2018	<0.0002	<0.0002		<0.0002		
4/3/2018			<0.0002			
3/11/2019				<0.0002		
3/12/2019	<0.0002	<0.0002	<0.0002			
3/2/2020	<0.0002	<0.0002	<0.0002	<0.0002		
9/16/2020						<0.0002
9/17/2020					<0.0002	
11/10/2020						<0.0002
11/11/2020					<0.0002	
12/15/2020					<0.0002	<0.0002
1/19/2021						<0.0002
1/20/2021					<0.0002	
2/8/2021	<0.0002			<0.0002	<0.0002	
2/9/2021		<0.0002	<0.0002			<0.0002
2/1/2022	<0.0002	<0.0002	<0.0002			<0.0002
2/7/2022				<0.0002	<0.0002	
8/2/2022	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
8/9/2022					<0.0002	
1/23/2023			<0.0002	<0.0002	<0.0002	
1/24/2023	<0.0002	<0.0002				<0.0002
8/8/2023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.0002				
5/20/2016			<0.0002			
5/23/2016				<0.0002	<0.0002	<0.0002
7/11/2016		<0.0002	<0.0002			
7/12/2016				<0.0002	<0.0002	<0.0002
8/30/2016		<0.0002	4.4E-05 (J)			
9/1/2016				<0.0002	<0.0002	<0.0002
10/20/2016		<0.0002	<0.0002			
10/24/2016				<0.0002	<0.0002	
10/25/2016						<0.0002
12/7/2016				<0.0002	<0.0002	<0.0002
12/8/2016		<0.0002	<0.0002			
1/24/2017		<0.0002	<0.0002			
1/26/2017				<0.0002	<0.0002	<0.0002
3/21/2017		<0.0002	<0.0002			
3/22/2017						<0.0002
3/23/2017				<0.0002	<0.0002	
5/23/2017		<0.0002	<0.0002			
5/24/2017				<0.0002	<0.0002	<0.0002
4/3/2018		<0.0002	<0.0002		<0.0002	<0.0002
4/4/2018				<0.0002		
3/12/2019		<0.0002	<0.0002			
3/14/2019				<0.0002	<0.0002	
3/15/2019						<0.0002
3/2/2020		<0.0002	<0.0002			
3/3/2020				<0.0002	<0.0002	<0.0002
9/16/2020	<0.0002					
11/10/2020	<0.0002					
12/15/2020	<0.0002					
1/19/2021	<0.0002					
2/9/2021	<0.0002	<0.0002	<0.0002			
2/10/2021						<0.0002
2/11/2021				<0.0002		
2/12/2021					<0.0002	
2/1/2022	<0.0002					
2/7/2022		<0.0002	<0.0002			
2/8/2022					<0.0002	<0.0002
2/9/2022				<0.0002		
8/2/2022	<0.0002					
8/11/2022				<0.0002	<0.0002	
1/24/2023	<0.0002					
1/27/2023		<0.0002	<0.0002			
2/1/2023				<0.0002	<0.0002	<0.0002
8/8/2023	<0.0002	<0.0002	<0.0002			
8/13/2023				<0.0002	<0.0002	<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.0002					
5/24/2016		<0.0002				
7/12/2016	<0.0002	<0.0002				
9/1/2016	<0.0002	6E-05 (J)				
10/25/2016	<0.0002	4E-05 (J)				
12/7/2016	<0.0002					
12/8/2016		<0.0002				
1/26/2017	<0.0002	8E-05 (J)				
3/22/2017	<0.0002					
3/23/2017		9E-05 (J)				
5/25/2017	<0.0002	8E-05 (J)				
4/3/2018	<0.0002	<0.0002				
3/14/2019		<0.0002			<0.0002	
3/15/2019	<0.0002		<0.0002	<0.0002		
3/2/2020				<0.0002	<0.0002	
3/3/2020	<0.0002	<0.0002	<0.0002			
2/11/2021	<0.0002	<0.0002	<0.0002			
2/12/2021					<0.0002	<0.0002
2/15/2021				<0.0002		
2/8/2022	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
2/10/2022					<0.0002	
8/11/2022			<0.0002	0.00016 (J)	0.00017 (J)	
1/27/2023			<0.0002			<0.0002
1/30/2023	<0.0002			<0.0002		
2/1/2023		<0.0002			<0.0002	
8/12/2023			<0.0002			
8/13/2023	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002



# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
2/11/2021			<0.0002	
2/15/2021		<0.0002		
2/8/2022		0.00014 (J)	<0.0002	<0.0002
2/9/2022	<0.0002			
8/11/2022		0.00014 (J)		0.00013 (J)
1/30/2023	<0.0002		<0.0002	
2/1/2023		0.00084		<0.0002
8/12/2023	<0.0002	<0.0002		<0.0002
8/13/2023			<0.0002	

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.01	<0.01	<0.01	<0.01		
7/11/2016	<0.01	<0.01		<0.01		
7/12/2016			<0.01			
8/30/2016	<0.01	<0.01	<0.01	<0.01		
10/19/2016	<0.01	<0.01	<0.01	<0.01		
12/6/2016	<0.01	<0.01	<0.01	<0.01		
1/24/2017	<0.01	<0.01	<0.01	<0.01		
3/21/2017	<0.01	<0.01	<0.01	<0.01		
5/22/2017	<0.01	<0.01	<0.01			
5/23/2017				<0.01		
4/2/2018	<0.01	<0.01		<0.01		
4/3/2018			<0.01			
3/11/2019				<0.01		
3/12/2019	<0.01	<0.01	<0.01			
4/1/2019			<0.01			
4/2/2019	<0.01	<0.01		<0.01		
9/23/2019	<0.01	<0.01	<0.01			
9/24/2019				<0.01		
3/2/2020	<0.01	<0.01	<0.01	<0.01		
3/25/2020	<0.01	<0.01	<0.01			
3/26/2020				<0.01		
9/15/2020	<0.01	<0.01	<0.01	<0.01		
9/16/2020						0.0044 (J)
9/17/2020					0.0037 (J)	
11/10/2020						0.0072 (J)
11/11/2020					<0.01	
12/15/2020					0.00082 (J)	0.0044 (J)
1/19/2021						0.0038 (J)
1/20/2021					<0.01	
2/8/2021	<0.01			<0.01	<0.01	
2/9/2021		<0.01	<0.01			0.0045 (J)
3/10/2021	<0.01			<0.01	<0.01	
3/11/2021		<0.01	<0.01			0.0064 (J)
8/11/2021	<0.01					0.0034 (J)
8/12/2021		<0.01	<0.01	<0.01	<0.01	
2/1/2022	<0.01	<0.01	<0.01			0.0036 (J)
2/7/2022				<0.01	0.00099 (J)	
8/2/2022	<0.01	<0.01	<0.01	<0.01		0.0042 (J)
8/9/2022					<0.01	
1/23/2023			<0.01	<0.01	<0.01	
1/24/2023	<0.01	<0.01				0.0027 (J)
8/8/2023	<0.01	<0.01	<0.01	<0.01	<0.01	0.0019 (J)

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.01				
5/20/2016			<0.01			
5/23/2016				<0.01	<0.01	<0.01
7/11/2016		<0.01	0.0008 (J)			
7/12/2016				<0.01	0.0007 (J)	<0.01
8/30/2016		<0.01	<0.01			
9/1/2016				<0.01	<0.01	<0.01
10/20/2016		<0.01	<0.01			
10/24/2016				<0.01	<0.01	
10/25/2016						<0.01
12/7/2016				<0.01	<0.01	<0.01
12/8/2016		<0.01	<0.01			
1/24/2017		<0.01	<0.01			
1/26/2017				<0.01	<0.01	<0.01
3/21/2017		<0.01	0.0002 (J)			
3/22/2017						<0.01
3/23/2017				<0.01	<0.01	
5/23/2017		<0.01	<0.01			
5/24/2017				<0.01	<0.01	<0.01
4/3/2018		<0.01	<0.01		<0.01	<0.01
4/4/2018				<0.01		
3/12/2019		<0.01	<0.01			
3/14/2019				<0.01	<0.01	
3/15/2019						<0.01
4/2/2019		<0.01	<0.01			
4/4/2019					<0.01	<0.01
4/5/2019				<0.01		
9/24/2019		<0.01	<0.01	<0.01	<0.01	
9/25/2019						<0.01
3/2/2020		<0.01	<0.01			
3/3/2020				<0.01	<0.01	<0.01
3/25/2020			<0.01			
3/26/2020		<0.01			<0.01	
3/30/2020				<0.01		<0.01
9/15/2020		<0.01	<0.01			
9/16/2020	0.0019 (J)					
9/17/2020					<0.01	<0.01
9/18/2020				<0.01		
11/10/2020	0.0018 (J)					
12/15/2020	0.0019 (J)					
1/19/2021	0.0035 (J)					
2/9/2021	0.0038 (J)	<0.01	<0.01			
2/10/2021						<0.01
2/11/2021				<0.01		
2/12/2021					<0.01	
3/10/2021	0.0019 (J)					
3/11/2021		<0.01	<0.01			
3/16/2021					<0.01	
3/17/2021				<0.01		<0.01
8/12/2021		<0.01	<0.01			
8/13/2021	0.0051 (J)					
8/18/2021				<0.01		

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/19/2021					<0.01	<0.01
2/1/2022	0.0055 (J)					
2/7/2022		<0.01	<0.01			
2/8/2022					<0.01	<0.01
2/9/2022				<0.01		
8/2/2022	0.002 (J)					
8/11/2022				<0.01	<0.01	
1/24/2023	0.0026 (J)					
1/27/2023		<0.01	<0.01			
2/1/2023				<0.01	<0.01	<0.01
8/8/2023	0.0013 (J)	<0.01	<0.01			
8/13/2023				<0.01	<0.01	<0.01

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.01					
5/24/2016		<0.01				
7/12/2016	<0.01	<0.01				
9/1/2016	<0.01	<0.01				
10/25/2016	<0.01	<0.01				
12/7/2016	<0.01					
12/8/2016		<0.01				
1/26/2017	<0.01	<0.01				
3/22/2017	<0.01					
3/23/2017		<0.01				
5/25/2017	<0.01	<0.01				
4/3/2018	<0.01	<0.01				
3/14/2019		<0.01			<0.01	
3/15/2019	<0.01		0.045	<0.01		
4/4/2019			0.033			
4/5/2019	<0.01	<0.01		0.00013 (J)	0.0014 (J)	
9/25/2019	<0.01	<0.01	0.038			
9/26/2019					0.0025 (J)	
9/27/2019				<0.01		
3/2/2020				<0.01	0.003 (J)	
3/3/2020	<0.01	<0.01	0.025			
3/27/2020				<0.01		
3/31/2020	<0.01	<0.01				
4/1/2020			0.024		0.0032 (J)	<0.01
6/17/2020			0.019			<0.01
9/15/2020		<0.01				
9/16/2020	<0.01					
9/17/2020				<0.01	0.0026 (J)	
9/21/2020			0.017			<0.01
2/11/2021	<0.01	<0.01	0.016			
2/12/2021					0.0039 (J)	<0.01
2/15/2021				<0.01		
3/17/2021				<0.01	0.0034 (J)	
3/18/2021	<0.01	<0.01	0.016			<0.01
8/18/2021	<0.01					<0.01
8/19/2021		<0.01	0.018	<0.01	0.0034 (J)	
2/8/2022	<0.01	<0.01	0.016	<0.01		<0.01
2/10/2022					0.0034 (J)	
8/11/2022			0.023	<0.01	0.0039 (J)	
1/27/2023			0.028			<0.01
1/30/2023	<0.01			<0.01		
2/1/2023		<0.01			0.0041 (J)	
8/12/2023			0.021			
8/13/2023	<0.01	<0.01		<0.01	0.0041 (J)	<0.01

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	<0.01	<0.01	0.023	
9/21/2020		<0.01		
9/23/2020	<0.01		0.015	
2/11/2021			0.019	
2/15/2021		<0.01		
3/12/2021			0.014	
3/19/2021		<0.01		
8/16/2021	<0.01			
8/18/2021		<0.01	0.0083 (J)	<0.01
2/8/2022		<0.01	0.007 (J)	<0.01
2/9/2022	<0.01			
8/11/2022		<0.01		<0.01
1/30/2023	<0.01		0.0063 (J)	
2/1/2023		<0.01		<0.01
8/12/2023	<0.01	<0.01		<0.01
8/13/2023			0.0029 (J)	

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.005	<0.005	<0.005	<0.005		
7/11/2016	<0.005	<0.005		<0.005		
7/12/2016			<0.005			
8/30/2016	<0.005	<0.005	<0.005	<0.005		
10/19/2016	<0.005	<0.005	<0.005	<0.005		
12/6/2016	<0.005	<0.005	<0.005	<0.005		
1/24/2017	<0.005	<0.005	<0.005	<0.005		
3/21/2017	<0.005	<0.005	<0.005	<0.005		
5/22/2017	<0.005	<0.005	<0.005			
5/23/2017				<0.005		
4/2/2018	<0.005	<0.005		<0.005		
4/3/2018			<0.005			
6/4/2018	<0.005	<0.005	<0.005	<0.005		
10/1/2018	<0.005	<0.005	<0.005	<0.005		
3/11/2019				<0.005		
3/12/2019	<0.005	<0.005	<0.005			
4/1/2019			<0.005			
4/2/2019	<0.005	<0.005		<0.005		
9/23/2019	<0.005	<0.005	<0.005			
9/24/2019				<0.005		
3/2/2020	<0.005	<0.005	<0.005	<0.005		
3/25/2020	<0.005	<0.005	<0.005			
3/26/2020				<0.005		
9/15/2020	<0.005	<0.005	<0.005	<0.005		
9/16/2020						<0.005
9/17/2020				<0.005		
11/10/2020						<0.005
11/11/2020				<0.005		
12/15/2020				<0.005		<0.005
1/19/2021						<0.005
1/20/2021				<0.005		
2/8/2021	<0.005			<0.005	<0.005	
2/9/2021		<0.005	<0.005			<0.005
3/10/2021	0.0047 (J)			<0.005	<0.005	
3/11/2021		<0.005	<0.005			<0.005
8/11/2021	<0.005					<0.005
8/12/2021		<0.005	<0.005	<0.005	<0.005	
2/1/2022	<0.005	<0.005	<0.005			<0.005
2/7/2022				<0.005	<0.005	
8/2/2022	<0.005	0.0014 (J)	<0.005	<0.005		<0.005
8/9/2022					<0.005	
1/23/2023			<0.005	<0.005	<0.005	
1/24/2023	<0.005	<0.005				<0.005
8/8/2023	<0.005	0.0019 (J)	<0.005	<0.005	<0.005	<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.005				
5/20/2016			<0.005			
5/23/2016				0.017	<0.005	<0.005
7/11/2016		<0.005	<0.005			
7/12/2016				0.0146	<0.005	<0.005
8/30/2016		<0.005	<0.005			
9/1/2016				0.0137	<0.005	<0.005
10/20/2016		<0.005	<0.005			
10/24/2016				0.0135	0.0012 (J)	
10/25/2016						<0.005
12/7/2016				0.01 (J)	0.0041 (J)	<0.005
12/8/2016		<0.005	<0.005			
1/24/2017		0.0011 (J)	<0.005			
1/26/2017				0.0214	<0.005	<0.005
3/21/2017		<0.005	<0.005			
3/22/2017						<0.005
3/23/2017				0.0167	0.0016 (J)	
5/23/2017		<0.005	<0.005			
5/24/2017				0.0083 (J)	<0.005	<0.005
4/3/2018		<0.005	<0.005		<0.005	<0.005
4/4/2018				0.012		
6/5/2018		<0.005	<0.005			
6/6/2018				0.014	<0.005	<0.005
10/2/2018		<0.005	<0.005			
10/3/2018				0.0056 (J)	<0.005	<0.005
3/12/2019		<0.005	<0.005			
3/14/2019				0.0048 (J)	<0.005	
3/15/2019						<0.005
4/2/2019		<0.005	<0.005			
4/4/2019					0.00021 (J)	8.9E-05 (J)
4/5/2019				0.00091 (J)		
9/24/2019		<0.005	<0.005	0.0064 (J)	<0.005	
9/25/2019						<0.005
3/2/2020		<0.005	<0.005			
3/3/2020				0.0045 (J)	<0.005	<0.005
3/25/2020			<0.005			
3/26/2020		<0.005			<0.005	
3/30/2020				0.0049 (J)		<0.005
9/15/2020		<0.005	<0.005			
9/16/2020	<0.005					
9/17/2020					<0.005	<0.005
9/18/2020				0.0045 (J)		
11/10/2020	<0.005					
12/15/2020	<0.005					
1/19/2021	<0.005					
2/9/2021	<0.005	<0.005	<0.005			
2/10/2021						<0.005
2/11/2021				0.0072 (J)		
2/12/2021					<0.005	
3/10/2021	<0.005					
3/11/2021		<0.005	<0.005			
3/16/2021					<0.005	



# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.01 (J)		<0.005
8/12/2021		<0.005	<0.005			
8/13/2021	<0.005					
8/18/2021				0.0077		
8/19/2021					<0.005	<0.005
2/1/2022	<0.005					
2/7/2022		<0.005	<0.005			
2/8/2022					<0.005	<0.005
2/9/2022				0.0047 (J)		
8/2/2022	<0.005					
8/10/2022		<0.005	<0.005			<0.005
8/11/2022				0.0037 (J)	<0.005	
1/24/2023	<0.005					
1/27/2023		<0.005	<0.005			
2/1/2023				0.0036 (J)	<0.005	<0.005
8/8/2023	<0.005	<0.005	<0.005			
8/13/2023				0.0038 (J)	<0.005	<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.005					
5/24/2016		<0.2				
7/12/2016	<0.005	0.036				
9/1/2016	0.0014 (J)	0.0347				
10/25/2016	<0.005	0.0282				
12/7/2016	0.0023 (J)					
12/8/2016		0.0373				
1/26/2017	<0.005	0.0385				
3/22/2017	<0.005					
3/23/2017		0.0414				
5/25/2017	<0.005	0.019				
4/3/2018	<0.005	0.029				
6/5/2018		0.038				
6/6/2018	<0.005					
10/3/2018	<0.005	0.017				
3/14/2019		0.016			<0.005	
3/15/2019	<0.005		<0.005	<0.005		
4/4/2019			<0.005			
4/5/2019	9.3E-05 (J)	0.0018 (J)		<0.005	<0.005	
9/25/2019	<0.005	0.02	<0.005			
9/26/2019					<0.005	
9/27/2019				<0.005		
3/2/2020				<0.005	<0.005	
3/3/2020	<0.005	0.014	<0.005			
3/27/2020				<0.005		
3/31/2020	<0.005	0.019				
4/1/2020			<0.005		<0.005	0.011
6/17/2020			<0.005			0.014
9/15/2020		0.059				
9/16/2020	<0.005					
9/17/2020				0.002 (J)	<0.005	
9/21/2020			<0.005			0.041
2/11/2021	<0.005	0.023	<0.005			
2/12/2021					<0.005	0.011
2/15/2021				<0.005		
3/17/2021				<0.005	<0.005	
3/18/2021	<0.005	0.019 (J)	<0.005			0.028
8/18/2021	<0.005					0.014
8/19/2021		0.01	<0.005	<0.005	<0.005	
2/8/2022	<0.005	0.0082	<0.005	<0.005		0.0078
2/10/2022					<0.005	
8/10/2022	<0.005	0.0096				0.007 (J)
8/11/2022			<0.005	<0.005	<0.005	
1/27/2023			<0.005			0.015
1/30/2023	<0.005			<0.005		
2/1/2023		0.0054			<0.005	
8/12/2023			<0.005			
8/13/2023	<0.005	0.0085		<0.005	<0.005	0.0065

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.0025 (J)	0.014	<0.005	
9/21/2020		0.037		
9/23/2020	<0.005		<0.005	
2/11/2021			<0.005	
2/15/2021		0.01		
3/12/2021			<0.005	
3/19/2021		0.016 (J)		
8/16/2021	<0.005			
8/18/2021		0.014	<0.005	0.004 (J)
2/8/2022		0.0083	<0.005	<0.005
2/9/2022	<0.005			
8/10/2022	<0.005		<0.005	
8/11/2022		0.0089 (J)		0.0023 (J)
1/30/2023	0.0016 (J)		<0.005	
2/1/2023		0.0063		0.0021 (J)
8/12/2023	<0.005	0.0058		<0.005
8/13/2023			<0.005	

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	66.9	48.6	42.3	1.22		
7/11/2016	41	45		3.7		
7/12/2016			44			
8/30/2016	36	42	40	6.8		
10/19/2016	46	44	43	11		
12/6/2016	59	44	43	13		
1/24/2017	46	46	48	5.7		
3/21/2017	63	46	45	1.7		
5/22/2017	77	48	46			
5/23/2017				1.5		
10/3/2017	42	47	48	1.3		
6/4/2018	71.8	47.8	46.6	4.9		
10/1/2018	49.1	48.1	48.6	0.59 (J)		
4/1/2019			50.4			
4/2/2019	84.3	48.7		4.9		
9/23/2019	70.2	47.2	43.9			
9/24/2019				<1		
3/25/2020	85.9	46.3	50.5			
3/26/2020				<1		
9/15/2020	47.3	51.5	44.7	<1		
9/16/2020						43
9/17/2020				10.9		
11/10/2020						39
11/11/2020				9.4		
12/15/2020				10.9		38.8
1/19/2021						37.3
1/20/2021				9.8		
3/10/2021	49.6			1.2	10.8	
3/11/2021		52.9	50.4			38.6
8/11/2021	48.9					30.5
8/12/2021		47.4	38.6	1.1	7.8	
2/1/2022	43.7	67.1	46			37.5
2/7/2022				2.9	10.4	
8/2/2022	58.1	86.9	43.5	4.9		37
8/9/2022					11.2	
1/23/2023			39.5	42.5	11.1	
1/24/2023	48.3	79.7				34.7
8/8/2023	67.7	89.9	35	16.8	10.5	25.6

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		25				
5/20/2016			34.4			
5/23/2016				1070	424	203
7/11/2016		27	34			
7/12/2016				1300	440	220
8/30/2016		23	36			
9/1/2016				1300	440	220
10/20/2016		19	36			
10/24/2016				280	420	
10/25/2016						230
12/7/2016				1300	450	220
12/8/2016		20	36			
1/24/2017		20	37			
1/26/2017				1400	490	250
3/21/2017		23	37			
3/22/2017						240
3/23/2017				1500	530	
5/23/2017		21	38			
5/24/2017				1400	500	230
10/3/2017		21	38			
10/4/2017				1400	560	220
6/5/2018		22.9	38			
6/6/2018				1520	469	233
10/2/2018		20.3	38.5			
10/3/2018				1550	600	215
4/2/2019		23.8	35.5			
4/4/2019					528	251
4/5/2019				1520		
9/24/2019		20.7	35.4	1110	382	
9/25/2019						223
3/25/2020			35.1			
3/26/2020		21.6			438	
3/30/2020				1150		223
9/15/2020		21.2	35.3			
9/16/2020	6.9					
9/17/2020					416	254
9/18/2020				1260		
11/10/2020	6.3					
12/15/2020	6.7					
1/19/2021	7.4					
3/10/2021	<1					
3/11/2021		22.7	35.5			
3/16/2021					379	
3/17/2021				1300		250
8/12/2021		17.4	28.6			
8/13/2021	56.1					
8/18/2021				768		
8/19/2021					223	228
2/1/2022	56.3					
2/7/2022		20.6	33			
2/8/2022					360	238
2/9/2022				1190		

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	13.2					
8/10/2022		19.7	34			206
8/11/2022				1200	365	
1/24/2023	10.1					
1/27/2023		22.7	35			
2/1/2023				1060	341	257
8/8/2023	1.3	32.7	18.8			
8/13/2023				935	281	214

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	395					
5/24/2016		834				
7/12/2016	460	930				
9/1/2016	430	890				
10/25/2016	440	950				
12/7/2016	410					
12/8/2016		910				
1/26/2017	440	970				
3/22/2017	460					
3/23/2017		980				
5/25/2017	430	920				
10/4/2017	490	870				
6/5/2018		962				
6/6/2018	520					
10/3/2018	651	1170				
4/4/2019			915			
4/5/2019	642	1030		392	585	
9/25/2019	434	920	767			
9/26/2019					556	
9/27/2019				520		
1/22/2020						1250
3/27/2020				419		
3/31/2020	484	934				
4/1/2020			889		478	1210
6/17/2020			901			1210
9/15/2020		1080				
9/16/2020	467					
9/17/2020				468	490	
9/21/2020			1010			1290
3/17/2021				461	486	
3/18/2021	447	1050	829			1360
8/18/2021	280					740
8/19/2021		934	724	412 (M1)	432	
2/8/2022	364	960	779	449		1220
2/10/2022					430	
8/10/2022	423	946				1010
8/11/2022			910	472	389	
1/27/2023			646			895
1/30/2023	451			445		
2/1/2023		776			438	
8/12/2023			276			
8/13/2023	351	895		410	379	970

# Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	1100	1160	286	
9/21/2020		1220		
9/23/2020	1080		256	
3/12/2021			237	
3/19/2021		1220		
8/16/2021	987			
8/18/2021		789	207	757
2/8/2022		1190	248	1150
2/9/2022	1050			
8/10/2022	1040		122	
8/11/2022		1020		979
1/30/2023	1120		85.2	
2/1/2023		1190		1110
8/12/2023	948	1090		1040
8/13/2023			39.2	



# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	<0.001	<0.001	<0.001	<0.001		
7/11/2016	<0.001	<0.001		<0.001		
7/12/2016			<0.001			
8/30/2016	<0.001	<0.001	<0.001	<0.001		
10/19/2016	<0.001	<0.001	<0.001	<0.001		
12/6/2016	<0.001	<0.001	<0.001	<0.001		
1/24/2017	<0.001	<0.001	<0.001	<0.001		
3/21/2017	<0.001	3E-05 (J)	<0.001	<0.001		
5/22/2017	<0.001	<0.001	<0.001			
5/23/2017				<0.001		
4/2/2018	<0.001	<0.001		<0.001		
4/3/2018			<0.001			
6/4/2018	<0.001	<0.001	<0.001	<0.001		
10/1/2018	<0.001	<0.001	<0.001	<0.001		
3/11/2019				<0.001		
3/12/2019	<0.001	<0.001	<0.001			
4/1/2019			<0.001			
4/2/2019	<0.001	<0.001		<0.001		
9/23/2019	<0.001	<0.001	<0.001			
9/24/2019				<0.001		
3/2/2020	<0.001	<0.001	<0.001	<0.001		
3/25/2020	<0.001	<0.001	<0.001			
3/26/2020				<0.001		
9/15/2020	<0.001	<0.001	<0.001	<0.001		
9/16/2020						<0.001
9/17/2020				<0.001		
11/10/2020						<0.001
11/11/2020				<0.001		
12/15/2020				<0.001		<0.001
1/19/2021						<0.001
1/20/2021				<0.001		
2/8/2021	<0.001			<0.001	<0.001	
2/9/2021		<0.001	<0.001			<0.001
3/10/2021	<0.001			<0.001	<0.001	
3/11/2021		<0.001	<0.001			<0.001
8/11/2021	<0.001					<0.001
8/12/2021		<0.001	<0.001	<0.001	<0.001	
2/1/2022	<0.001	<0.001	<0.001			<0.001
2/7/2022				<0.001	<0.001	
8/2/2022	<0.001	<0.001	<0.001	<0.001		<0.001
8/9/2022					<0.001	
1/23/2023			<0.001	<0.001	<0.001	
1/24/2023	<0.001	<0.001				<0.001
8/8/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		<0.001				
5/20/2016			<0.001			
5/23/2016				0.000306 (J)	<0.001	<0.001
7/11/2016		<0.001	<0.001			
7/12/2016				0.0003 (J)	<0.001	<0.001
8/30/2016		<0.001	<0.001			
9/1/2016				0.0003 (J)	<0.001	<0.001
10/20/2016		<0.001	<0.001			
10/24/2016				0.0004	<0.001	
10/25/2016						<0.001
12/7/2016				0.0003 (J)	<0.001	<0.001
12/8/2016		<0.001	<0.001			
1/24/2017		<0.001	<0.001			
1/26/2017				0.0003 (J)	<0.001	<0.001
3/21/2017		<0.001	<0.001			
3/22/2017						<0.001
3/23/2017				0.0003 (J)	<0.001	
5/23/2017		<0.001	<0.001			
5/24/2017				0.0003 (J)	<0.001	<0.001
4/3/2018		<0.001	<0.001		<0.001	<0.001
4/4/2018				0.00028 (J)		
6/5/2018		<0.001	<0.001			
6/6/2018				0.00029 (J)	<0.001	<0.001
10/2/2018		<0.001	<0.001			
10/3/2018				0.00029 (J)	<0.001	<0.001
3/12/2019		<0.001	<0.001			
3/14/2019				0.00028 (J)	<0.001	
3/15/2019						<0.001
4/2/2019		<0.001	<0.001			
4/4/2019					<0.001	<0.001
4/5/2019				0.00028 (J)		
9/24/2019		<0.001	<0.001	0.0003 (J)	<0.001	
9/25/2019						<0.001
3/2/2020		<0.001	<0.001			
3/3/2020				0.00026 (J)	<0.001	<0.001
3/25/2020			5.7E-05 (J)			
3/26/2020		<0.001			<0.001	
3/30/2020				0.00028 (J)		<0.001
9/15/2020		<0.001	<0.001			
9/16/2020	<0.001					
9/17/2020					<0.001	<0.001
9/18/2020				0.00028 (J)		
11/10/2020	<0.001					
12/15/2020	<0.001					
1/19/2021	<0.001					
2/9/2021	<0.001	<0.001	<0.001			
2/10/2021						<0.001
2/11/2021				0.00026 (J)		
2/12/2021					<0.001	
3/10/2021	<0.001					
3/11/2021		<0.001	<0.001			
3/16/2021					<0.001	

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
3/17/2021				0.00034 (J)		<0.001
8/12/2021		<0.001	<0.001			
8/13/2021	<0.001					
8/18/2021				0.00027 (J)		
8/19/2021					<0.001	<0.001
2/1/2022	<0.001					
2/7/2022		<0.001	<0.001			
2/8/2022					<0.001	<0.001
2/9/2022				0.00025 (J)		
8/2/2022	<0.001					
8/10/2022		<0.001	<0.001			<0.001
8/11/2022				0.00024 (J)	<0.001	
1/24/2023	<0.001					
1/27/2023		<0.001	<0.001			
2/1/2023				0.00047 (J)	0.00022 (J)	<0.001
8/8/2023	<0.001	<0.001	<0.001			
8/13/2023				0.00026 (J)	<0.001	<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	<0.001					
5/24/2016		<0.001				
7/12/2016	0.0001 (J)	0.0002 (J)				
9/1/2016	<0.001	<0.001				
10/25/2016	<0.001	<0.001				
12/7/2016	<0.001					
12/8/2016		<0.001				
1/26/2017	<0.001	<0.001				
3/22/2017	0.0001 (J)					
3/23/2017		0.0002 (J)				
5/25/2017	0.0001 (J)	0.0002 (J)				
4/3/2018	<0.001	0.00014 (J)				
6/5/2018		0.00016 (J)				
6/6/2018	<0.001					
10/3/2018	<0.001	<0.001				
3/14/2019		<0.001			<0.001	
3/15/2019	<0.001		<0.001	<0.001		
4/4/2019			<0.001			
4/5/2019	0.00013 (J)	0.00014 (J)		<0.001	<0.001	
9/25/2019	0.00012 (J)	0.00019 (J)	<0.001			
9/26/2019					<0.001	
9/27/2019				<0.001		
3/2/2020				<0.001	<0.001	
3/3/2020	0.00011 (J)	0.00013 (J)	<0.001			
3/27/2020				<0.001		
3/31/2020	0.00014 (J)	0.00015 (J)				
4/1/2020			<0.001		<0.001	0.00029 (J)
6/17/2020			<0.001			0.00028 (J)
9/15/2020		0.00016 (J)				
9/16/2020	<0.001					
9/17/2020				<0.001	<0.001	
9/21/2020			<0.001			0.00029 (J)
2/11/2021	<0.001	<0.001	<0.001			
2/12/2021					<0.001	0.00025 (J)
2/15/2021				<0.001		
3/17/2021				<0.001	<0.001	
3/18/2021	<0.001	0.00016 (J)	<0.001			0.00031 (J)
8/18/2021	<0.001					0.0004 (J)
8/19/2021		0.0002 (J)	<0.001	<0.001	<0.001	
2/8/2022	<0.001	<0.001	<0.001	<0.001		0.00025 (J)
2/10/2022					<0.001	
8/10/2022	<0.001	<0.001				<0.005
8/11/2022			<0.001	<0.001	<0.001	
1/27/2023			<0.001			0.00021 (J)
1/30/2023	0.00025 (J)			<0.001		
2/1/2023		<0.001			<0.001	
8/12/2023			<0.001			
8/13/2023	<0.001	<0.001		<0.001	<0.001	0.00022 (J)

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	0.00015 (J)	0.00013 (J)	<0.001	
9/21/2020		<0.001		
9/23/2020	<0.001		<0.001	
2/11/2021			<0.001	
2/15/2021		<0.001		
3/12/2021			<0.001	
3/19/2021		<0.001		
8/16/2021	<0.001			
8/18/2021		<0.001	<0.001	<0.001
2/8/2022		<0.001	<0.001	<0.001
2/9/2022	<0.001			
8/10/2022	<0.001		<0.001	
8/11/2022		<0.001		<0.001
1/30/2023	<0.001		<0.001	
2/1/2023		<0.001		<0.001
8/12/2023	<0.001	<0.001		<0.001
8/13/2023			<0.001	

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-3 (bg)	HGWA-4 (bg)	HGWA-42D (bg)	HGWA-43D (bg)
5/19/2016	421	143	267	165		
7/11/2016	363	125		266		
7/12/2016			249			
8/30/2016	330	168	254	292		
10/19/2016	380	176	357	338		
12/6/2016	377	145	285	356		
1/24/2017	342	129	300	131		
3/21/2017	340	103	288	132		
5/22/2017	338	92	263			
5/23/2017				183		
10/3/2017	343	127	300	161		
6/4/2018	415	140	266	240		
10/1/2018	354	135	291	106		
4/1/2019			284			
4/2/2019	452	133		230		
9/23/2019	442	129	268			
9/24/2019				131		
3/25/2020	496	138	284			
3/26/2020				69		
9/15/2020	265	124	258	93		
9/16/2020						272
9/17/2020				188		
11/10/2020						307
11/11/2020				175		
12/15/2020				193		289
1/19/2021						270
1/20/2021					158	
3/10/2021	348			53	163	
3/11/2021		169	267			279
8/11/2021	366					277
8/12/2021		118	265	55	179	
2/1/2022	270	156	350			156
2/7/2022				54	190	
8/2/2022	400	196	287	48		278
8/9/2022					182	
1/23/2023			293	128	168	
1/24/2023	369	164				271
8/8/2023	457	189	285	141	175	274

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
5/19/2016		168				
5/20/2016			223			
5/23/2016				4130	1270	570
7/11/2016		158	225			
7/12/2016				3140	1100	585
8/30/2016		141	232			
9/1/2016				3200	1180	625
10/20/2016		99	225			
10/24/2016				2920	1090	
10/25/2016						563
12/7/2016				2740	1040	561
12/8/2016		116	235			
1/24/2017		156	272			
1/26/2017				3080	1260	608
3/21/2017		144	222			
3/22/2017						599
3/23/2017				3060	1360	
5/23/2017		134	231			
5/24/2017				3140	1320	598
10/3/2017		147	243			
10/4/2017				3210	1340	626
6/5/2018		152	235			
6/6/2018				2620	1120	678
10/2/2018		146	228			
10/3/2018				2430	1140	700
4/2/2019		144	238			
4/4/2019					926	704
4/5/2019				2310		
9/24/2019		133	222	2470	1140	
9/25/2019						813
3/25/2020			240			
3/26/2020		104			1000	
3/30/2020				2590		787
9/15/2020		116	217			
9/16/2020	270					
9/17/2020					956	804
9/18/2020				2440		
11/10/2020	287					
12/15/2020	295					
1/19/2021	278					
3/10/2021	289					
3/11/2021		118	215			
3/16/2021					92	
3/17/2021				1640		768
8/12/2021		158	229			
8/13/2021	436					
8/18/2021				2350		
8/19/2021					958	816
2/1/2022	444					
2/7/2022		135	224			
2/8/2022					866	852
2/9/2022				2310		

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	HGWA-44D (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-14	HGWC-15	HGWC-16
8/2/2022	311					
8/10/2022		134	217			894
8/11/2022				1060	940	
1/24/2023	363					
1/27/2023		182	229			
2/1/2023				1950	892	1030
8/8/2023	361	225	125			
8/13/2023				1960	881	861



# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D	MW-33
5/23/2016	1010					
5/24/2016		1900				
7/12/2016	976	1950				
9/1/2016	1060	2000				
10/25/2016	<25	1870				
12/7/2016	866					
12/8/2016		1930				
1/26/2017	1000	1950				
3/22/2017	1080					
3/23/2017		2080				
5/25/2017	1080	1970				
10/4/2017	1210	2200				
6/5/2018		1880				
6/6/2018	1180					
10/3/2018	1250	2180				
4/4/2019			1800			
4/5/2019	1260	1610		890	1400	
9/25/2019	1280	1960	1970			
9/26/2019					1400	
9/27/2019				1110		
1/22/2020						2310
3/27/2020				1100		
3/31/2020	1310	1860				
4/1/2020			1940		1530	2590
6/17/2020			2100			2540
9/15/2020		1890				
9/16/2020	1220					
9/17/2020				1090	1360	
9/21/2020			2060			2340
3/17/2021				998	990	
3/18/2021	1020	1390	1390			1790
8/18/2021	1290					3690
8/19/2021		1750	1920	1030	1440	
2/8/2022	1160	1770	1810	1070		2480
2/10/2022					1260	
8/10/2022	1390	1890				2050
8/11/2022			356	960	2700	
1/27/2023			1420			1570
1/30/2023	1320			961		
2/1/2023		1430			1320	
8/12/2023			2200			
8/13/2023	1180	1700		1000	1280	1910

# Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 11/15/2023 1:27 PM View: Constituents View

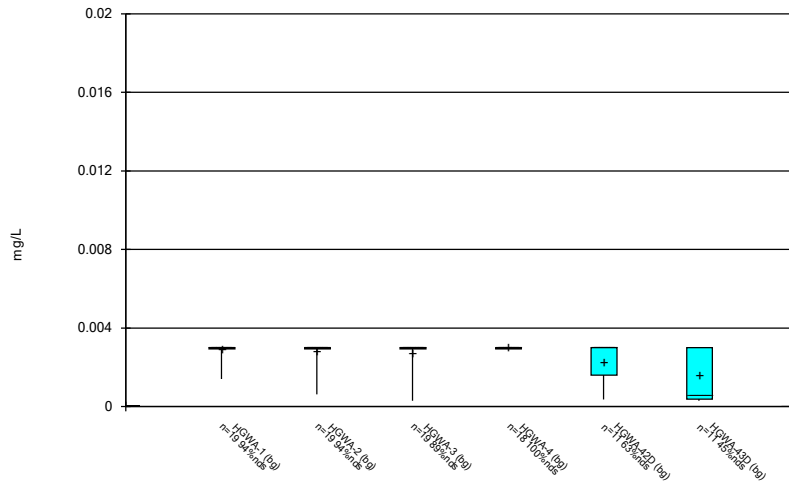
Plant Hammond Client: Southern Company Data: Hammond AP-2

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	MW-34D	MW-35	MW-37D	MW-51
6/18/2020	2320	2310	888	
9/21/2020		2210		
9/23/2020	2430		894	
3/12/2021			890	
3/19/2021		1690		
8/16/2021	2340			
8/18/2021		2390	950	2610
2/8/2022		2410	882	2430
2/9/2022	2260			
8/10/2022	2310		2770	
8/11/2022		1070		2080
1/30/2023	2230		226	
2/1/2023		2410		2090
8/12/2023	837	2290		2220
8/13/2023			258	

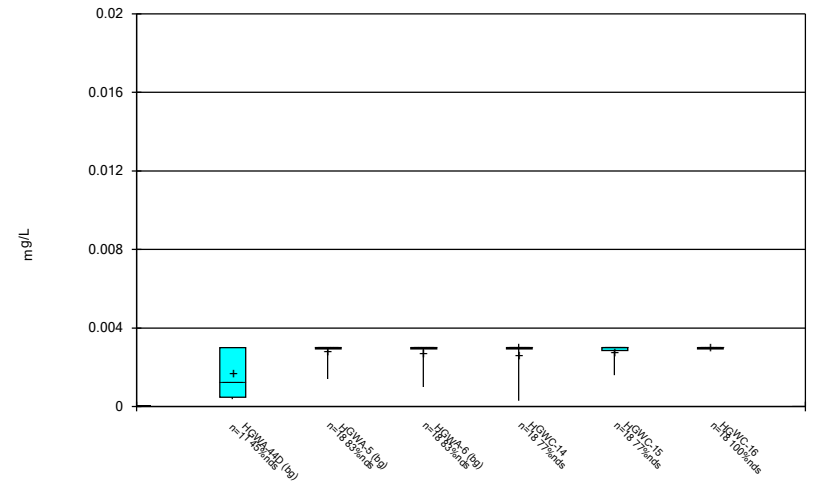
FIGURE B.

Box & Whiskers Plot



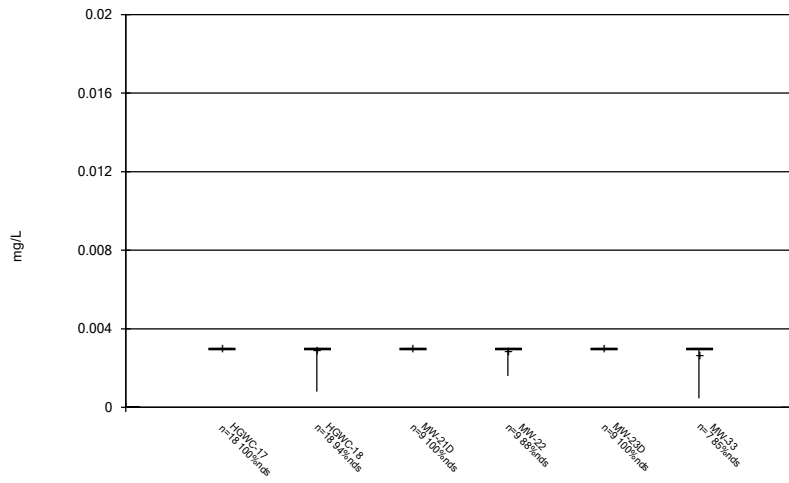
Constituent: Antimony Analysis Run 11/15/2023 1:58 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



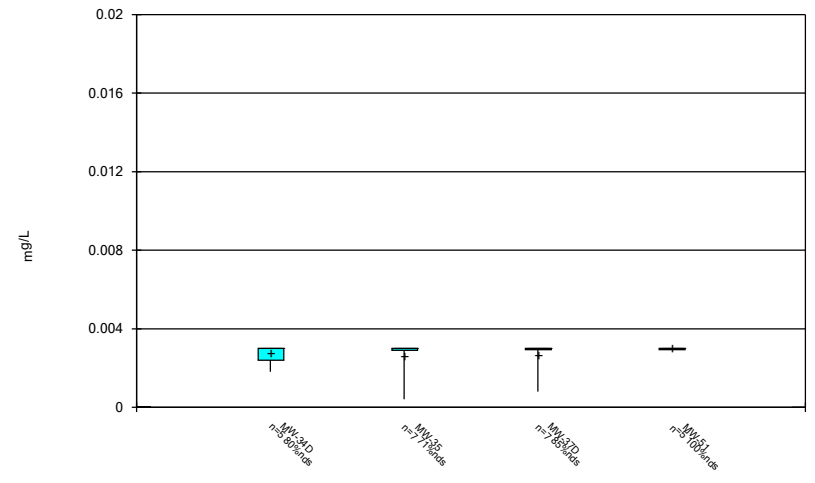
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Box & Whiskers Plot



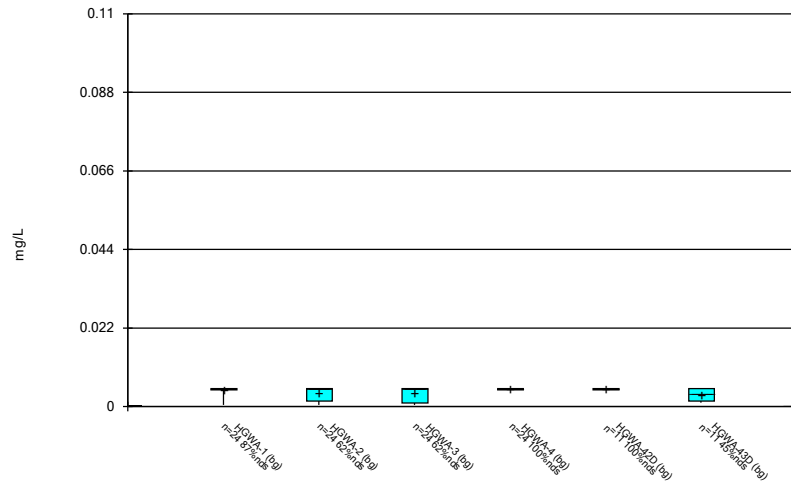
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



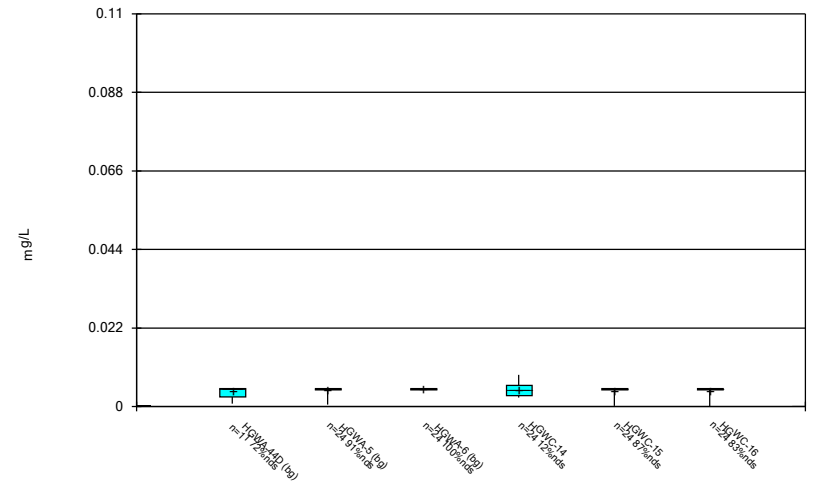
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Box & Whiskers Plot



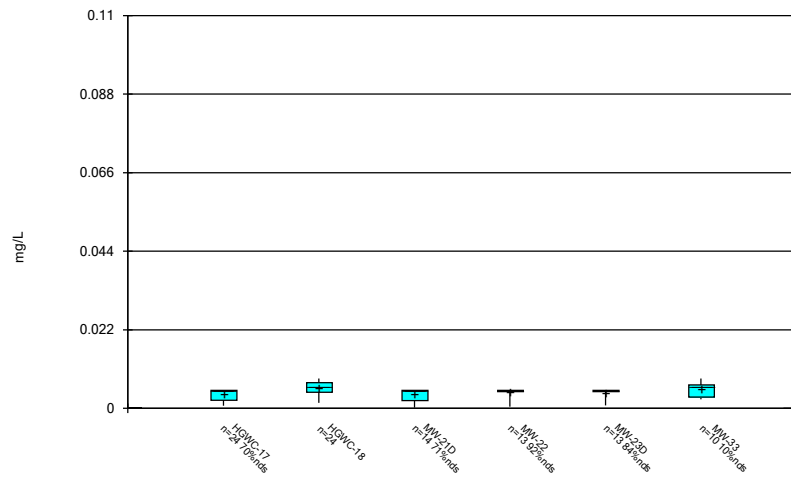
Constituent: Arsenic Analysis Run 11/15/2023 1:58 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



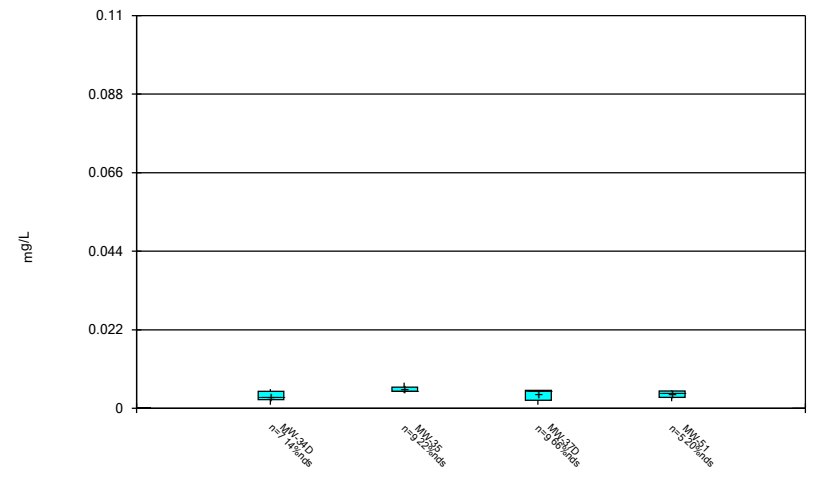
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



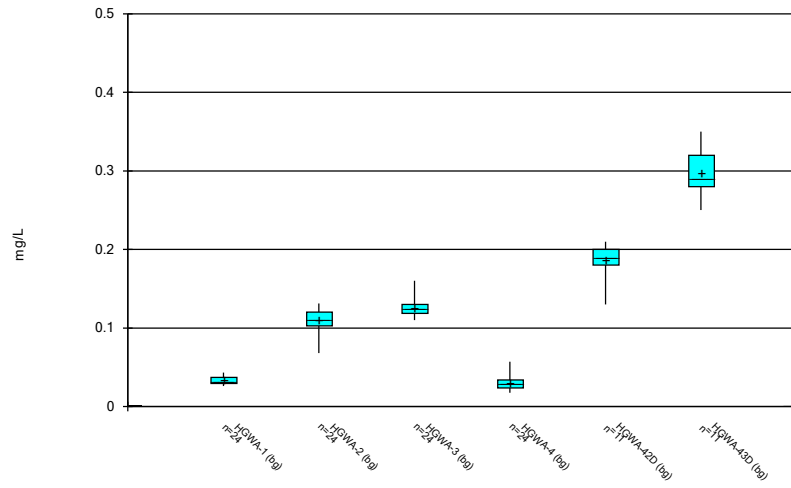
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



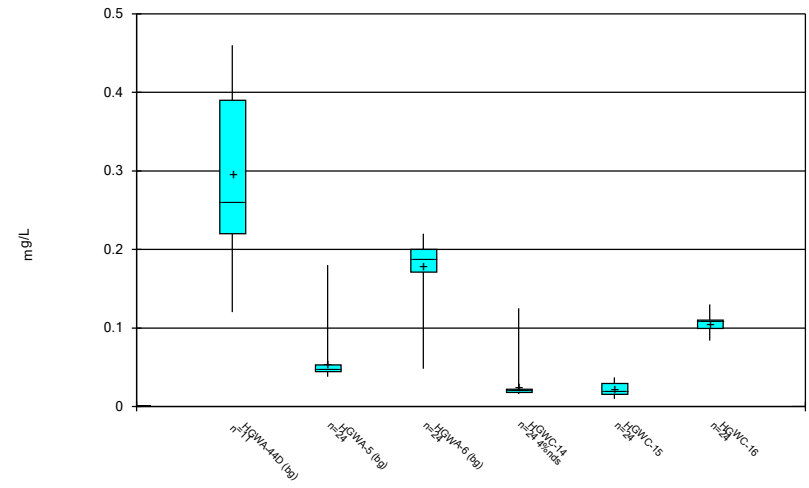
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



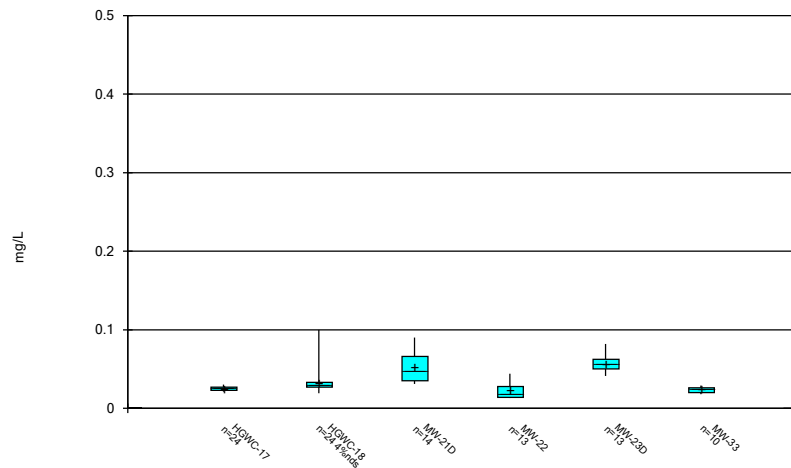
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Box & Whiskers Plot



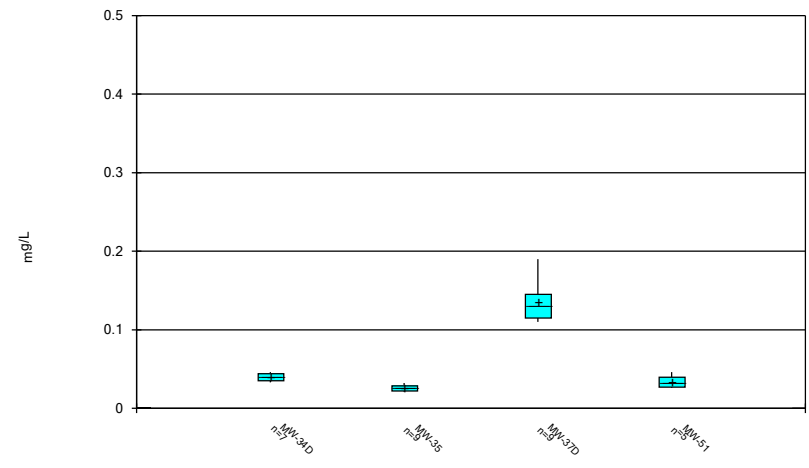
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



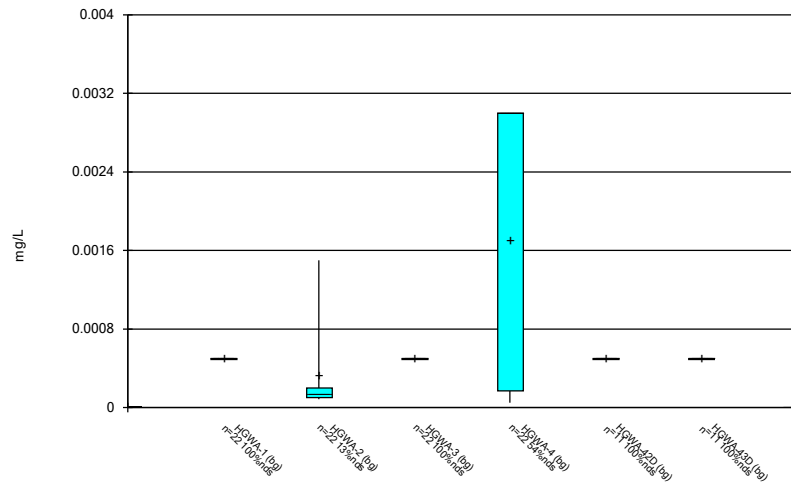
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Box & Whiskers Plot



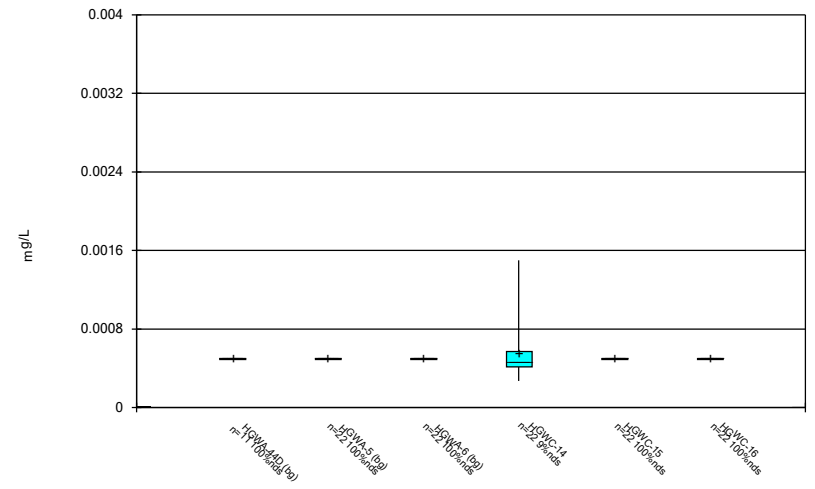
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



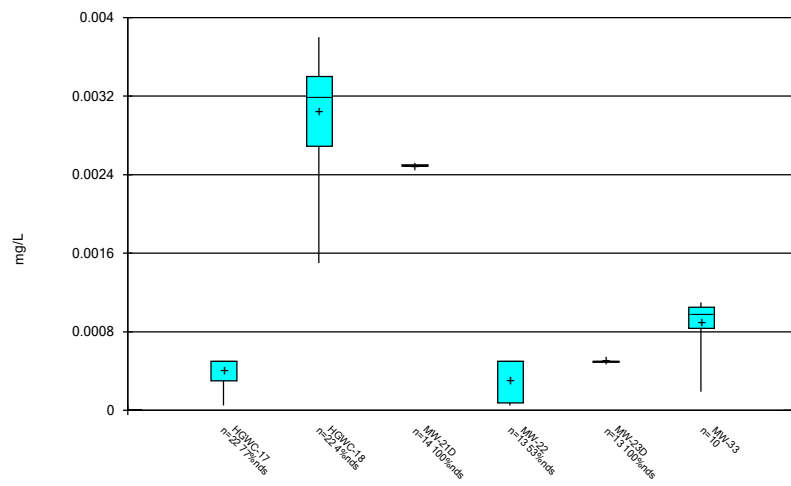
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



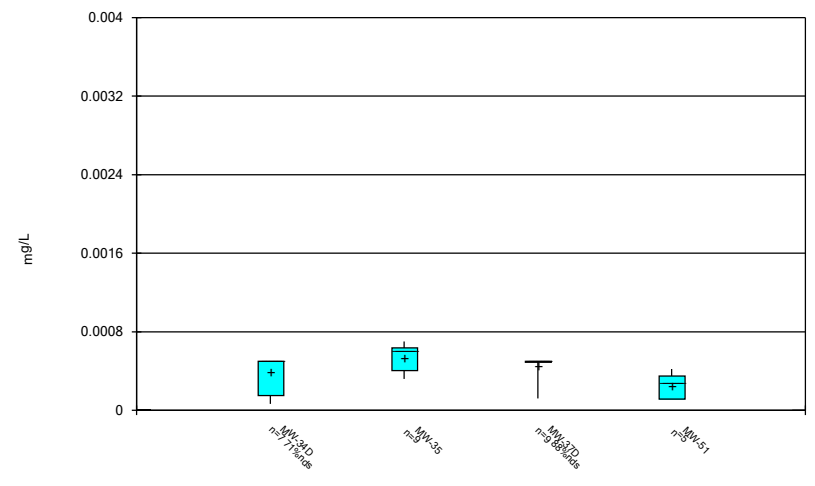
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



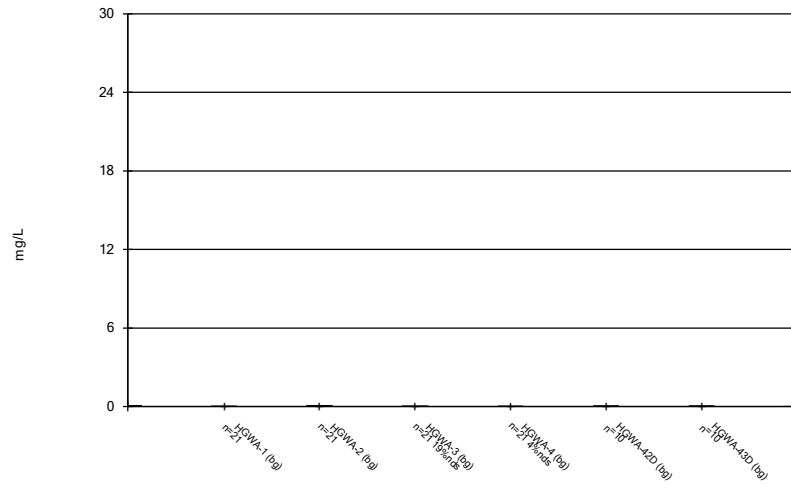
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Box & Whiskers Plot



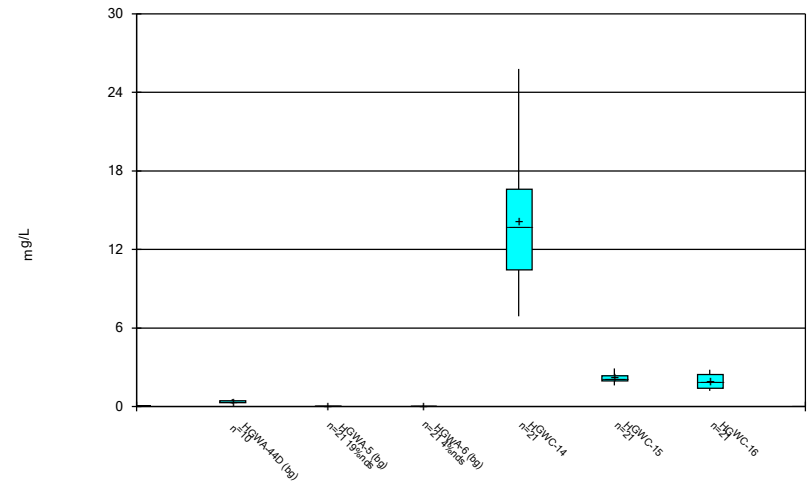
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Box & Whiskers Plot



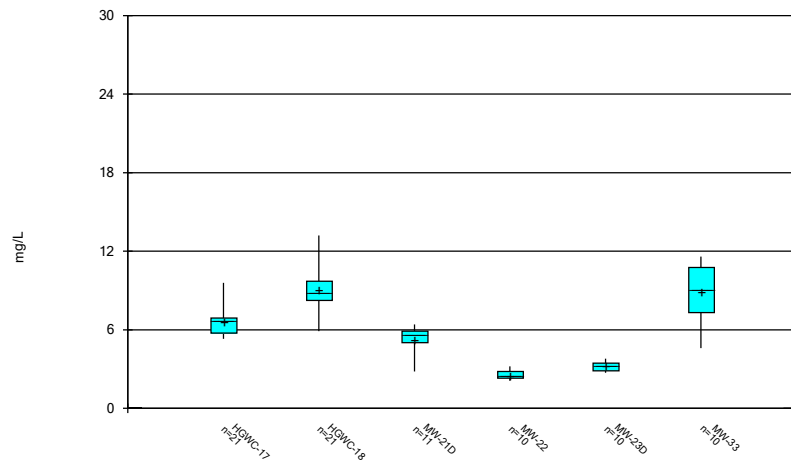
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Box & Whiskers Plot



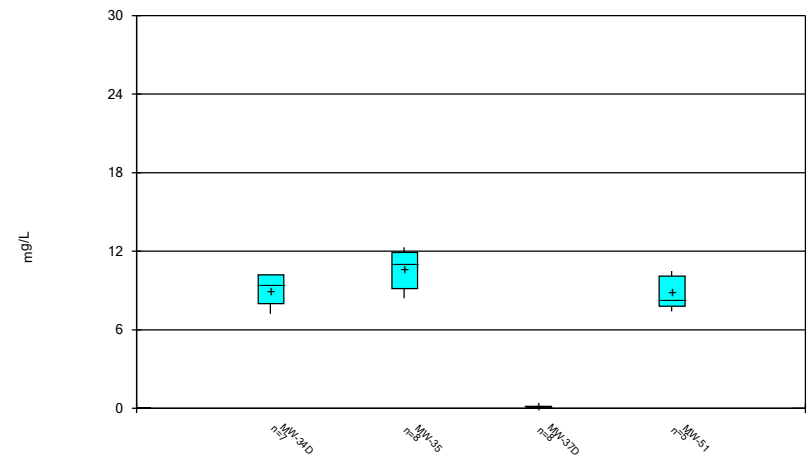
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Box & Whiskers Plot



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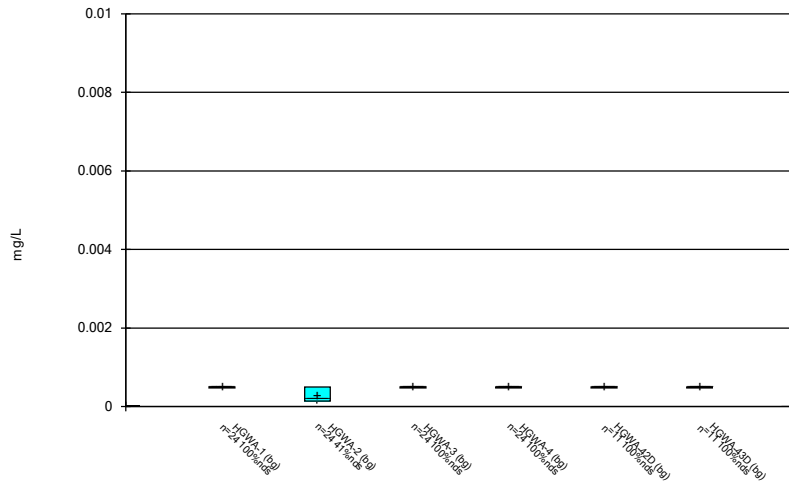
Box & Whiskers Plot



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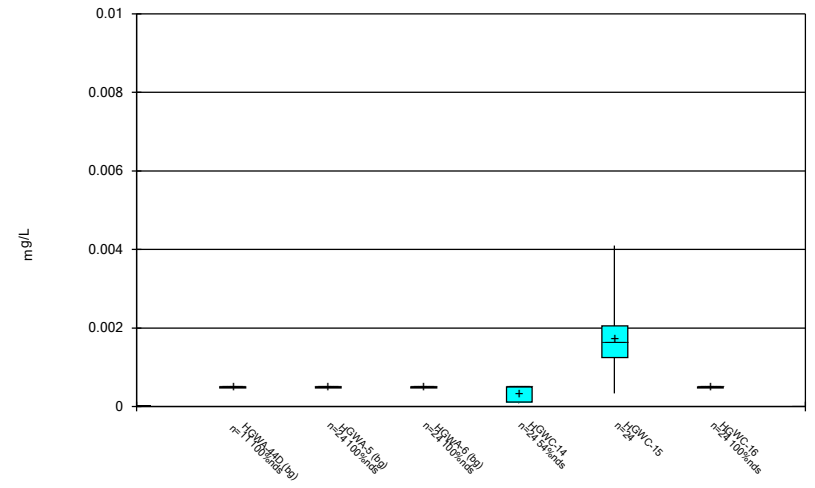


Box & Whiskers Plot



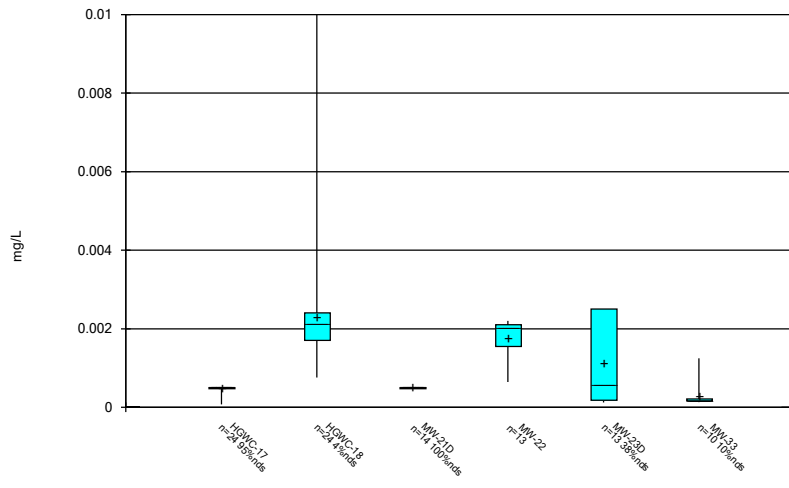
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Box & Whiskers Plot



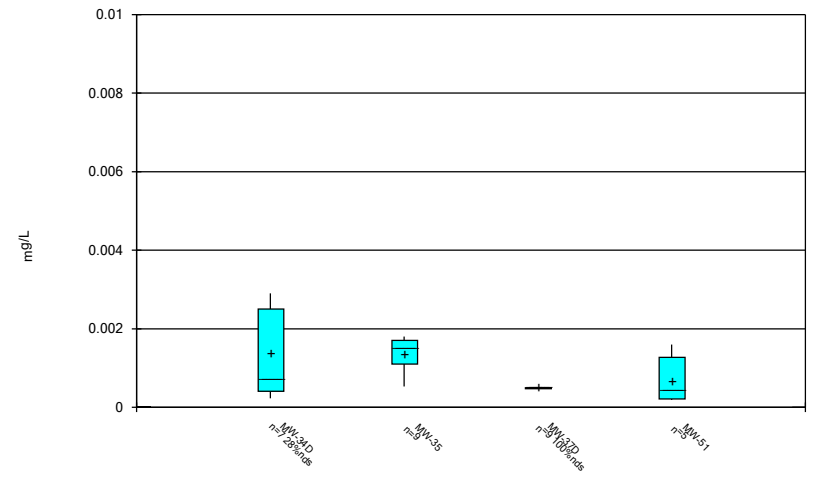
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Box & Whiskers Plot



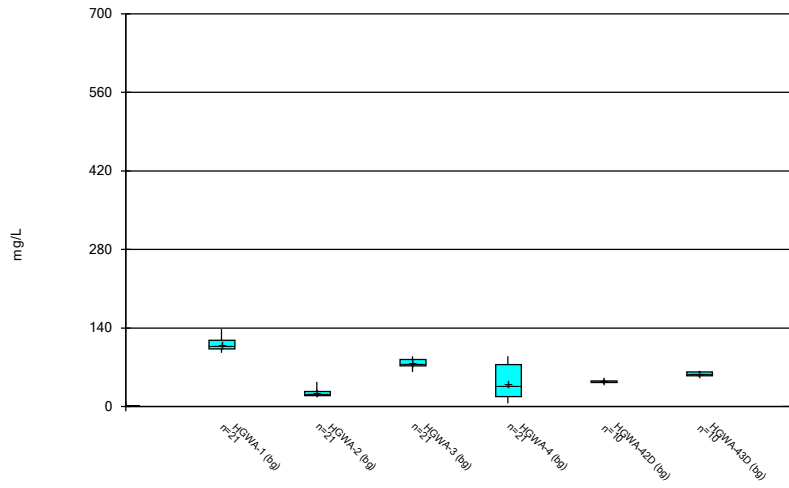
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



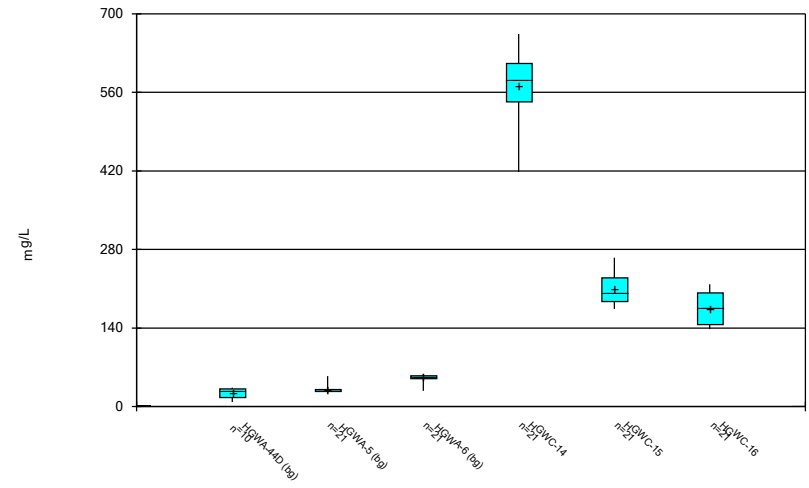
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Box & Whiskers Plot



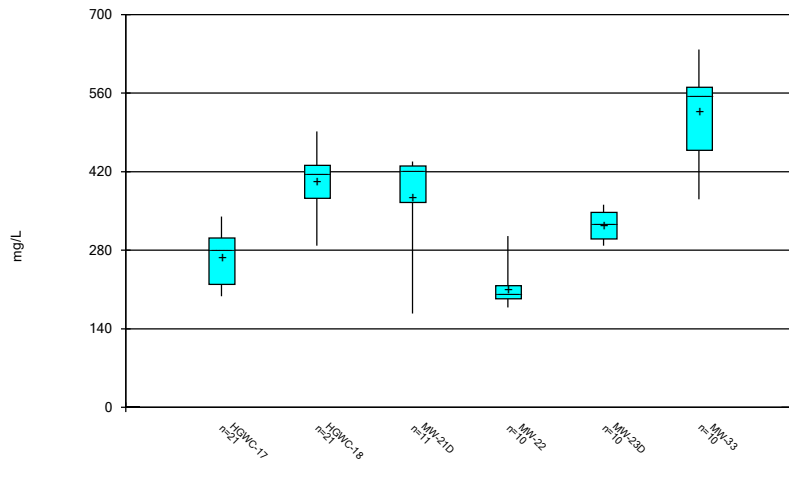
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Box & Whiskers Plot



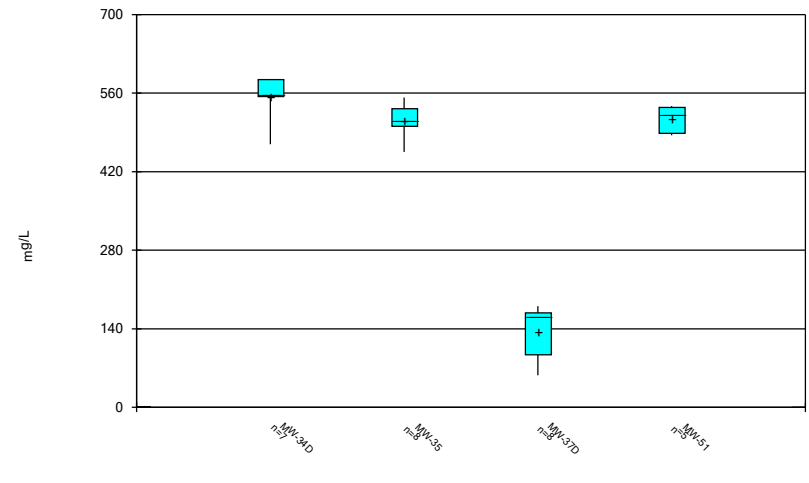
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Box & Whiskers Plot



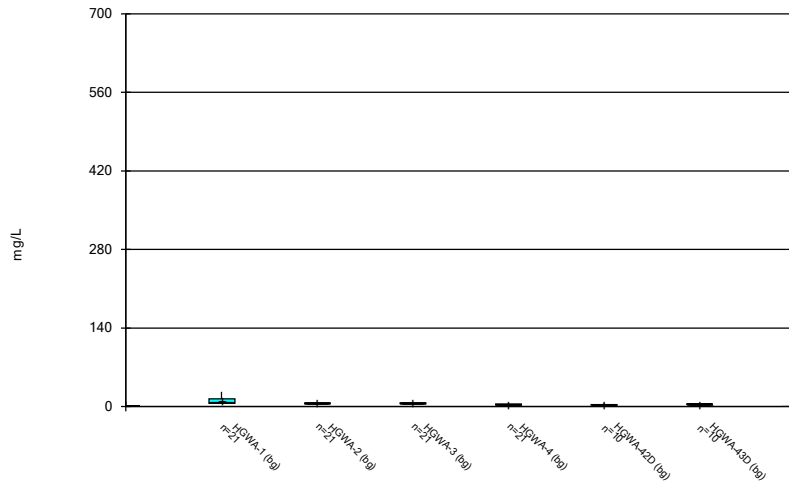
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Box & Whiskers Plot



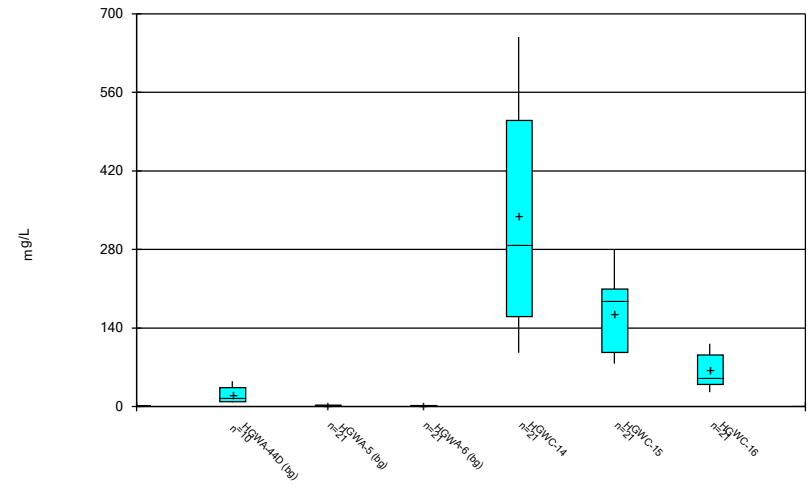
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Box & Whiskers Plot



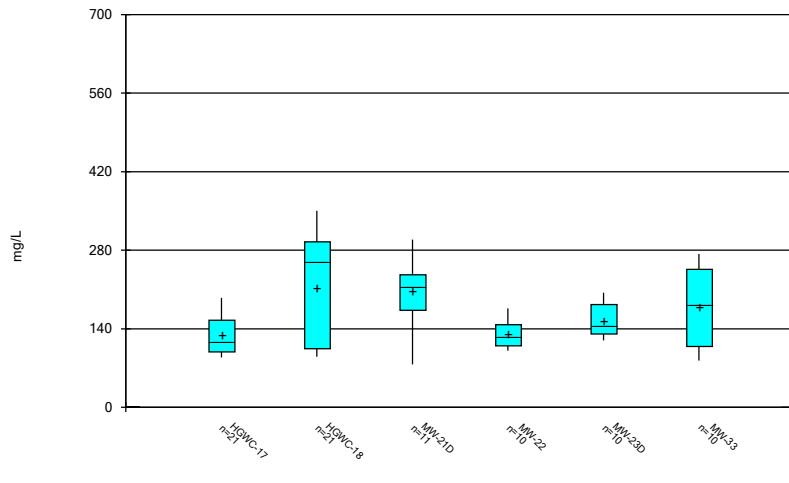
Constituent: Chloride Analysis Run 11/15/2023 1:58 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



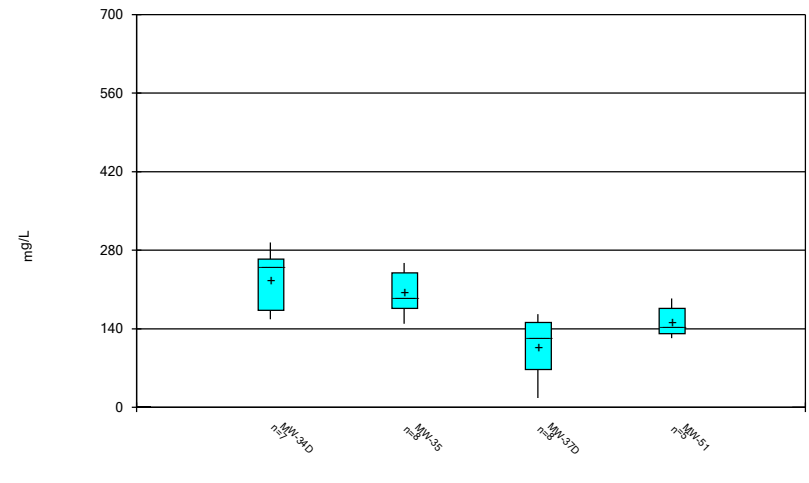
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



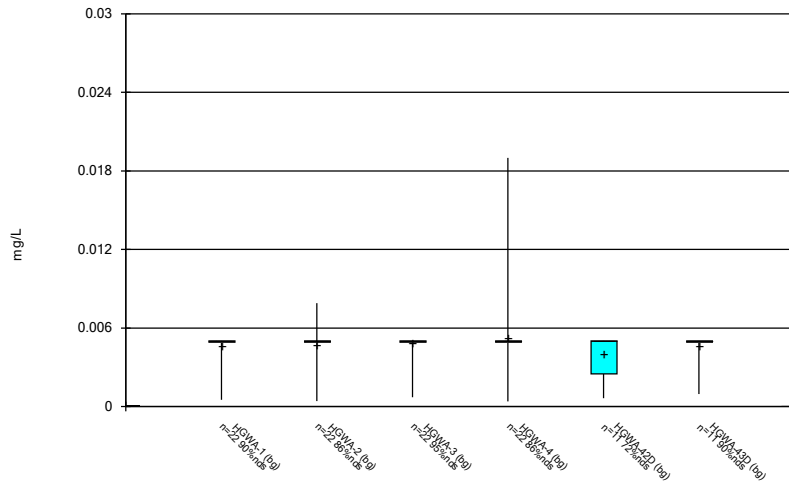
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Box & Whiskers Plot



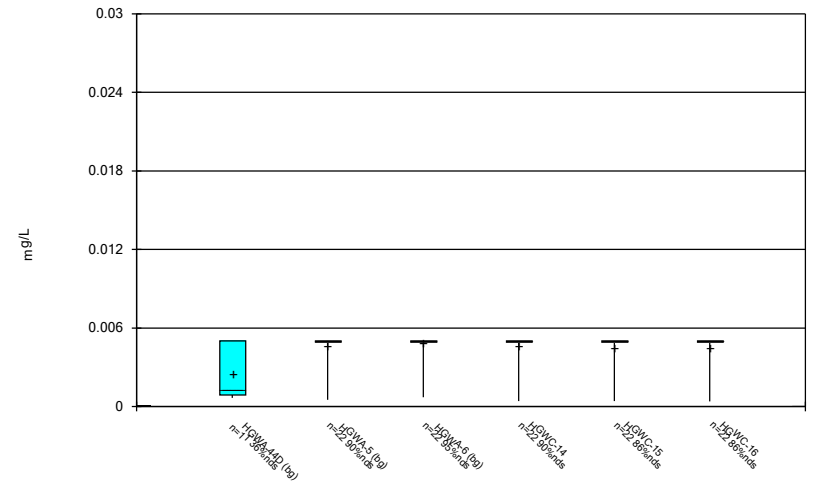
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Box & Whiskers Plot



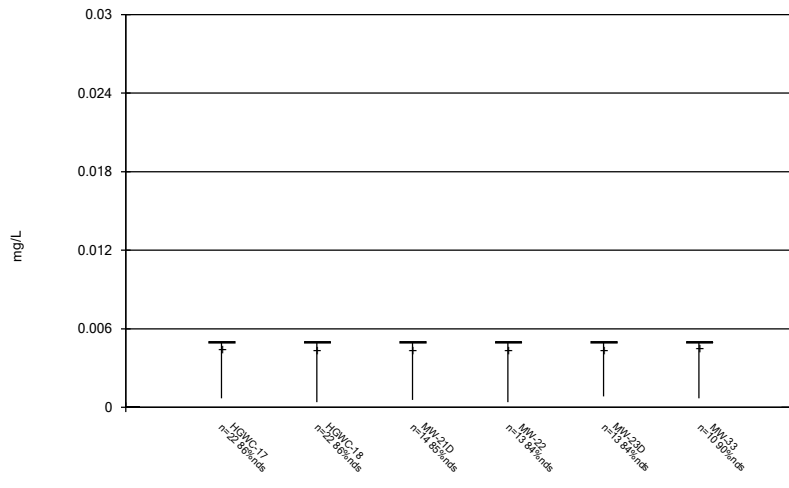
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Box & Whiskers Plot



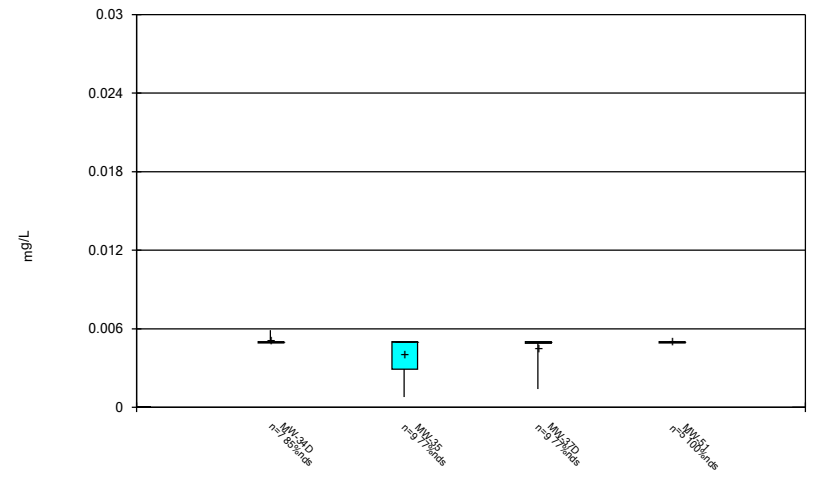
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



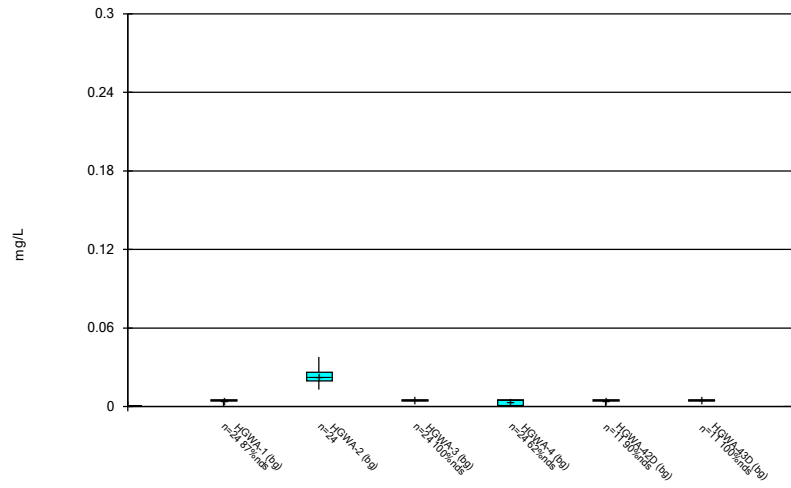
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Box & Whiskers Plot



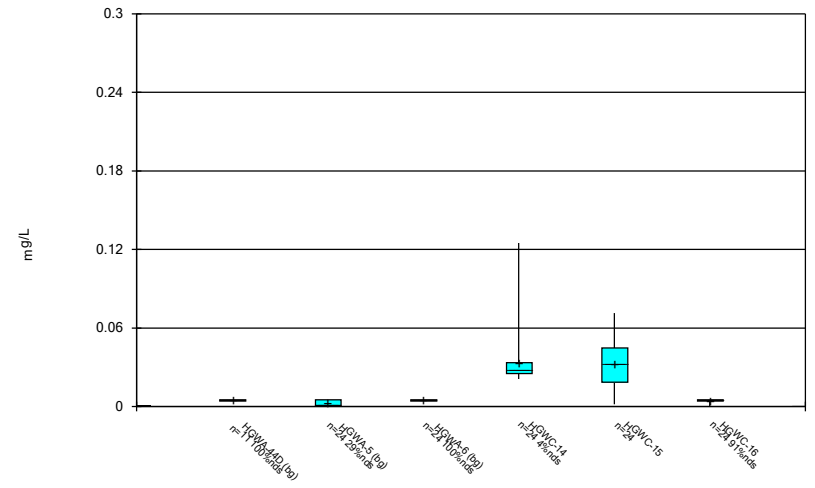
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Box & Whiskers Plot



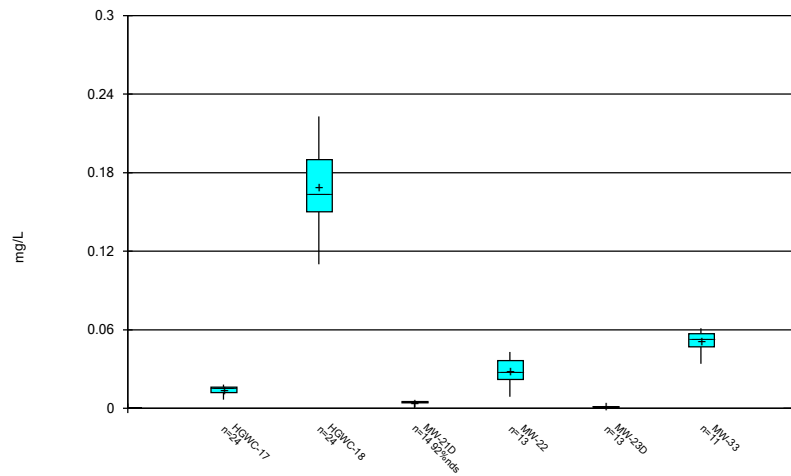
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Box & Whiskers Plot



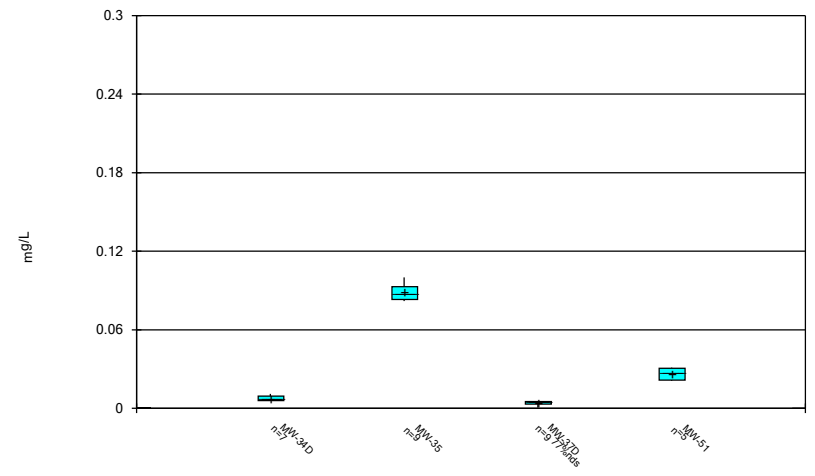
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Box & Whiskers Plot



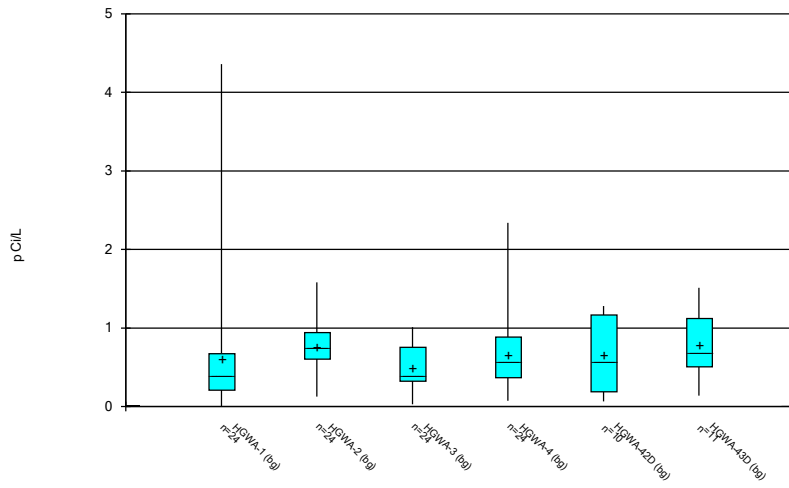
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



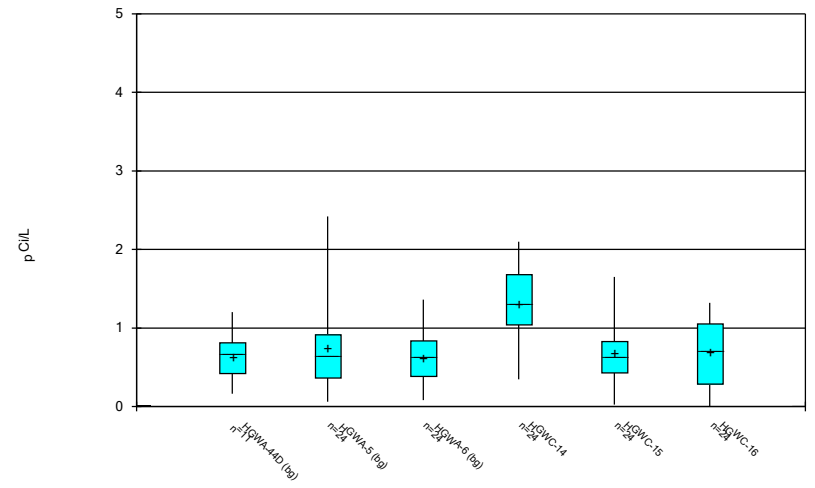
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



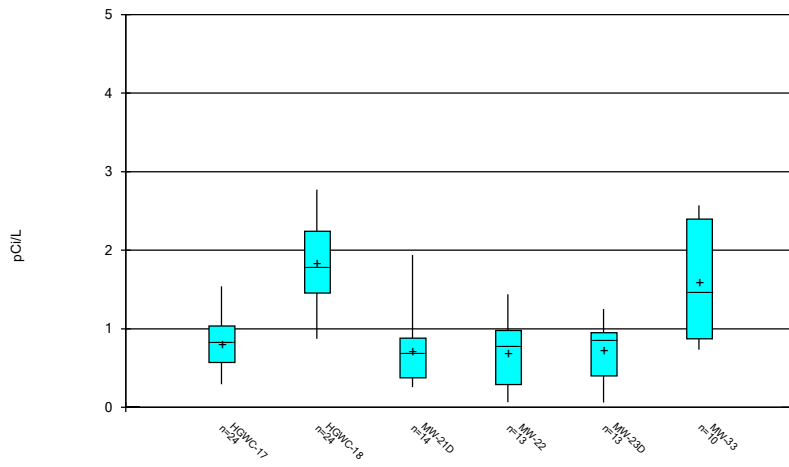
Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 1:59 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



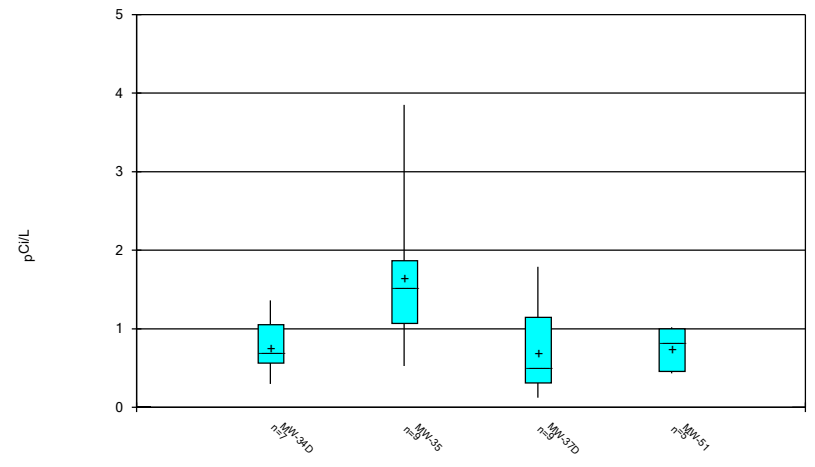
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Box & Whiskers Plot



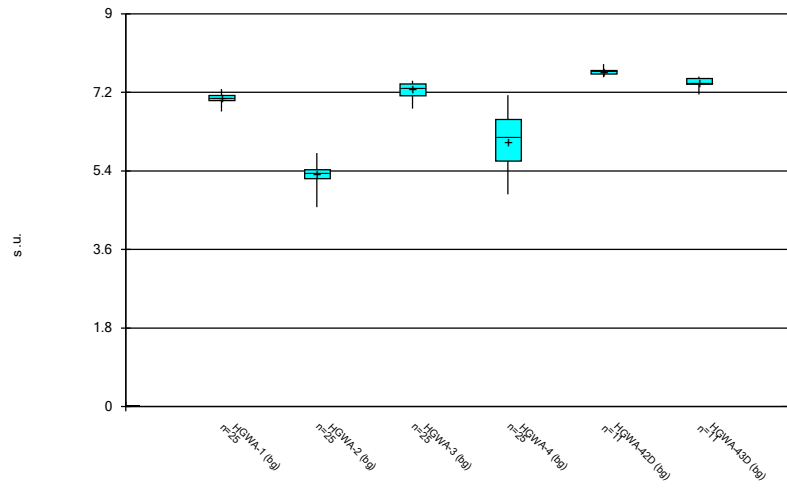
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



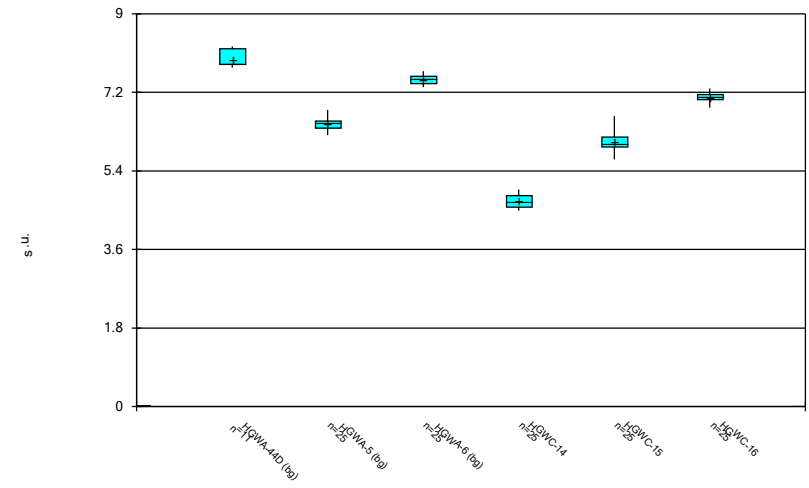
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



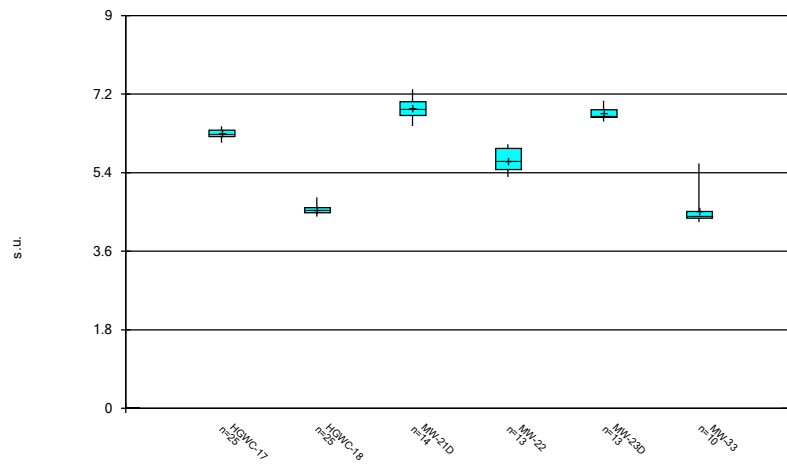
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



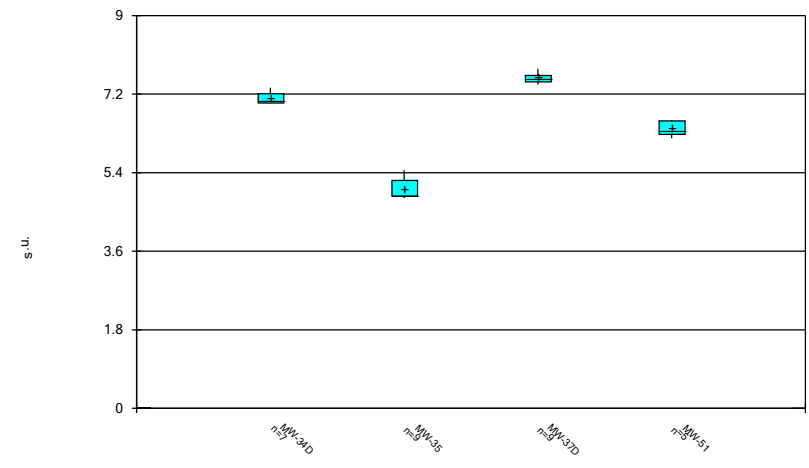
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



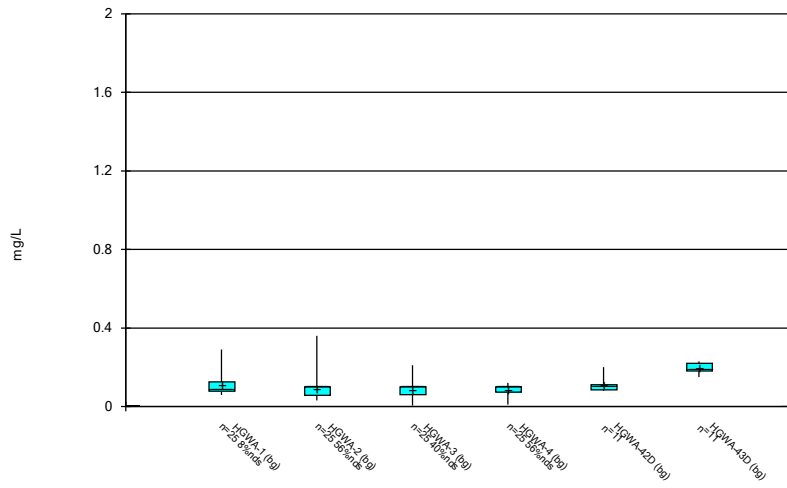
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



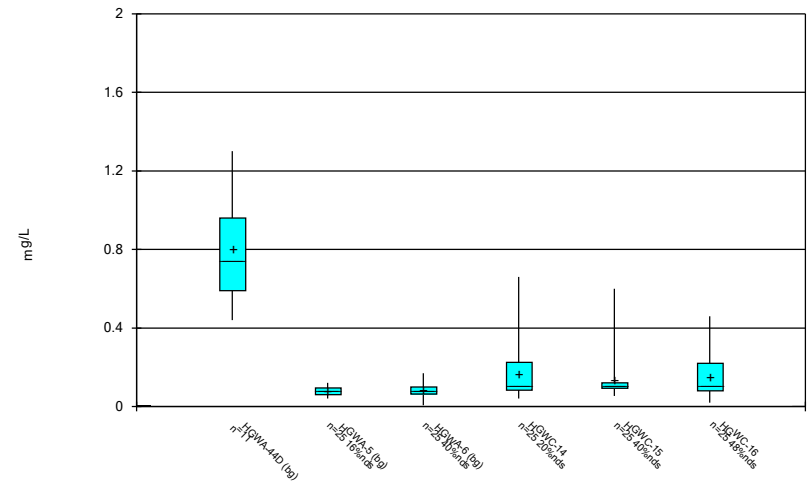
Constituent: Field pH Analysis Run 11/15/2023 1:59 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



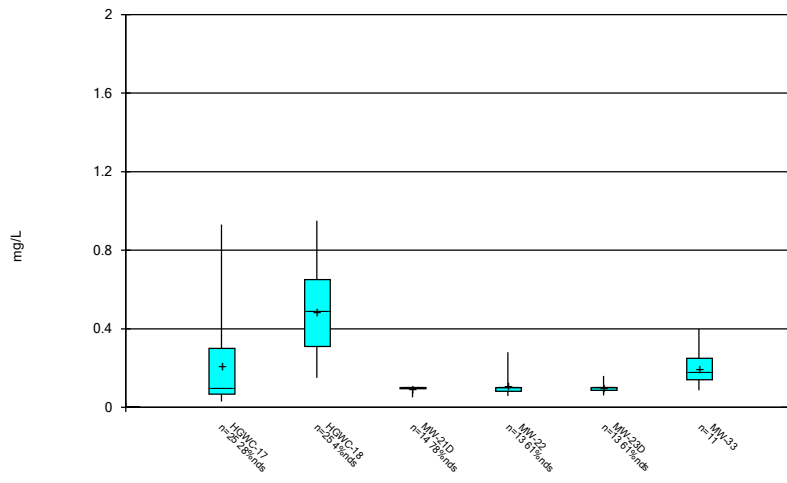
Constituent: Fluoride Analysis Run 11/15/2023 1:59 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



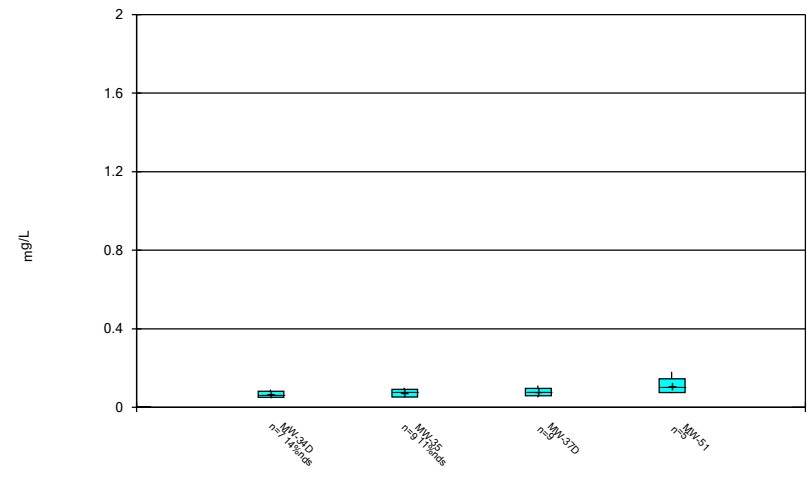
Constituent: Fluoride Analysis Run 11/15/2023 1:59 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 11/15/2023 1:59 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

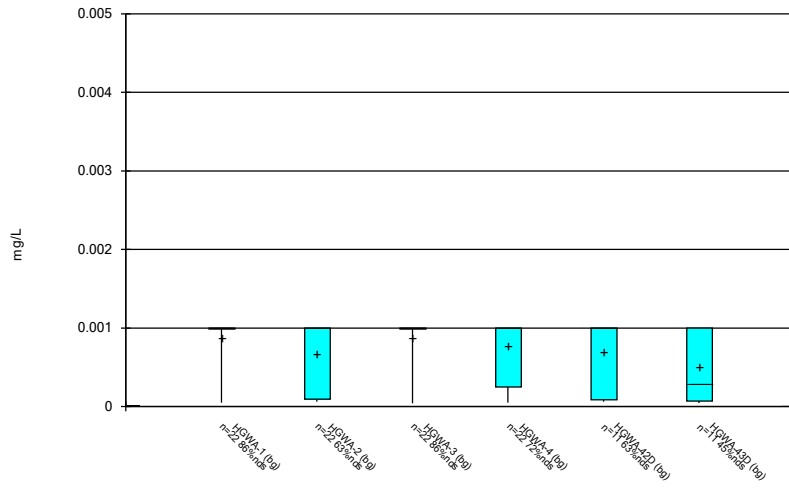
Box & Whiskers Plot



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Plant Hammond Client: Southern Company Data: Hammond AP-2

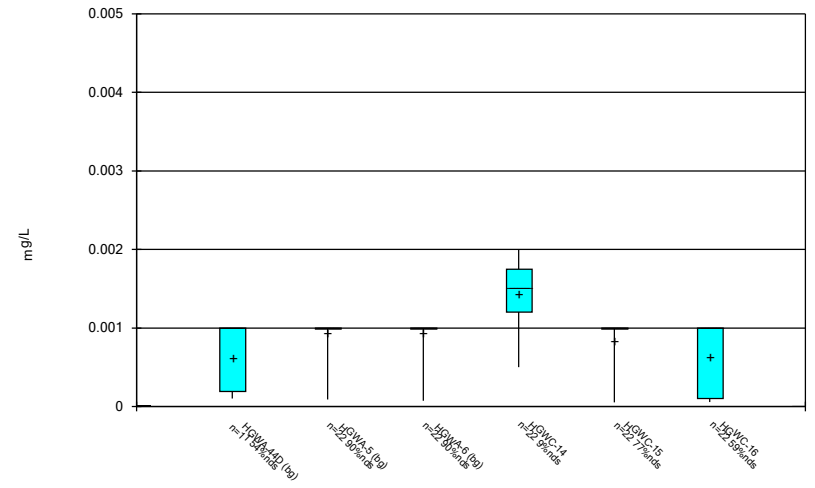


Box & Whiskers Plot



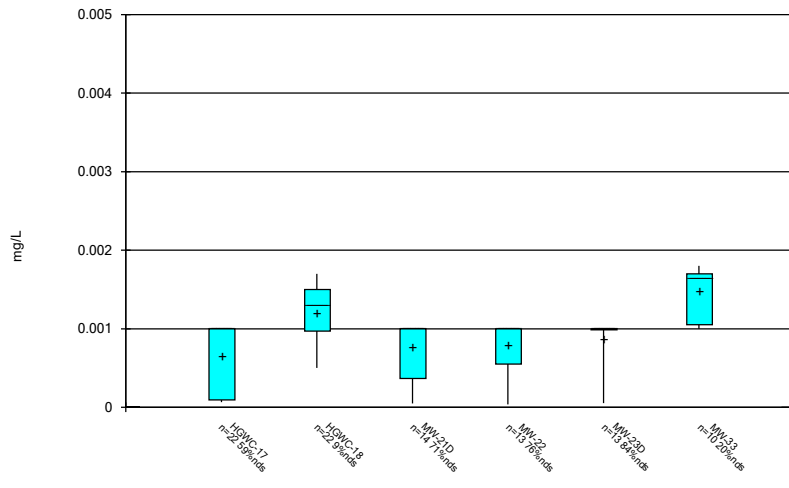
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Box & Whiskers Plot



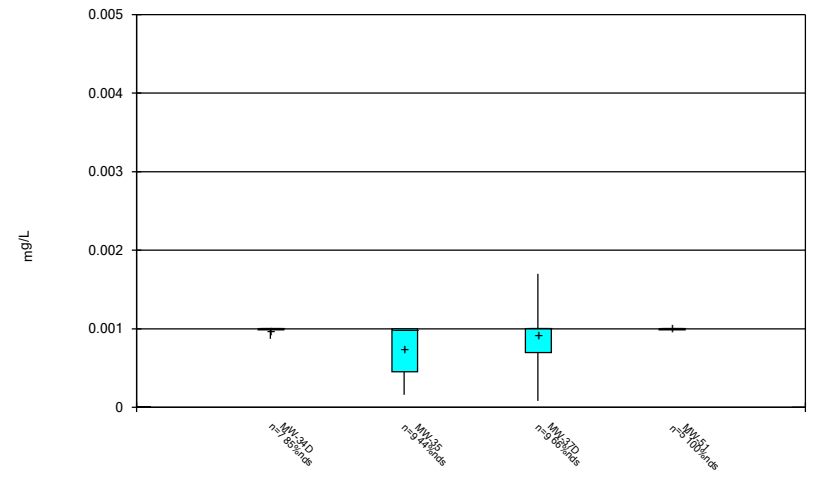
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Box & Whiskers Plot



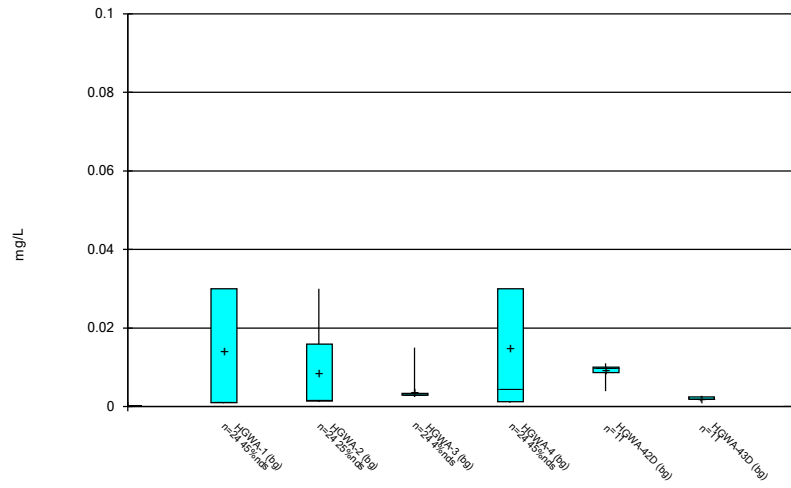
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Box & Whiskers Plot



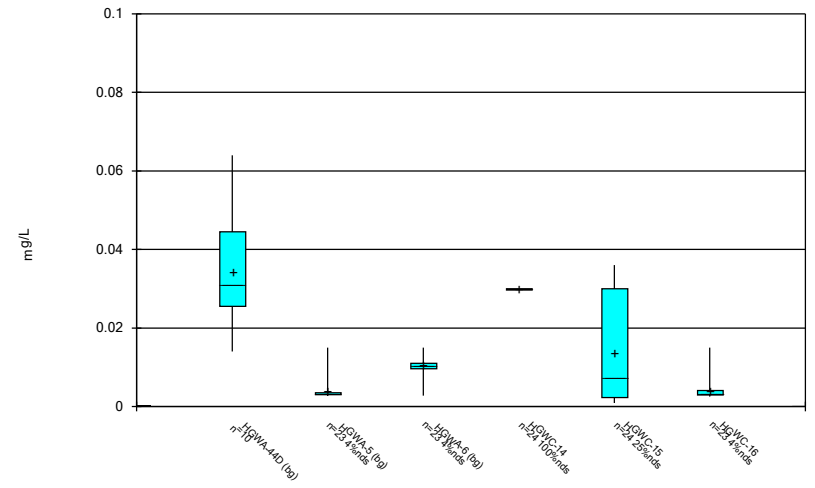
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Box & Whiskers Plot



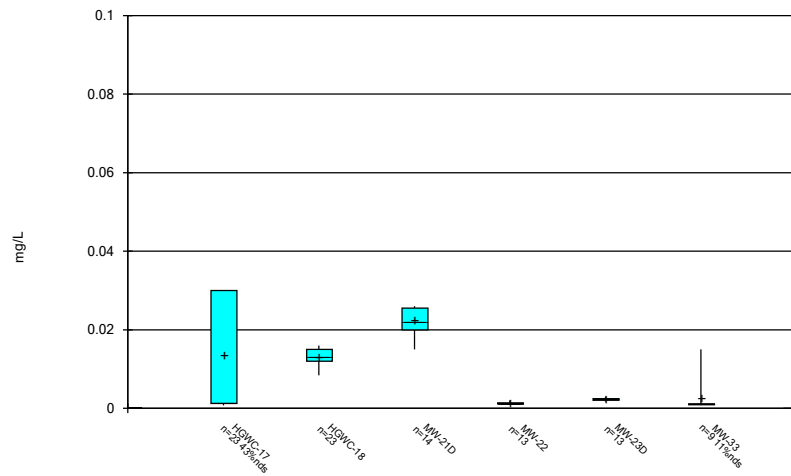
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Box & Whiskers Plot



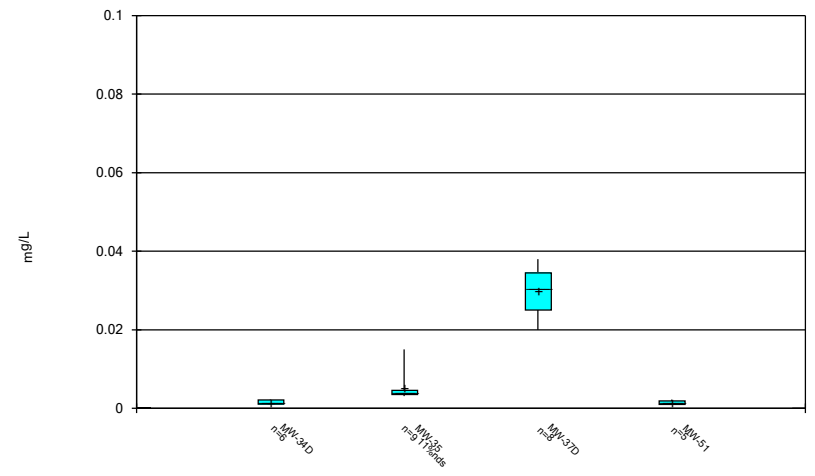
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



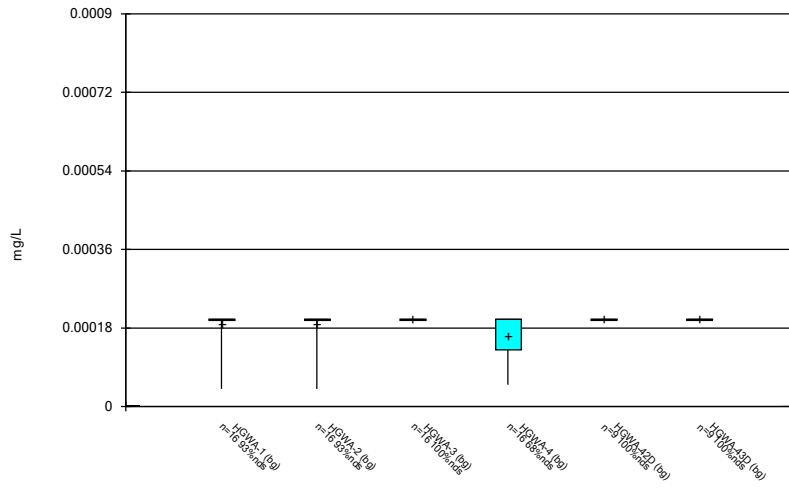
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



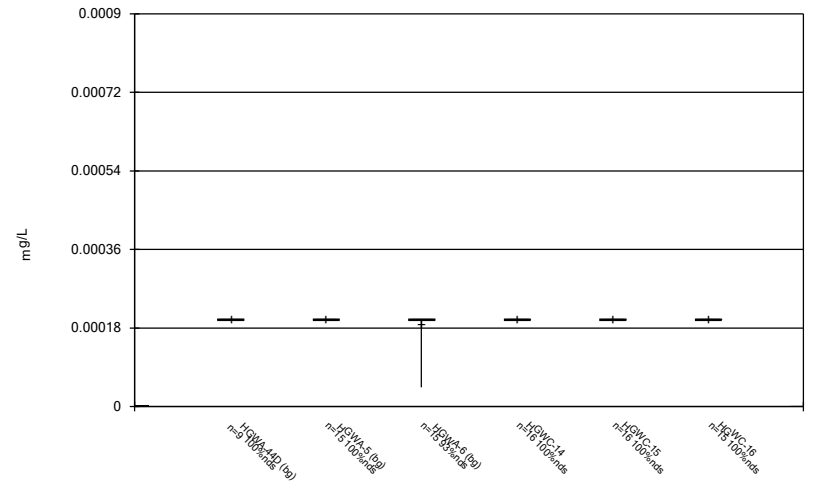
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



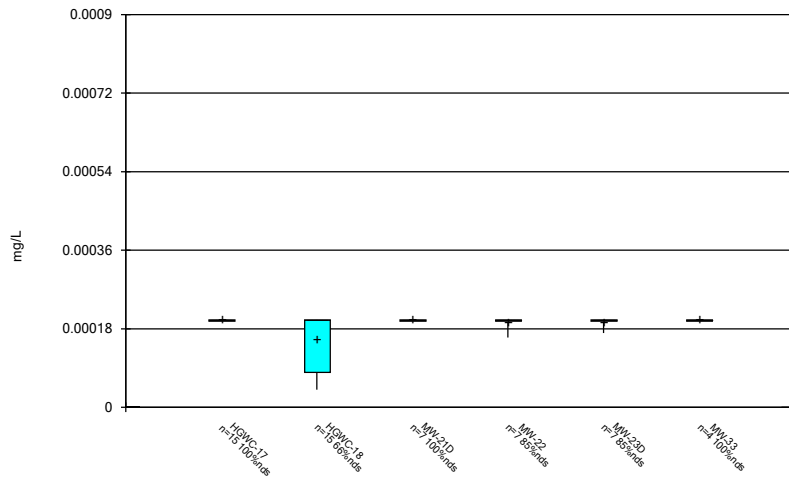
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



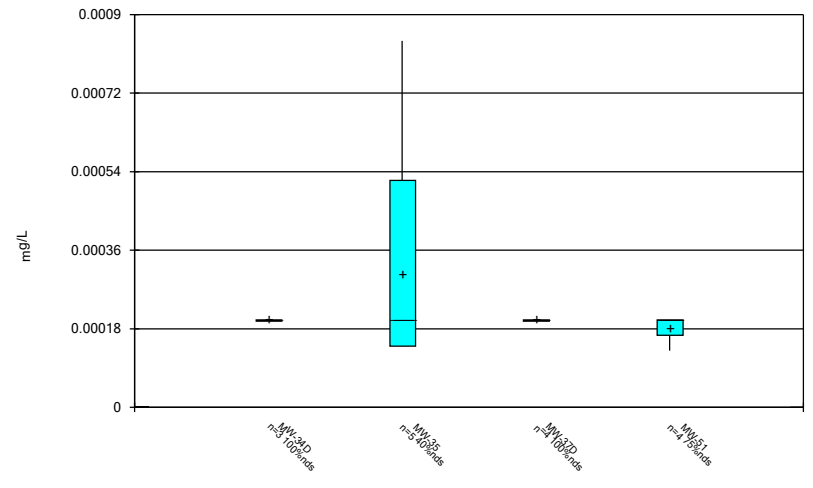
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



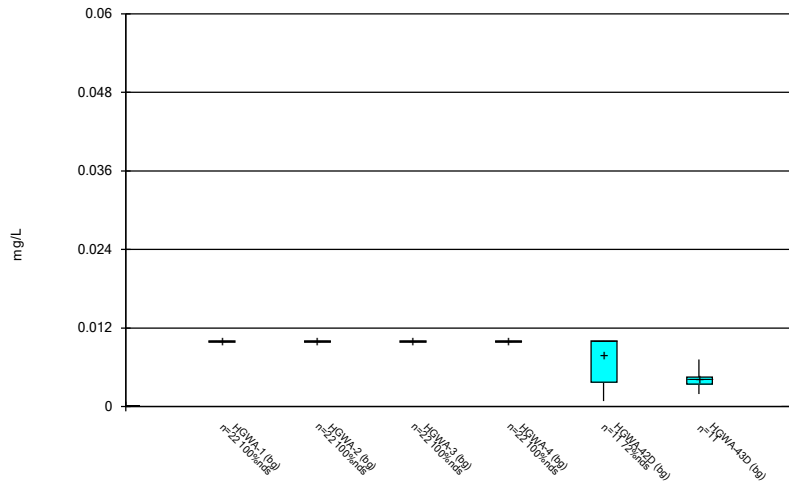
Constituent: Mercury Analysis Run 11/15/2023 1:59 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



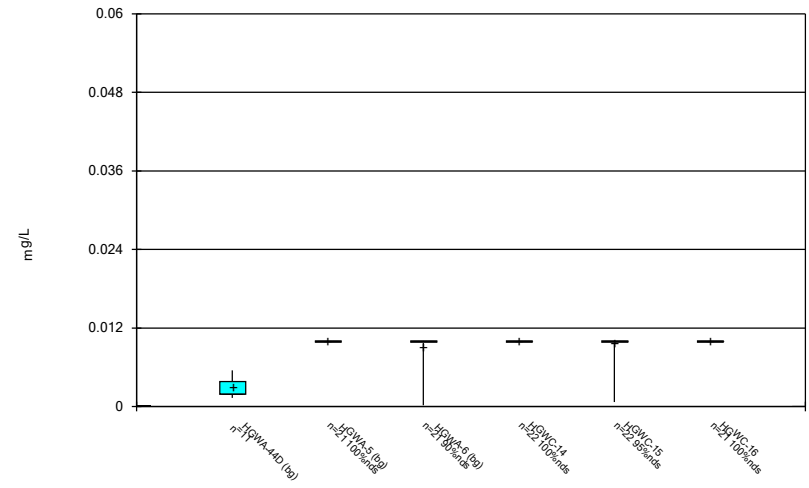
Constituent: Mercury Analysis Run 11/15/2023 1:59 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



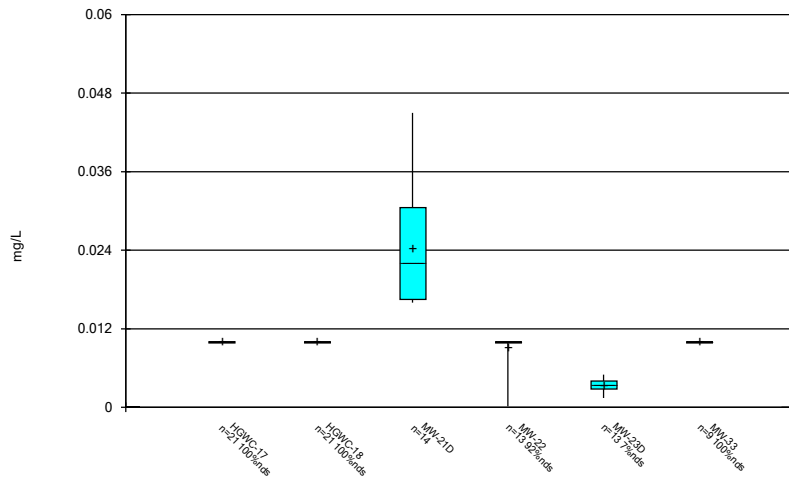
Constituent: Molybdenum Analysis Run 11/15/2023 1:59 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



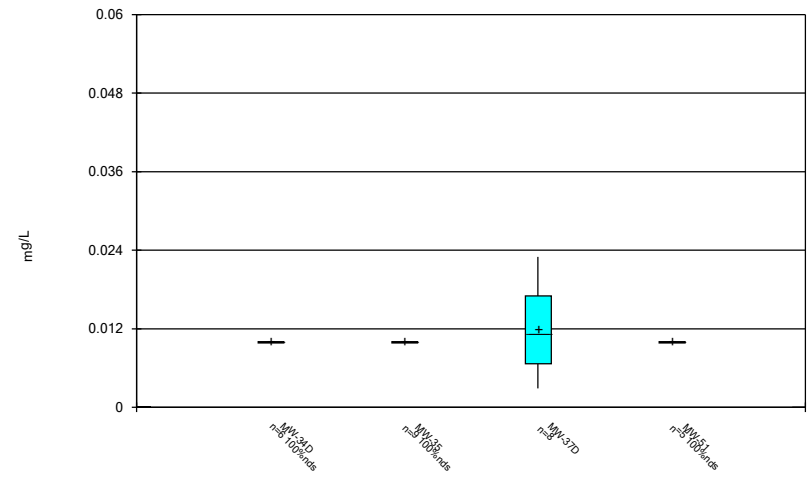
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



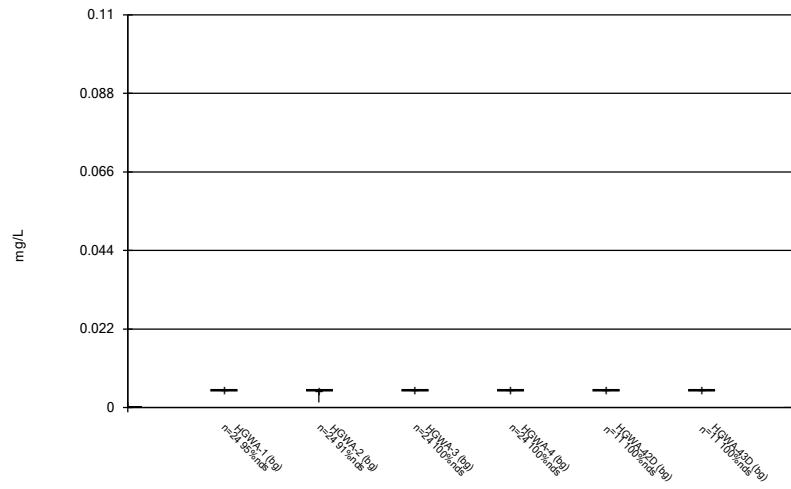
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Box & Whiskers Plot



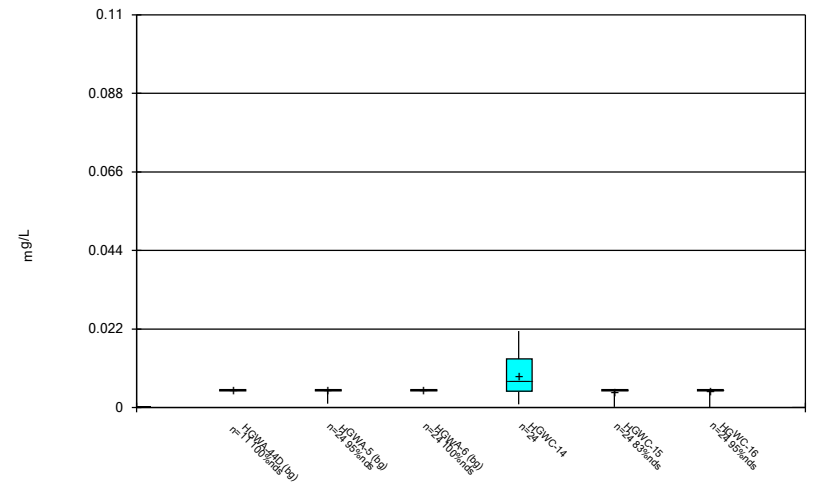
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 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



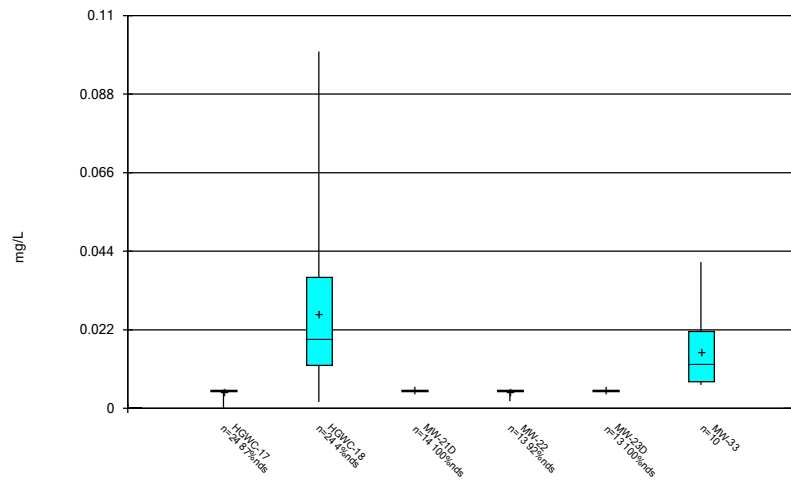
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



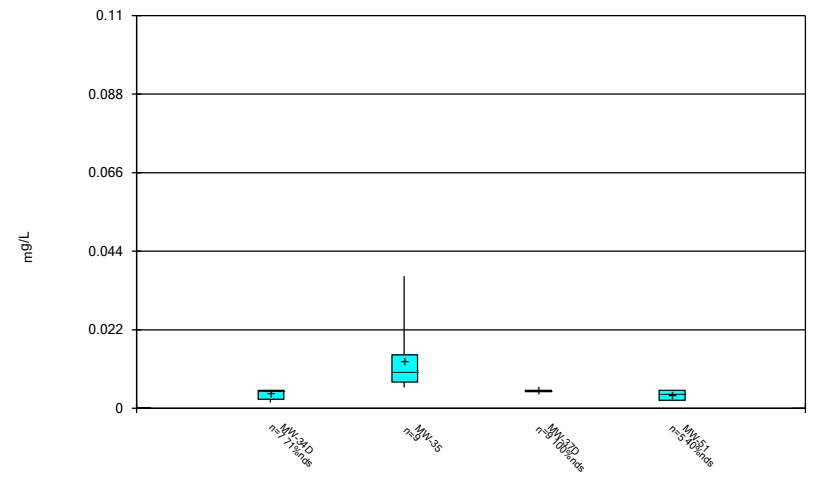
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



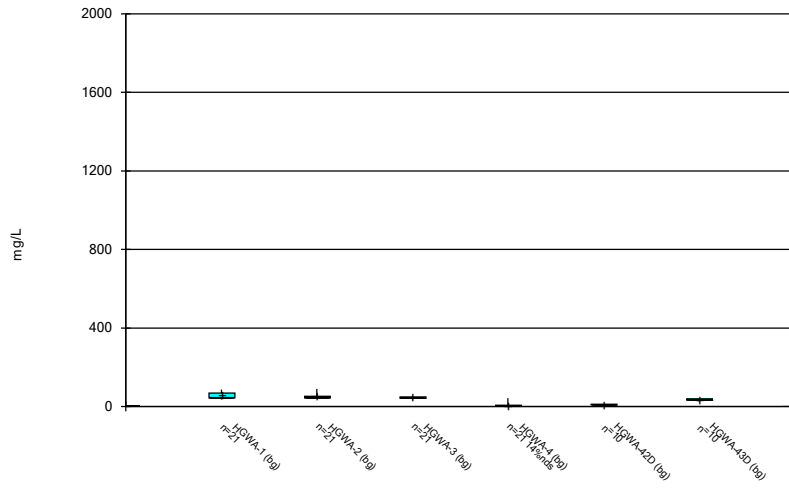
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



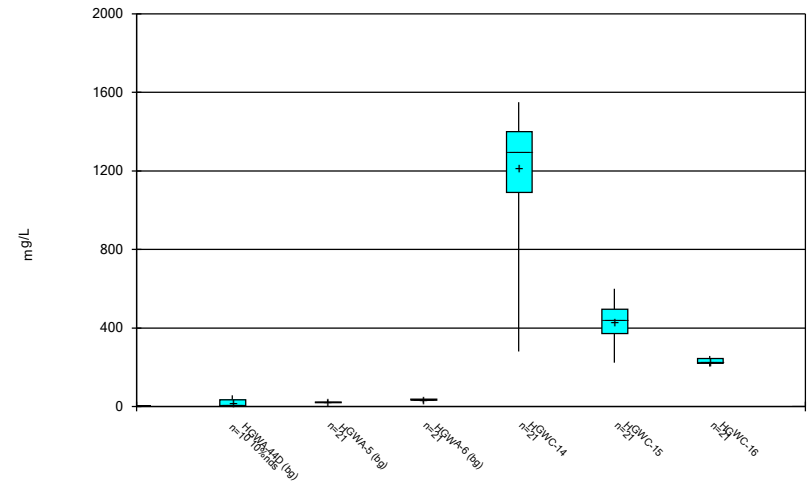
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Box & Whiskers Plot



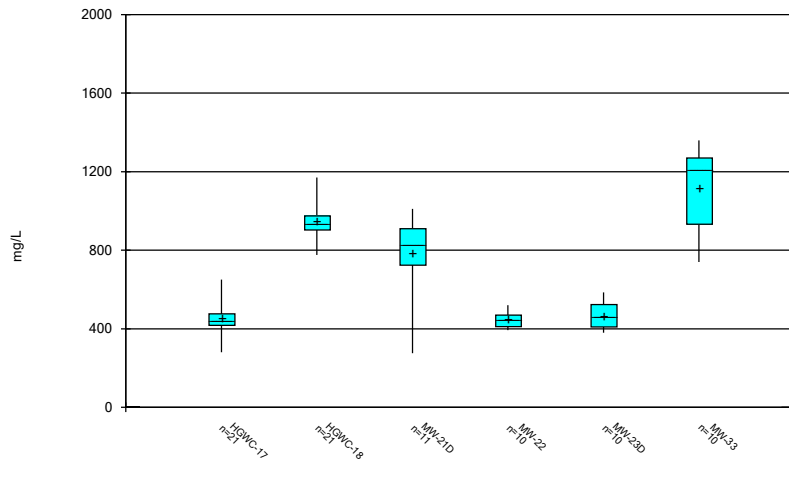
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



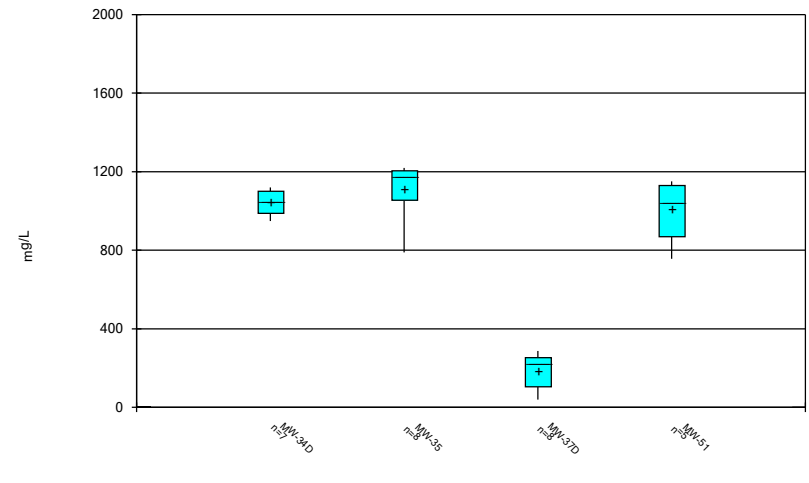
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



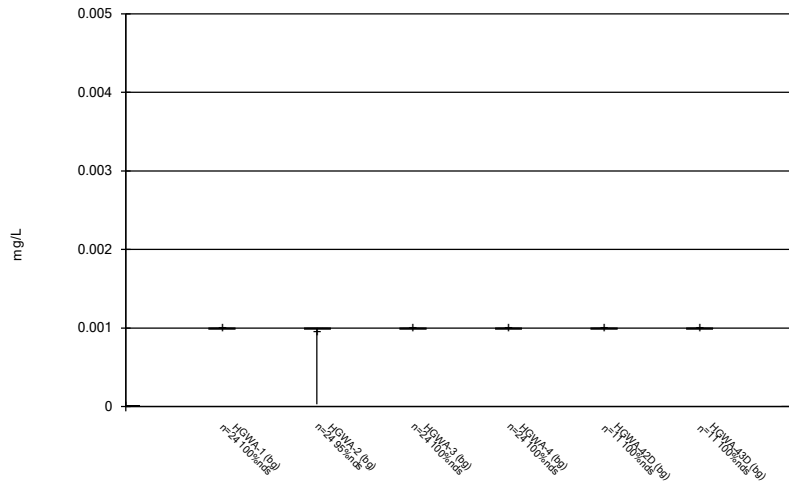
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



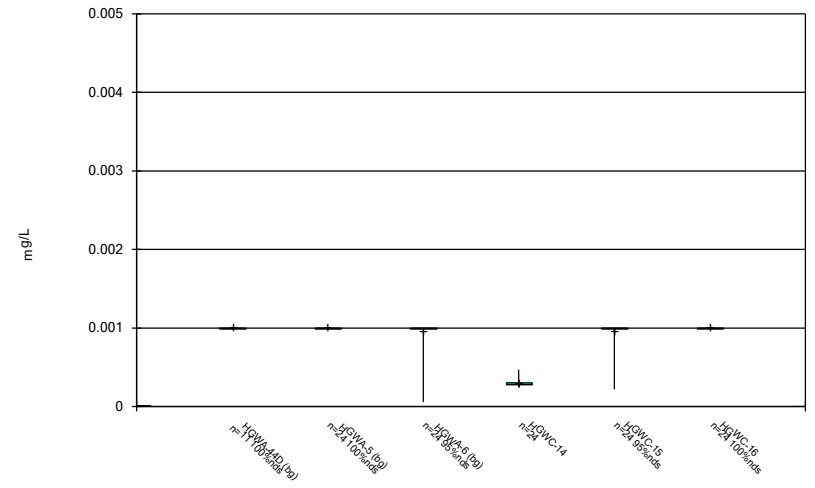
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



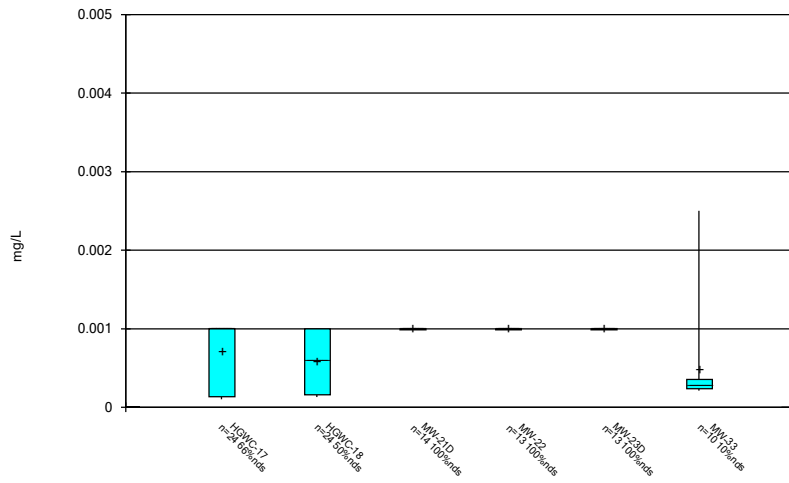
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Box & Whiskers Plot



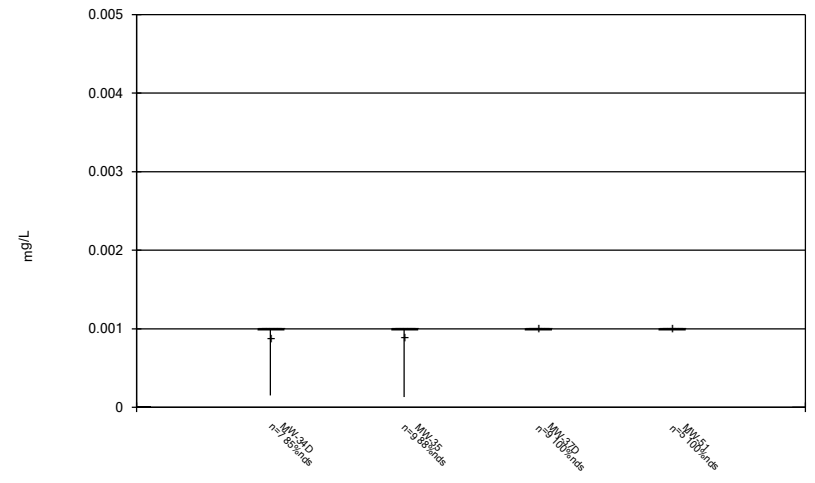
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Box & Whiskers Plot



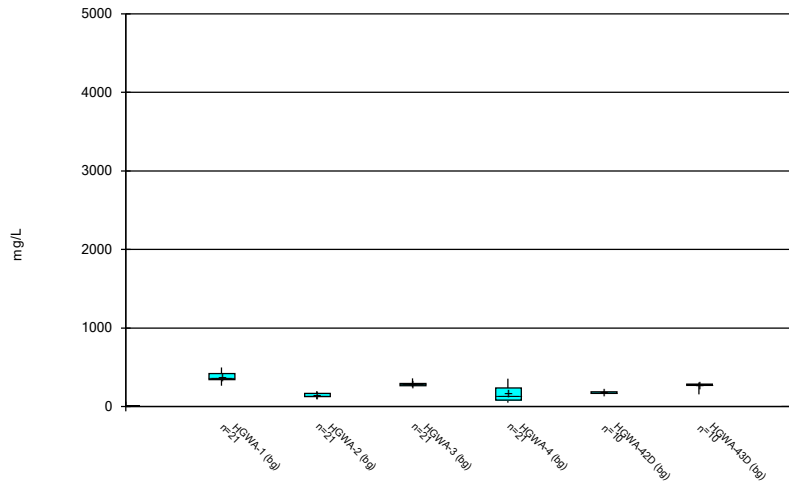
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Box & Whiskers Plot



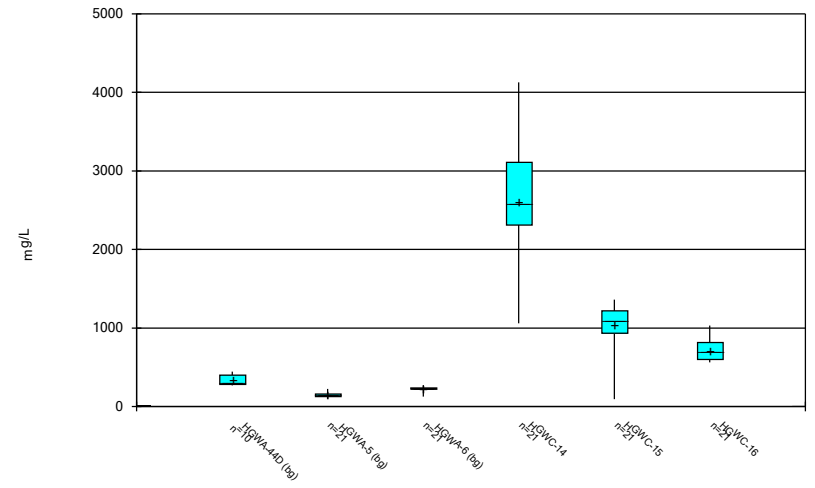
Constituent: Thallium Analysis Run 11/15/2023 1:59 PM View: Constituents View  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



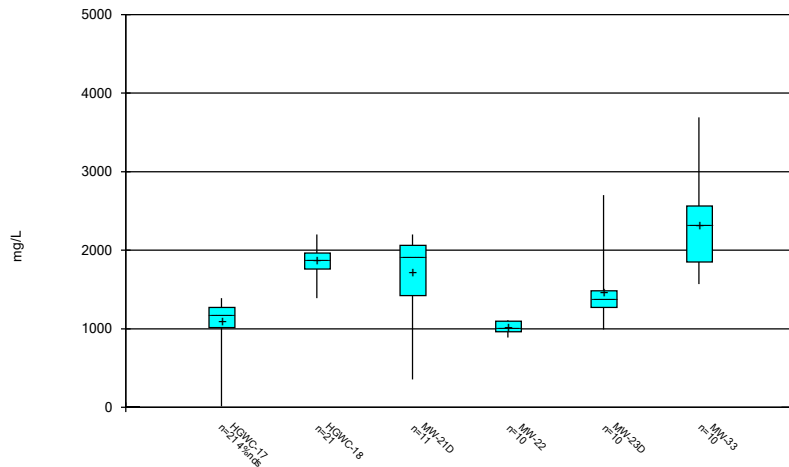
Constituent: Total Dissolved Solids Analysis Run 11/15/2023 1:59 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



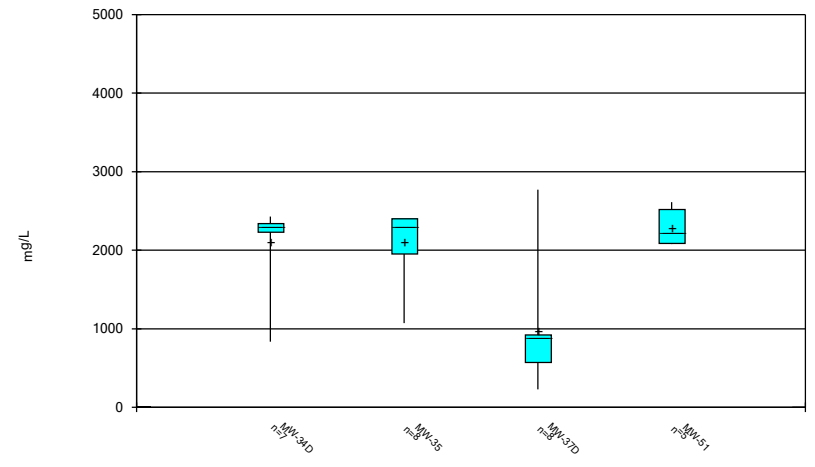
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Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 1:59 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/15/2023 1:59 PM View: Constituents View  
Plant Hammond Client: Southern Company Data: Hammond AP-2



FIGURE C.

# Outlier Summary

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/25/2023, 1:03 PM

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HGWA-4D Lithium (mg/L)

8/8/2023

0.092 (o)

FIGURE D.

# Appendix III Interwell Prediction Limits - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/17/2023, 2:02 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-14	0.55	n/a	8/13/2023	6.9	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.55	n/a	8/13/2023	1.6	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.55	n/a	8/13/2023	2.2	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.55	n/a	8/13/2023	6.2	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.55	n/a	8/13/2023	7.7	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	8/13/2023	418	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	8/13/2023	182	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	8/13/2023	187	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	8/13/2023	261	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	8/13/2023	355	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	8/13/2023	95.8	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	8/13/2023	78.2	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	8/13/2023	89.1	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	8/13/2023	109	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	8/13/2023	104	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	89.9	n/a	8/13/2023	935	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	89.9	n/a	8/13/2023	281	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	89.9	n/a	8/13/2023	214	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	89.9	n/a	8/13/2023	351	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	89.9	n/a	8/13/2023	895	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	8/13/2023	1960	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	8/13/2023	881	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	8/13/2023	861	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	8/13/2023	1180	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	8/13/2023	1700	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2

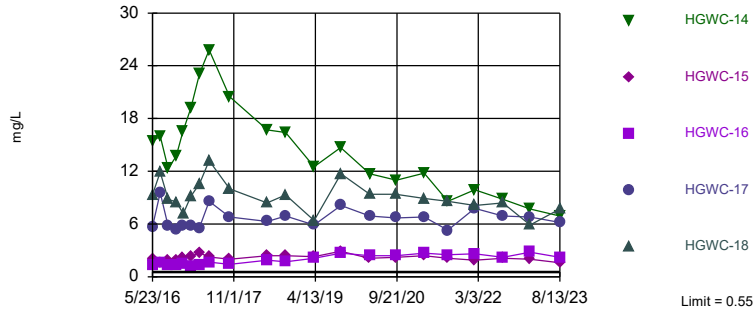
# Appendix III Interwell Prediction Limits - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/17/2023, 2:02 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-14	0.55	n/a	8/13/2023	6.9	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-15	0.55	n/a	8/13/2023	1.6	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-16	0.55	n/a	8/13/2023	2.2	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-17	0.55	n/a	8/13/2023	6.2	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Boron (mg/L)	HGWC-18	0.55	n/a	8/13/2023	7.7	Yes	156	n/a	n/a	6.41	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-14	138	n/a	8/13/2023	418	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-15	138	n/a	8/13/2023	182	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-16	138	n/a	8/13/2023	187	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-17	138	n/a	8/13/2023	261	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Calcium (mg/L)	HGWC-18	138	n/a	8/13/2023	355	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-14	44.8	n/a	8/13/2023	95.8	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-15	44.8	n/a	8/13/2023	78.2	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-16	44.8	n/a	8/13/2023	89.1	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-17	44.8	n/a	8/13/2023	109	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Chloride (mg/L)	HGWC-18	44.8	n/a	8/13/2023	104	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-14	8.25	4.57	8/13/2023	4.83	No	183	n/a	n/a	0	n/a	n/a	0.0001178	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-15	8.25	4.57	8/13/2023	6.66	No	183	n/a	n/a	0	n/a	n/a	0.0001178	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-16	8.25	4.57	8/13/2023	7.13	No	183	n/a	n/a	0	n/a	n/a	0.0001178	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-17	8.25	4.57	8/13/2023	6.46	No	183	n/a	n/a	0	n/a	n/a	0.0001178	NP Inter (normality) 1 of 2
Field pH (s.u.)	HGWC-18	8.25	4.57	8/13/2023	4.75	No	183	n/a	n/a	0	n/a	n/a	0.0001178	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-14	1.3	n/a	8/13/2023	0.1	No	183	n/a	n/a	29.51	n/a	n/a	0.00005888	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-15	1.3	n/a	8/13/2023	0.12	No	183	n/a	n/a	29.51	n/a	n/a	0.00005888	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-16	1.3	n/a	8/13/2023	0.053J	No	183	n/a	n/a	29.51	n/a	n/a	0.00005888	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-17	1.3	n/a	8/13/2023	0.081J	No	183	n/a	n/a	29.51	n/a	n/a	0.00005888	NP Inter (normality) 1 of 2
Fluoride (mg/L)	HGWC-18	1.3	n/a	8/13/2023	0.25	No	183	n/a	n/a	29.51	n/a	n/a	0.00005888	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-14	89.9	n/a	8/13/2023	935	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-15	89.9	n/a	8/13/2023	281	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-16	89.9	n/a	8/13/2023	214	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-17	89.9	n/a	8/13/2023	351	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Sulfate (mg/L)	HGWC-18	89.9	n/a	8/13/2023	895	Yes	156	n/a	n/a	2.564	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-14	496	n/a	8/13/2023	1960	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-15	496	n/a	8/13/2023	881	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-16	496	n/a	8/13/2023	861	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-17	496	n/a	8/13/2023	1180	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	HGWC-18	496	n/a	8/13/2023	1700	Yes	156	n/a	n/a	0	n/a	n/a	0.00008112	NP Inter (normality) 1 of 2

Exceeds Limit: HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18

### Prediction Limit Interwell Non-parametric

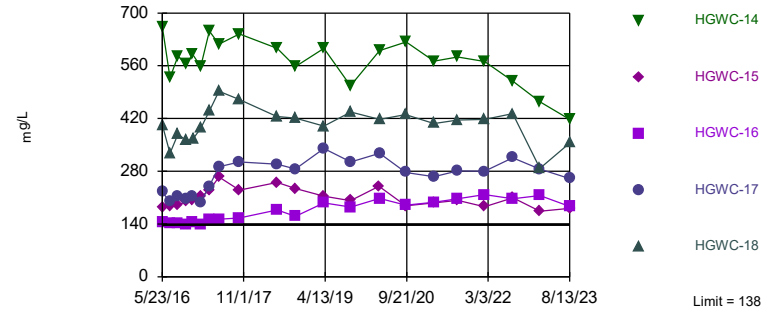


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 156 background values. 6.41% NDs. Annual per-constituent alpha = 0.001135. Individual comparison alpha = 0.00008112 (1 of 2). Comparing 5 points to limit. Assumes 2 future values.

Constituent: Boron Analysis Run 10/17/2023 2:00 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18

### Prediction Limit Interwell Non-parametric

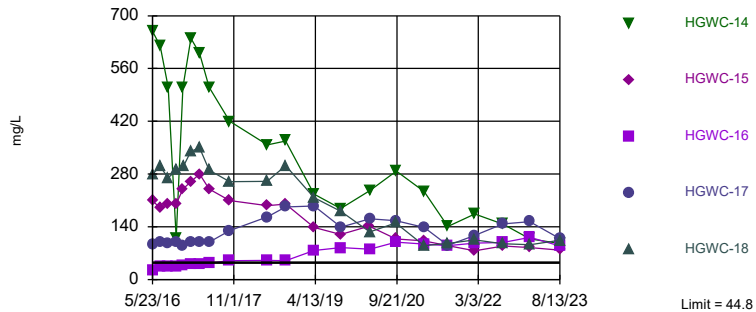


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 156 background values. Annual per-constituent alpha = 0.001135. Individual comparison alpha = 0.00008112 (1 of 2). Comparing 5 points to limit. Assumes 2 future values.

Constituent: Calcium Analysis Run 10/17/2023 2:00 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15, HGWC-16, HGWC-17, HGWC-18

### Prediction Limit Interwell Non-parametric

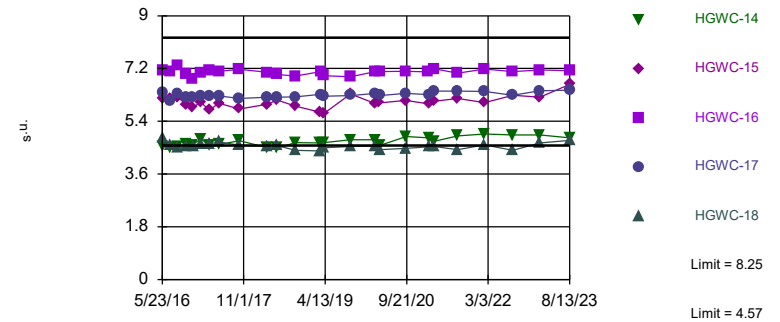


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 156 background values. Annual per-constituent alpha = 0.001135. Individual comparison alpha = 0.00008112 (1 of 2). Comparing 5 points to limit. Assumes 2 future values.

Constituent: Chloride Analysis Run 10/17/2023 2:00 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Within Limits

### Prediction Limit Interwell Non-parametric

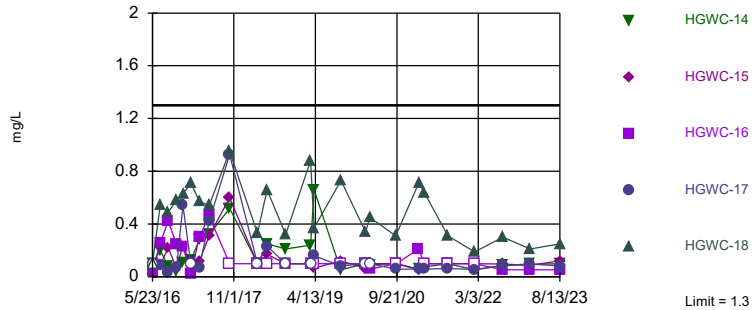


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 183 background values. Annual per-constituent alpha = 0.001648. Individual comparison alpha = 0.0001178 (1 of 2). Comparing 5 points to limit. Assumes 2 future values.

Constituent: Field pH Analysis Run 10/17/2023 2:00 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Within Limit

Prediction Limit  
Interwell Non-parametric

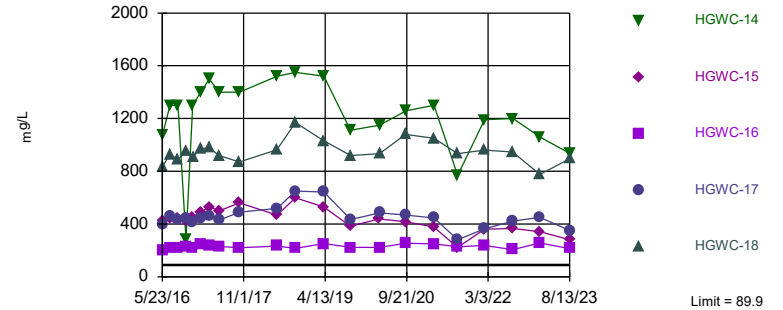


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 183 background values. 29.51% NDs. Annual per-constituent alpha = 0.000824. Individual comparison alpha = 0.00005888 (1 of 2). Comparing 5 points to limit. Assumes 2 future values.

Constituent: Fluoride Analysis Run 10/17/2023 2:00 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15,  
HGWC-16, HGWC-17, HGWC-18

Prediction Limit  
Interwell Non-parametric

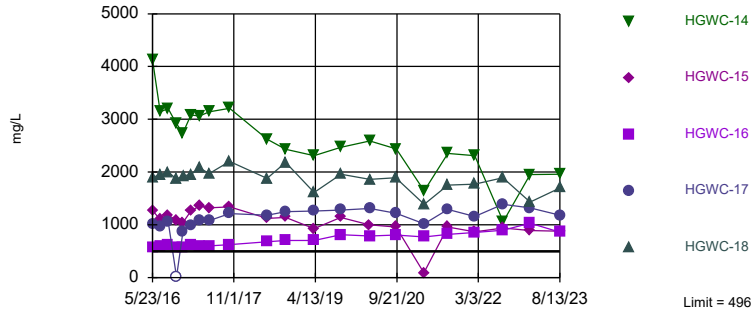


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 156 background values. 2.564% NDs. Annual per-constituent alpha = 0.001135. Individual comparison alpha = 0.00008112 (1 of 2). Comparing 5 points to limit. Assumes 2 future values.

Constituent: Sulfate Analysis Run 10/17/2023 2:00 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Exceeds Limit: HGWC-14, HGWC-15,  
HGWC-16, HGWC-17, HGWC-18

Prediction Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 156 background values. Annual per-constituent alpha = 0.001135. Individual comparison alpha = 0.00008112 (1 of 2). Comparing 5 points to limit. Assumes 2 future values.

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:00 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-3 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-16	HGWC-15	HGWC-14
5/19/2016	0.0214 (J)	0.0321 (J)	<0.04	<0.04	<0.04				
5/20/2016						0.0363 (J)			
5/23/2016							1.36	2.02	15.4
5/24/2016									
7/11/2016	0.0142 (J)	0.0337 (J)	0.0175 (J)		0.0052 (J)	0.0179 (J)			
7/12/2016				0.0074 (J)			1.62	1.65	16
8/30/2016	0.0074 (J)	0.0173 (J)	0.0072 (J)	<0.04	0.0068 (J)	0.014 (J)			
9/1/2016							1.31	1.93	12.3
10/19/2016	0.0224 (J)	0.0341 (J)	0.018 (J)	0.0085 (J)					
10/20/2016					0.0135 (J)	0.0197 (J)			
10/24/2016								1.93	13.7
10/25/2016							1.27		
12/6/2016	0.0211 (J)	0.0326 (J)	0.0158 (J)	0.0085 (J)					
12/7/2016							1.42	2.23	16.5
12/8/2016					0.0083 (J)	0.0159 (J)			
1/24/2017	0.0165 (J)	0.0365 (J)	0.0145 (J)	0.01 (J)	0.0072 (J)	<0.04			
1/26/2017							1.19	2.31	19.2
3/21/2017	0.0187 (J)	0.0349 (J)	0.0101 (J)	0.0079 (J)	<0.04	0.0166 (J)			
3/22/2017							1.32		
3/23/2017								2.72	23.1
5/22/2017	0.0782	0.0475		0.0131 (J)					
5/23/2017			0.0159 (J)		0.0095 (J)	0.0167 (J)			
5/24/2017							1.67	2.26	25.8
5/25/2017									
10/3/2017	0.0198 (J)	0.0386 (J)	0.0162 (J)	0.0097 (J)	0.0071 (J)	0.017 (J)			
10/4/2017							1.43	2	20.5
6/4/2018	0.02 (J)	0.036 (J)	0.014 (J)	0.017 (J)					
6/5/2018					0.0066 (J)	0.016 (J)			
6/6/2018							1.9	2.4	16.7
10/1/2018	0.013 (J)	0.035 (J)	0.0093 (J)	0.0061 (J)					
10/2/2018					0.0081 (J)	0.014 (J)			
10/3/2018							1.7	2.4	16.4
4/1/2019				0.0066 (J)					
4/2/2019	0.016 (J)	0.034 (J)	0.01 (J)		0.0052 (J)	0.013 (J)			
4/4/2019							2.1	2.3	
4/5/2019									12.5
9/23/2019	0.021 (J)	0.04 (J)		0.0081 (J)					
9/24/2019			0.013 (J)		0.0088 (J)	0.016 (J)		2.9	14.7
9/25/2019							2.7		
3/25/2020	0.025 (J)	0.039 (J)		0.0096 (J)		0.021 (J)			
3/26/2020			0.012 (J)		0.0072 (J)			2.1	
3/30/2020							2.4		11.7
3/31/2020									
9/15/2020	0.017 (J)	0.044 (J)	0.013 (J)	0.0071 (J)	0.012 (J)	0.016 (J)			
9/16/2020									
9/17/2020							2.4	2.2	
9/18/2020									11
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									



# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-3 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-16	HGWC-15	HGWC-14
3/10/2021	0.015 (J)		0.012 (J)						
3/11/2021		0.056		0.015 (J)	0.0075 (J)	0.018 (J)			
3/16/2021								2.4	
3/17/2021							2.7		11.8
3/18/2021									
8/11/2021	0.02 (J)								
8/12/2021		0.044	0.014 (J)	<0.04	0.0092 (J)	0.014 (J)			
8/13/2021									
8/18/2021									8.6
8/19/2021							2.5	2.1	
2/1/2022	0.016 (J)	0.056		0.011 (J)					
2/7/2022			0.017 (J)		<0.04	0.019 (J)			
2/8/2022							2.6	1.9	
2/9/2022									9.9
8/2/2022	0.012 (J)	0.047	0.02 (J)	<0.04					
8/9/2022									
8/10/2022					0.011 (J)	0.015 (J)	2.2		
8/11/2022								2.1	8.8
1/23/2023			0.023 (J)	0.012 (J)					
1/24/2023	0.015 (J)	0.046							
1/27/2023					<0.04	0.013 (J)			
1/30/2023									
2/1/2023							2.8	2	7.7
8/8/2023	0.023 (J)	0.06	0.029 (J)	0.011 (J)	0.025 (J)	0.017 (J)			
8/13/2023							2.2	1.6	6.9

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	5.7				
5/24/2016		9.33			
7/11/2016					
7/12/2016	9.58	11.9			
8/30/2016					
9/1/2016	5.76	8.8			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	5.38	8.5			
12/6/2016					
12/7/2016	5.74				
12/8/2016		7.15			
1/24/2017					
1/26/2017	5.78	9.17			
3/21/2017					
3/22/2017	5.52				
3/23/2017		10.6			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	8.58	13.2			
10/3/2017					
10/4/2017	6.8	10			
6/4/2018					
6/5/2018		8.4			
6/6/2018	6.3				
10/1/2018					
10/2/2018					
10/3/2018	6.9	9.3			
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	5.9	6.4			
9/23/2019					
9/24/2019					
9/25/2019	8.1	11.7			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	6.9	9.4			
9/15/2020		9.4			
9/16/2020	6.7		0.061 (J)	0.23	
9/17/2020					0.098 (J)
9/18/2020					
11/10/2020			0.057 (J)	0.29	
11/11/2020					0.058 (J)
12/15/2020			0.052 (J)	0.31	0.043 (J)
1/19/2021			0.049 (J)	0.4	
1/20/2021					0.045 (J)

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
3/10/2021				0.39	0.048
3/11/2021			0.06		
3/16/2021					
3/17/2021					
3/18/2021	6.8	8.9			
8/11/2021			0.042		
8/12/2021					0.044
8/13/2021				0.31	
8/18/2021	5.3				
8/19/2021		8.6			
2/1/2022			0.05	0.44	
2/7/2022					0.047
2/8/2022	7.8	8.1			
2/9/2022					
8/2/2022			0.043	0.31	
8/9/2022					0.055
8/10/2022	6.9	8.4			
8/11/2022					
1/23/2023					0.052
1/24/2023			0.037 (J)	0.44	
1/27/2023					
1/30/2023	6.8				
2/1/2023		5.9			
8/8/2023			0.038 (J)	0.55	0.048
8/13/2023	6.2	7.7			



# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-3 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-16	HGWC-15	HGWC-14
3/10/2021	111		5.9						
3/11/2021		43.8		83.8	28.3	53.1			
3/16/2021								196	
3/17/2021							198		572
3/18/2021									
8/11/2021	113								
8/12/2021		21.9	5.4	84	32	54.7			
8/13/2021									
8/18/2021									583
8/19/2021							207	203	
2/1/2022	106	27.2		85.1					
2/7/2022			5.9		30	53.4			
2/8/2022							218	186	
2/9/2022									571
8/2/2022	117	31.2	6	84.6					
8/9/2022									
8/10/2022					27.4	55.7	207		
8/11/2022								210	519
1/23/2023			24	85					
1/24/2023	117	29.4							
1/27/2023					28.5	55.4			
1/30/2023									
2/1/2023							216	174	464
8/8/2023	118	30.7	35.7	78.3	54.4	27.9			
8/13/2023							187	182	418

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	225				
5/24/2016		403			
7/11/2016					
7/12/2016	199	328			
8/30/2016					
9/1/2016	213	379			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	206	362			
12/6/2016					
12/7/2016	212				
12/8/2016		366			
1/24/2017					
1/26/2017	198	394			
3/21/2017					
3/22/2017	239				
3/23/2017		440			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	292	492			
10/3/2017					
10/4/2017	305	470			
6/4/2018					
6/5/2018		425			
6/6/2018	299				
10/1/2018					
10/2/2018					
10/3/2018	286	421			
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	340	400			
9/23/2019					
9/24/2019					
9/25/2019	305	437			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	328	418			
9/15/2020		430			
9/16/2020	277		56	30	
9/17/2020					43.8
9/18/2020					
11/10/2020			63.3	33.6	
11/11/2020					44.4
12/15/2020			62.6	28.7	47.3
1/19/2021			60.1	33	
1/20/2021					41.8

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
3/10/2021				18.3	43.4
3/11/2021			59.6		
3/16/2021					
3/17/2021					
3/18/2021	266	407			
8/11/2021			61		
8/12/2021					43.6
8/13/2021				28.9	
8/18/2021	281				
8/19/2021		416			
2/1/2022			55.9	24.8	
2/7/2022					48.7
2/8/2022	280	418			
2/9/2022					
8/2/2022			54.1	20.9	
8/9/2022					44.1
8/10/2022	316	433			
8/11/2022					
1/23/2023					43.7
1/24/2023			56.6	13.2	
1/27/2023					
1/30/2023	286				
2/1/2023		288			
8/8/2023			52.8	8.1	40.7
8/13/2023	261	355			





# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-3 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-16	HGWC-15	HGWC-14
3/10/2021	7.4		2.9						
3/11/2021		5.1		5.9	1.4	1.2			
3/16/2021								103	
3/17/2021							93.8		233
3/18/2021									
8/11/2021	9.6								
8/12/2021		5.2	2.4	4.8	1.4	0.94 (J)			
8/13/2021									
8/18/2021									141
8/19/2021							90.1	89.9	
2/1/2022	7.5	7		5.7					
2/7/2022			2.4		1.4	1.1			
2/8/2022							96.4	76.6	
2/9/2022									174
8/2/2022	14.1	7.8	2.9	5.9					
8/9/2022									
8/10/2022					2.1	1.3	98.3		
8/11/2022								89.2	147
1/23/2023			1.6	5.6					
1/24/2023	9	7.1							
1/27/2023					1.6	1.4			
1/30/2023									
2/1/2023							112	85	108
8/8/2023	26	6.6	2.6	5.3	1.3	2.1			
8/13/2023							89.1	78.2	95.8

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	94				
5/24/2016		280			
7/11/2016					
7/12/2016	100	300			
8/30/2016					
9/1/2016	95	270			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	98	290			
12/6/2016					
12/7/2016	89				
12/8/2016		300			
1/24/2017					
1/26/2017	99	340			
3/21/2017					
3/22/2017	100				
3/23/2017		350			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	99	290			
10/3/2017					
10/4/2017	130	260			
6/4/2018					
6/5/2018		261			
6/6/2018	166				
10/1/2018					
10/2/2018					
10/3/2018	193	302			
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	195	217			
9/23/2019					
9/24/2019					
9/25/2019	139	181			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	161	126			
9/15/2020		150			
9/16/2020	156		4.1	7.2	
9/17/2020					5.8
9/18/2020					
11/10/2020			4.4	7.8	
11/11/2020					3.1
12/15/2020			4.7	9.4	3.2
1/19/2021			4.1	9.5	
1/20/2021					2.8

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
3/10/2021				12.3	3
3/11/2021			4.5		
3/16/2021					
3/17/2021					
3/18/2021	138	90.2			
8/11/2021			3.5		
8/12/2021					2.6
8/13/2021				39.9	
8/18/2021	90.7				
8/19/2021		95.8			
2/1/2022			4.1	44.8	
2/7/2022					3.1
2/8/2022	117	105			
2/9/2022					
8/2/2022			4.3	19.8	
8/9/2022					3.7
8/10/2022	148	95.2			
8/11/2022					
1/23/2023					3.3
1/24/2023			4.3	24.9	
1/27/2023					
1/30/2023	154				
2/1/2023		92.7			
8/8/2023			3.5	27	3.2
8/13/2023	109	104			

# Prediction Limit

Constituent: Field pH (s.u.) Analysis Run 10/17/2023 2:02 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-6 (bg)	HGWC-17	HGWC-15	HGWC-16
5/19/2016	7.27	6.62	7.45	5.81	6.51				
5/20/2016						7.58			
5/23/2016							6.4	6.17	7.15
5/24/2016									
7/11/2016	7.06	6.54		5.68	6.65	7.32			
7/12/2016			7.32				6.09	6.17	7.1
8/30/2016	7.28	6.38	7.43	5.63	7.14	7.69			
9/1/2016							6.35	6.22	7.29
10/19/2016	7.02		7.03	5.46	7.08				
10/20/2016		6.52				7.43			
10/24/2016								5.97	
10/25/2016							6.23		7.03
12/6/2016	7.09		7.08	5.38	7				
12/7/2016							6.23	5.87	6.85
12/8/2016		6.5				7.56			
1/24/2017	7.2	6.59	7.39	5.37	6.16	7.52			
1/26/2017							6.24	6.05	7.07
3/21/2017	7.01	6.55	6.83	4.9	6.07	7.4			
3/22/2017							6.25		7.15
3/23/2017								5.79	
5/22/2017	7.11		7.02	5.2					
5/23/2017		6.5			6.28	7.53			
5/24/2017								6.01	7.11
5/25/2017							6.27		
10/3/2017	7.21	6.63	7.47	5.3	6.45	7.51			
10/4/2017							6.18	5.82	7.17
4/2/2018	7.1			5.4	6.23				
4/3/2018		6.59	7.38			7.53	6.22	5.98	7.07
4/4/2018									
6/4/2018	7.06		7.38	5.27	6.82				
6/5/2018		6.44				7.37			
6/6/2018							6.22	6.12	7
10/1/2018	7.09		7.13	5.31	5.73				
10/2/2018		6.35				7.36			
10/3/2018							6.23	5.92	6.94
3/11/2019					6.27				
3/12/2019	7.03	6.42	7.29	5.42		7.5			
3/14/2019								5.71	
3/15/2019							6.32		7.09
4/1/2019			7.16						
4/2/2019	6.86	6.38		5.41	6.66	7.46			
4/4/2019								5.66	6.95
4/5/2019							6.26		
9/23/2019	7.02		7.3	5.33					
9/24/2019		6.4			6.16	7.41		6.33	
9/25/2019							6.28		6.92
3/2/2020	7.1	6.8	7.12	5.43	5.63	7.67			
3/3/2020							6.35	6	7.1
3/25/2020	6.95		7.4	5.36		7.39			
3/26/2020		6.38			5.77			6.03	
3/30/2020									7.09
3/31/2020							6.28		

# Prediction Limit

Constituent: Field pH (s.u.) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-6 (bg)	HGWC-17	HGWC-15	HGWC-16
9/15/2020	7.15	6.33	7.29	5.22	5.75	7.37			
9/16/2020							6.35		
9/17/2020								6.11	7.11
9/18/2020									
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									
2/8/2021	7.11				4.94				
2/9/2021		6.35	7.23	5.42		7.4			
2/10/2021									7.08
2/11/2021							6.31		
2/12/2021								5.99	
3/10/2021	6.95				5.28				
3/11/2021		6.48	7.33	5.8		7.56			
3/16/2021								6.08	
3/17/2021									7.19
3/18/2021							6.43		
8/11/2021	6.98								
8/12/2021		6.46	7.31	5.05	5.26	7.47			
8/13/2021									
8/18/2021							6.43		
8/19/2021								6.18	7.04
2/1/2022	7.19		7.45	5.24					
2/7/2022		6.51			5.24	7.65			
2/8/2022							6.42	6.04	7.18
2/9/2022									
8/2/2022	7.03		7.02	4.57	4.86				
8/9/2022									
8/10/2022		6.22				7.53	6.29		7.09
8/11/2022								6.29	
1/23/2023			7.32		5.62				
1/24/2023	6.76			5.22					
1/27/2023		6.52				7.66			
1/30/2023							6.44		
2/1/2023								6.22	7.15
8/8/2023	7.05	6.5	7.42	5.01	6.03	7.6			
8/13/2023							6.46	6.66	7.13

# Prediction Limit

Constituent: Field pH (s.u.) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	4.56				
5/24/2016		4.83			
7/11/2016					
7/12/2016	4.49	4.58			
8/30/2016					
9/1/2016	4.54	4.51			
10/19/2016					
10/20/2016					
10/24/2016	4.63				
10/25/2016		4.53			
12/6/2016					
12/7/2016	4.6				
12/8/2016		4.56			
1/24/2017					
1/26/2017	4.8	4.61			
3/21/2017					
3/22/2017					
3/23/2017	4.57	4.63			
5/22/2017					
5/23/2017					
5/24/2017	4.61				
5/25/2017		4.69			
10/3/2017					
10/4/2017	4.74	4.58			
4/2/2018					
4/3/2018		4.54			
4/4/2018	4.5				
6/4/2018					
6/5/2018		4.57			
6/6/2018	4.49				
10/1/2018					
10/2/2018					
10/3/2018	4.67	4.41			
3/11/2019					
3/12/2019					
3/14/2019	4.66	4.39			
3/15/2019					
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	4.67	4.5			
9/23/2019					
9/24/2019	4.77				
9/25/2019		4.54			
3/2/2020					
3/3/2020	4.77	4.55			
3/25/2020					
3/26/2020					
3/30/2020	4.57				
3/31/2020		4.43			

# Prediction Limit

Constituent: Field pH (s.u.) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
9/15/2020		4.47			
9/16/2020			7.83	7.52	
9/17/2020					7.62
9/18/2020	4.88				
11/10/2020			7.84	7.27	
11/11/2020					7.68
12/15/2020			7.87	7.39	7.64
1/19/2021			7.86	7.39	
1/20/2021					7.68
2/8/2021					7.64
2/9/2021			7.84	7.44	
2/10/2021					
2/11/2021	4.84	4.53			
2/12/2021					
3/10/2021			7.92		7.7
3/11/2021				7.46	
3/16/2021					
3/17/2021	4.72				
3/18/2021		4.54			
8/11/2021				7.4	
8/12/2021					7.7
8/13/2021			7.77		
8/18/2021	4.9				
8/19/2021		4.43			
2/1/2022			8.25	7.52	
2/7/2022					7.85
2/8/2022		4.59			
2/9/2022	4.97				
8/2/2022			7.9	7.15	
8/9/2022					7.58
8/10/2022		4.41			
8/11/2022	4.93				
1/23/2023					7.55
1/24/2023			8.22	7.56	
1/27/2023					
1/30/2023					
2/1/2023	4.93	4.66			
8/8/2023			8.2	7.39	7.72
8/13/2023	4.83	4.75			

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-6 (bg)	HGWC-17	HGWC-15	HGWC-16
5/19/2016	0.105 (J)	0.08 (J)	0.0513 (J)	0.0303 (J)	0.036 (J)				
5/20/2016						0.065 (J)			
5/23/2016							<0.1	<0.1	0.038 (J)
5/24/2016									
7/11/2016	0.16 (J)	0.09 (J)		0.05 (J)	0.09 (J)	0.13 (J)			
7/12/2016			0.12 (J)				0.09 (J)	0.09 (J)	0.26 (J)
8/30/2016	0.09 (J)	0.08 (J)	0.09 (J)	0.06 (J)	0.06 (J)	0.07 (J)			
9/1/2016							0.03 (J)	0.22 (J)	0.42
10/19/2016	0.1 (J)		0.1 (J)	0.04 (J)	0.07 (J)				
10/20/2016		0.1 (J)				0.06 (J)			
10/24/2016								0.07 (J)	
10/25/2016							0.07 (J)		0.25 (J)
12/6/2016	0.11 (J)		0.21 (J)	0.36	0.07 (J)				
12/7/2016							0.54	0.23 (J)	0.23 (J)
12/8/2016		0.08 (J)				0.06 (J)			
1/24/2017	0.09 (J)	0.09 (J)	0.06 (J)	<0.1	<0.1	0.02 (J)			
1/26/2017							<0.1	<0.1	0.02 (J)
3/21/2017	0.13 (J)	0.04 (J)	0.005 (J)	<0.1	<0.1	0.08 (J)			
3/22/2017							0.07 (J)		0.3
3/23/2017								0.12 (J)	
5/22/2017	0.12 (J)		0.05 (J)	<0.1					
5/23/2017		0.04 (J)			0.01 (J)	0.006 (J)			
5/24/2017								0.31	0.46
5/25/2017							0.42		
10/3/2017	0.13 (J)	0.06 (J)	0.13 (J)	<0.1	<0.1	<0.1			
10/4/2017							0.93	0.6	<0.1
4/2/2018	<0.1			<0.1	<0.1				
4/3/2018		<0.1	<0.1			<0.1	<0.1	<0.1	<0.1
4/4/2018									
6/4/2018	0.074 (J)		<0.1	<0.1	0.097 (J)				
6/5/2018		0.083 (J)				0.055 (J)			
6/6/2018							0.23 (J)	0.17 (J)	<0.1
10/1/2018	<0.1		<0.1	<0.1	<0.1				
10/2/2018		<0.1				0.076 (J)			
10/3/2018							<0.1	<0.1	<0.1
3/11/2019					0.035 (J)				
3/12/2019	0.29 (J)	0.079 (J)	0.072 (J)	0.038 (J)		0.061 (J)			
3/14/2019								<0.1	
3/15/2019							<0.1		<0.1
4/1/2019			0.029 (J)						
4/2/2019	0.1 (J)	0.12 (J)		0.071 (J)	<0.1	<0.1			
4/4/2019								0.066 (J)	<0.1
4/5/2019							0.16 (J)		
9/23/2019	0.078 (J)		<0.1	<0.1					
9/24/2019		0.058 (J)			<0.1	<0.1		0.12 (J)	
9/25/2019							0.081 (J)		<0.1
3/2/2020	0.076 (J)	0.053 (J)	<0.1	<0.1	<0.1	<0.1			
3/3/2020							<0.1	0.064 (J)	<0.1
3/25/2020	0.098 (J)		<0.1	<0.1		<0.1			
3/26/2020		0.066 (J)			<0.1			<0.1	
3/30/2020									0.059 (J)
3/31/2020							<0.1		



# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-5 (bg)	HGWA-3 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-6 (bg)	HGWC-17	HGWC-15	HGWC-16
9/15/2020	0.082 (J)	0.061 (J)	<0.1	<0.1	<0.1	<0.1			
9/16/2020							0.058 (J)		
9/17/2020								<0.1	<0.1
9/18/2020									
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									
2/8/2021	0.078 (J)				<0.1				
2/9/2021		0.053 (J)	0.074 (J)	<0.1		<0.1			
2/10/2021									0.21
2/11/2021							0.058 (J)		
2/12/2021								0.053 (J)	
3/10/2021	0.079 (J)				<0.1				
3/11/2021		0.06 (J)	<0.1	0.1		0.17			
3/16/2021								<0.1	
3/17/2021									<0.1
3/18/2021							0.057 (J)		
8/11/2021	0.058 (J)								
8/12/2021		<0.1	<0.1	<0.1	<0.1	<0.1			
8/13/2021									
8/18/2021							0.062 (J)		
8/19/2021								<0.1	<0.1
2/1/2022	0.064 (J)		<0.1	<0.1					
2/7/2022		<0.1			<0.1	<0.1			
2/8/2022							0.055 (J)	<0.1	<0.1
2/9/2022									
8/2/2022	0.09 (J)		0.067 (J)	0.053 (J)	0.076 (J)				
8/9/2022									
8/10/2022		0.078 (J)				0.067 (J)	0.086 (J)		0.054 (J)
8/11/2022								0.097 (J)	
1/23/2023			0.061 (J)		0.12				
1/24/2023	0.089 (J)			0.053 (J)					
1/27/2023		0.088 (J)				0.067 (J)			
1/30/2023							0.097 (J)		
2/1/2023								0.086 (J)	0.053 (J)
8/8/2023	0.088 (J)	0.059 (J)	0.055 (J)	0.07 (J)	0.11	0.072 (J)			
8/13/2023							0.081 (J)	0.12	0.053 (J)

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	<0.1				
5/24/2016		<0.1			
7/11/2016					
7/12/2016	0.2 (J)	0.54			
8/30/2016					
9/1/2016	0.08 (J)	0.49			
10/19/2016					
10/20/2016					
10/24/2016	0.04 (J)				
10/25/2016		0.58			
12/6/2016					
12/7/2016	0.11 (J)				
12/8/2016		0.63			
1/24/2017					
1/26/2017	0.13 (J)	0.71			
3/21/2017					
3/22/2017					
3/23/2017	0.28 (J)	0.57			
5/22/2017					
5/23/2017					
5/24/2017	0.32				
5/25/2017		0.54			
10/3/2017					
10/4/2017	0.52	0.95			
4/2/2018					
4/3/2018		0.33			
4/4/2018	<0.1				
6/4/2018					
6/5/2018		0.66			
6/6/2018	0.25 (J)				
10/1/2018					
10/2/2018					
10/3/2018	0.21 (J)	0.32			
3/11/2019					
3/12/2019					
3/14/2019	0.24 (J)	0.88			
3/15/2019					
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	0.66	0.37			
9/23/2019					
9/24/2019	0.053 (J)				
9/25/2019		0.73			
3/2/2020					
3/3/2020	<0.1	0.34			
3/25/2020					
3/26/2020					
3/30/2020	0.092 (J)				
3/31/2020		0.45			

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-18	HGWA-44D (bg)	HGWA-43D (bg)	HGWA-42D (bg)
9/15/2020		0.31			
9/16/2020			0.52	0.22	
9/17/2020					0.2
9/18/2020	<0.1				
11/10/2020			0.59	0.19	
11/11/2020					0.1
12/15/2020			0.67	0.21	0.11
1/19/2021			0.74	0.16	
1/20/2021					0.082 (J)
2/8/2021					0.096 (J)
2/9/2021			0.44	0.19	
2/10/2021					
2/11/2021	0.059 (J)	0.71			
2/12/2021					
3/10/2021			0.65		0.11
3/11/2021				0.2	
3/16/2021					
3/17/2021	0.076 (J)				
3/18/2021		0.64			
8/11/2021				0.15	
8/12/2021					0.079 (J)
8/13/2021			0.87		
8/18/2021	<0.1				
8/19/2021		0.31			
2/1/2022			0.96	0.19	
2/7/2022					0.085 (J)
2/8/2022		0.19			
2/9/2022	0.053 (J)				
8/2/2022			0.8	0.22	
8/9/2022					0.12
8/10/2022		0.3			
8/11/2022	0.085 (J)				
1/23/2023					0.11
1/24/2023			1.3	0.23	
1/27/2023					
1/30/2023					
2/1/2023	0.094 (J)	0.21			
8/8/2023			1.3	0.18	0.1
8/13/2023	0.1	0.25			

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-3 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-16	HGWC-15	HGWC-14
5/19/2016	66.9	48.6	1.22	42.3	25				
5/20/2016						34.4			
5/23/2016							203	424	1070
5/24/2016									
7/11/2016	41	45	3.7		27	34			
7/12/2016				44			220	440	1300
8/30/2016	36	42	6.8	40	23	36			
9/1/2016							220	440	1300
10/19/2016	46	44	11	43					
10/20/2016					19	36			
10/24/2016								420	280
10/25/2016							230		
12/6/2016	59	44	13	43					
12/7/2016							220	450	1300
12/8/2016					20	36			
1/24/2017	46	46	5.7	48	20	37			
1/26/2017							250	490	1400
3/21/2017	63	46	1.7	45	23	37			
3/22/2017							240		
3/23/2017								530	1500
5/22/2017	77	48		46					
5/23/2017			1.5		21	38			
5/24/2017							230	500	1400
5/25/2017									
10/3/2017	42	47	1.3	48	21	38			
10/4/2017							220	560	1400
6/4/2018	71.8	47.8	4.9	46.6					
6/5/2018					22.9	38			
6/6/2018							233	469	1520
10/1/2018	49.1	48.1	0.59 (J)	48.6					
10/2/2018					20.3	38.5			
10/3/2018							215	600	1550
4/1/2019				50.4					
4/2/2019	84.3	48.7	4.9		23.8	35.5			
4/4/2019							251	528	
4/5/2019									1520
9/23/2019	70.2	47.2		43.9					
9/24/2019			<1		20.7	35.4		382	1110
9/25/2019							223		
3/25/2020	85.9	46.3		50.5		35.1			
3/26/2020			<1		21.6			438	
3/30/2020							223		1150
3/31/2020									
9/15/2020	47.3	51.5	<1	44.7	21.2	35.3			
9/16/2020									
9/17/2020							254	416	
9/18/2020									1260
11/10/2020									
11/11/2020									
12/15/2020									
1/19/2021									
1/20/2021									

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-3 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-16	HGWC-15	HGWC-14
3/10/2021	49.6		1.2						
3/11/2021		52.9		50.4	22.7	35.5			
3/16/2021								379	
3/17/2021							250		1300
3/18/2021									
8/11/2021	48.9								
8/12/2021		47.4	1.1	38.6	17.4	28.6			
8/13/2021									
8/18/2021									768
8/19/2021							228	223	
2/1/2022	43.7	67.1		46					
2/7/2022			2.9		20.6	33			
2/8/2022							238	360	
2/9/2022									1190
8/2/2022	58.1	86.9	4.9	43.5					
8/9/2022									
8/10/2022					19.7	34	206		
8/11/2022								365	1200
1/23/2023			42.5	39.5					
1/24/2023	48.3	79.7							
1/27/2023					22.7	35			
1/30/2023									
2/1/2023							257	341	1060
8/8/2023	67.7	89.9	16.8	35	32.7	18.8			
8/13/2023							214	281	935

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	395				
5/24/2016		834			
7/11/2016					
7/12/2016	460	930			
8/30/2016					
9/1/2016	430	890			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	440	950			
12/6/2016					
12/7/2016	410				
12/8/2016		910			
1/24/2017					
1/26/2017	440	970			
3/21/2017					
3/22/2017	460				
3/23/2017		980			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	430	920			
10/3/2017					
10/4/2017	490	870			
6/4/2018					
6/5/2018		962			
6/6/2018	520				
10/1/2018					
10/2/2018					
10/3/2018	651	1170			
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	642	1030			
9/23/2019					
9/24/2019					
9/25/2019	434	920			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	484	934			
9/15/2020		1080			
9/16/2020	467		43	6.9	
9/17/2020					10.9
9/18/2020					
11/10/2020			39	6.3	
11/11/2020					9.4
12/15/2020			38.8	6.7	10.9
1/19/2021			37.3	7.4	
1/20/2021					9.8

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
3/10/2021				<1	10.8
3/11/2021			38.6		
3/16/2021					
3/17/2021					
3/18/2021	447	1050			
8/11/2021			30.5		
8/12/2021					7.8
8/13/2021				56.1	
8/18/2021	280				
8/19/2021		934			
2/1/2022			37.5	56.3	
2/7/2022					10.4
2/8/2022	364	960			
2/9/2022					
8/2/2022			37	13.2	
8/9/2022					11.2
8/10/2022	423	946			
8/11/2022					
1/23/2023					11.1
1/24/2023			34.7	10.1	
1/27/2023					
1/30/2023	451				
2/1/2023		776			
8/8/2023			25.6	1.3	10.5
8/13/2023	351	895			





# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWA-1 (bg)	HGWA-2 (bg)	HGWA-4 (bg)	HGWA-3 (bg)	HGWA-5 (bg)	HGWA-6 (bg)	HGWC-16	HGWC-15	HGWC-14
3/10/2021	348		53						
3/11/2021		169		267	118	215			
3/16/2021								92	
3/17/2021							768		1640
3/18/2021									
8/11/2021	366								
8/12/2021		118	55	265	158	229			
8/13/2021									
8/18/2021									2350
8/19/2021							816	958	
2/1/2022	270	156		350					
2/7/2022			54		135	224			
2/8/2022							852	866	
2/9/2022									2310
8/2/2022	400	196	48	287					
8/9/2022									
8/10/2022					134	217	894		
8/11/2022								940	1060
1/23/2023			128	293					
1/24/2023	369	164							
1/27/2023					182	229			
1/30/2023									
2/1/2023							1030	892	1950
8/8/2023	457	189	141	285	225	125			
8/13/2023							861	881	1960

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
5/19/2016					
5/20/2016					
5/23/2016	1010				
5/24/2016		1900			
7/11/2016					
7/12/2016	976	1950			
8/30/2016					
9/1/2016	1060	2000			
10/19/2016					
10/20/2016					
10/24/2016					
10/25/2016	<25	1870			
12/6/2016					
12/7/2016	866				
12/8/2016		1930			
1/24/2017					
1/26/2017	1000	1950			
3/21/2017					
3/22/2017	1080				
3/23/2017		2080			
5/22/2017					
5/23/2017					
5/24/2017					
5/25/2017	1080	1970			
10/3/2017					
10/4/2017	1210	2200			
6/4/2018					
6/5/2018		1880			
6/6/2018	1180				
10/1/2018					
10/2/2018					
10/3/2018	1250	2180			
4/1/2019					
4/2/2019					
4/4/2019					
4/5/2019	1260	1610			
9/23/2019					
9/24/2019					
9/25/2019	1280	1960			
3/25/2020					
3/26/2020					
3/30/2020					
3/31/2020	1310	1860			
9/15/2020		1890			
9/16/2020	1220		272	270	
9/17/2020					188
9/18/2020					
11/10/2020			307	287	
11/11/2020					175
12/15/2020			289	295	193
1/19/2021			270	278	
1/20/2021					158

# Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/17/2023 2:02 PM View: Appendix III  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-17	HGWC-18	HGWA-43D (bg)	HGWA-44D (bg)	HGWA-42D (bg)
3/10/2021				289	163
3/11/2021			279		
3/16/2021					
3/17/2021					
3/18/2021	1020	1390			
8/11/2021			277		
8/12/2021					179
8/13/2021				436	
8/18/2021	1290				
8/19/2021		1750			
2/1/2022			156	444	
2/7/2022					190
2/8/2022	1160	1770			
2/9/2022					
8/2/2022			278	311	
8/9/2022					182
8/10/2022	1390	1890			
8/11/2022					
1/23/2023					168
1/24/2023			271	363	
1/27/2023					
1/30/2023	1320				
2/1/2023		1430			
8/8/2023			274	361	175
8/13/2023	1180	1700			

FIGURE E.

# Appendix III Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/17/2023, 2:07 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-2 (bg)	0.002577	142	87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-43D (bg)	-0.007982	-31	-30	Yes	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-14	-1.418	-116	-87	Yes	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-16	0.213	135	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-3 (bg)	1.977	110	87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-4 (bg)	-7.312	-103	-87	Yes	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-44D (bg)	-7.57	-31	-30	Yes	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-16	11.73	154	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-3 (bg)	-0.14	-106	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-4 (bg)	-0.3879	-163	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-44D (bg)	7.347	33	30	Yes	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-14	-71.62	-147	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-15	-22.69	-140	-87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-16	12.06	180	87	Yes	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWC-18	-33.83	-132	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-2 (bg)	2.095	138	87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-43D (bg)	-3.197	-35	-30	Yes	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-4 (bg)	-23.33	-111	-87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-14	-189.4	-146	-87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-15	-53.15	-111	-87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-16	51.71	170	87	Yes	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-17	49.9	122	87	Yes	21	4.762	n/a	n/a	0.01	NP

# Appendix III Trend Tests - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 10/17/2023, 2:08 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	HGWA-1 (bg)	-0.0002648	-19	-87	No	21	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>0.002577</b>	<b>142</b>	<b>87</b>	<b>Yes</b>	<b>21</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)	0.0003268	22	87	No	21	19.05	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-4 (bg)	0.0004817	17	87	No	21	4.762	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-42D (bg)	-0.001093	-2	-30	No	10	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWA-43D (bg)</b>	<b>-0.007982</b>	<b>-31</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>
Boron (mg/L)	HGWA-44D (bg)	0.08822	29	30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-5 (bg)	0.0005721	50	87	No	21	19.05	n/a	n/a	0.01	NP
Boron (mg/L)	HGWA-6 (bg)	-0.000409	-44	-87	No	21	4.762	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-14</b>	<b>-1.418</b>	<b>-116</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-15	0	-6	-87	No	21	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>HGWC-16</b>	<b>0.213</b>	<b>135</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	HGWC-17	0.1028	38	87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	HGWC-18	-0.2917	-68	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-1 (bg)	2.147	75	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-2 (bg)	1.082	82	87	No	21	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>1.977</b>	<b>110</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Calcium (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-7.312</b>	<b>-103</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWA-42D (bg)	-0.3182	-7	-30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-43D (bg)	-3.038	-25	-30	No	10	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWA-44D (bg)</b>	<b>-7.57</b>	<b>-31</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>
Calcium (mg/L)	HGWA-5 (bg)	0.2632	25	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWA-6 (bg)	0.3126	33	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-14	-13.11	-70	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-15	-0.7372	-14	-87	No	21	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>HGWC-16</b>	<b>11.73</b>	<b>154</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	HGWC-17	12.03	70	87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	HGWC-18	2.683	13	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-1 (bg)	0.716	75	87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-2 (bg)	0	4	87	No	21	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWA-3 (bg)</b>	<b>-0.14</b>	<b>-106</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-0.3879</b>	<b>-163</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	HGWA-42D (bg)	0	1	30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-43D (bg)	-0.1067	-10	-30	No	10	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWA-44D (bg)</b>	<b>7.347</b>	<b>33</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>
Chloride (mg/L)	HGWA-5 (bg)	-0.064	-75	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	HGWA-6 (bg)	-0.04474	-53	-87	No	21	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWC-14</b>	<b>-71.62</b>	<b>-147</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWC-15</b>	<b>-22.69</b>	<b>-140</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>HGWC-16</b>	<b>12.06</b>	<b>180</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	HGWC-17	7.625	70	87	No	21	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>HGWC-18</b>	<b>-33.83</b>	<b>-132</b>	<b>-87</b>	<b>Yes</b>	<b>21</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)	0.9291	31	87	No	21	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-2 (bg)</b>	<b>2.095</b>	<b>138</b>	<b>87</b>	<b>Yes</b>	<b>21</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)	0.09502	8	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-4 (bg)	-0.05621	-16	-87	No	21	14.29	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-42D (bg)	0.09493	6	30	No	10	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>HGWA-43D (bg)</b>	<b>-3.197</b>	<b>-35</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-44D (bg)	1.358	7	30	No	10	10	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-5 (bg)	-0.05539	-16	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWA-6 (bg)	-0.264	-63	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-14	-22.7	-34	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-15	-18.52	-83	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-16	1.52	39	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-17	-1.796	-11	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	HGWC-18	5.095	24	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-1 (bg)	3.922	26	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-2 (bg)	3.534	35	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-3 (bg)	0.9434	22	87	No	21	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-23.33</b>	<b>-111</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids (mg/L)	HGWA-42D (bg)	-2.613	-4	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-43D (bg)	-4.269	-13	-30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-44D (bg)	32.23	25	30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-5 (bg)	0	2	87	No	21	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWA-6 (bg)	-1.451	-49	-87	No	21	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-14</b>	<b>-189.4</b>	<b>-146</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-15</b>	<b>-53.15</b>	<b>-111</b>	<b>-87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>HGWC-16</b>	<b>51.71</b>	<b>170</b>	<b>87</b>	<b>Yes</b>	<b>21</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

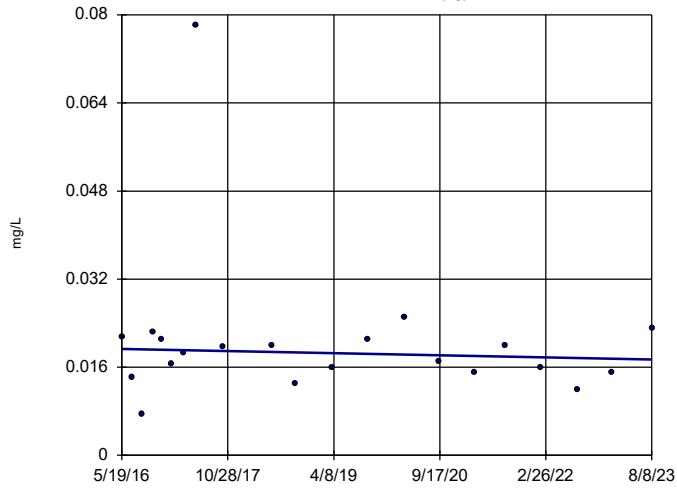
# Appendix III Trend Tests - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/17/2023, 2:08 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids (mg/L)	HGWC-17	49.9	122	87	Yes	21	4.762	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	HGWC-18	-35.5	-78	-87	No	21	0	n/a	n/a	0.01	NP

### Sen's Slope Estimator

HGWA-1 (bg)

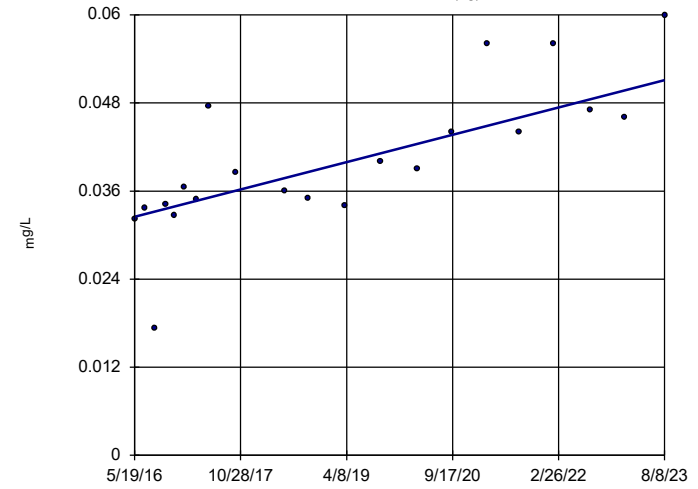


n = 21  
 Slope = -0.0002648  
 units per year.  
 Mann-Kendall  
 statistic = -19  
 critical = -87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-2 (bg)

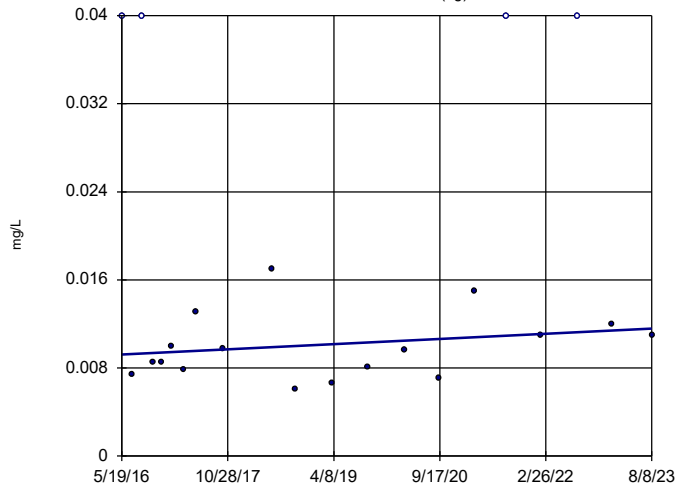


n = 21  
 Slope = 0.002577  
 units per year.  
 Mann-Kendall  
 statistic = 142  
 critical = 87  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-3 (bg)

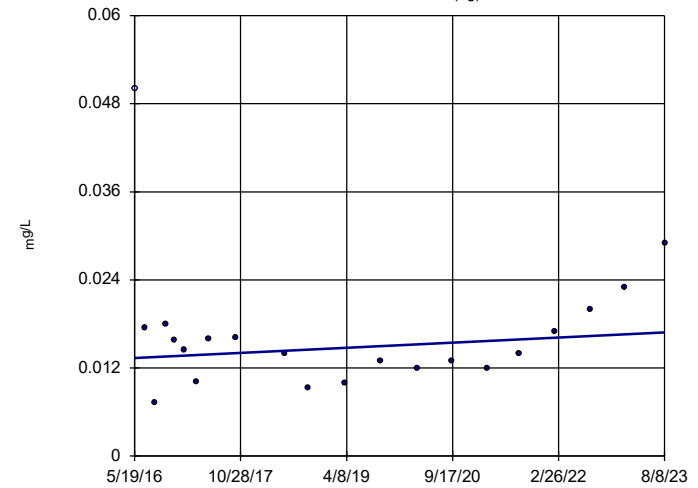


n = 21  
 Slope = 0.0003268  
 units per year.  
 Mann-Kendall  
 statistic = 22  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-4 (bg)



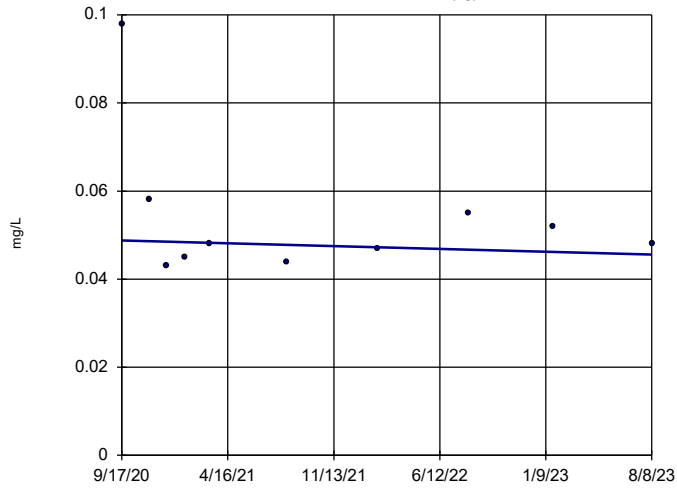
n = 21  
 Slope = 0.0004817  
 units per year.  
 Mann-Kendall  
 statistic = 17  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2



### Sen's Slope Estimator

HGWA-42D (bg)

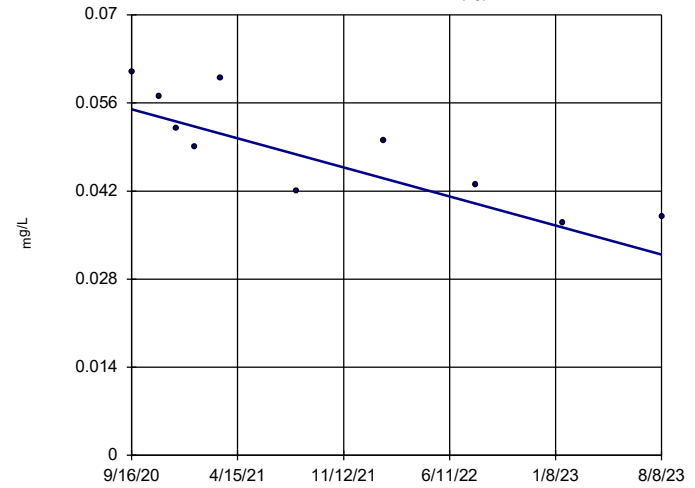


n = 10  
 Slope = -0.001093  
 units per year.  
 Mann-Kendall  
 statistic = -2  
 critical = -30  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-43D (bg)

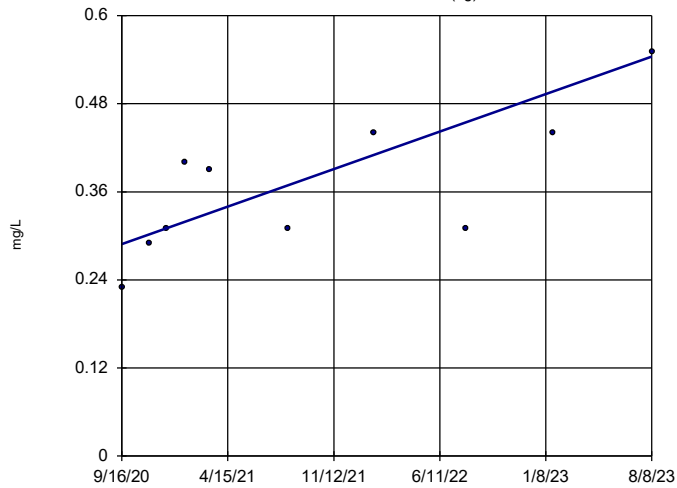


n = 10  
 Slope = -0.007982  
 units per year.  
 Mann-Kendall  
 statistic = -31  
 critical = -30  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-44D (bg)

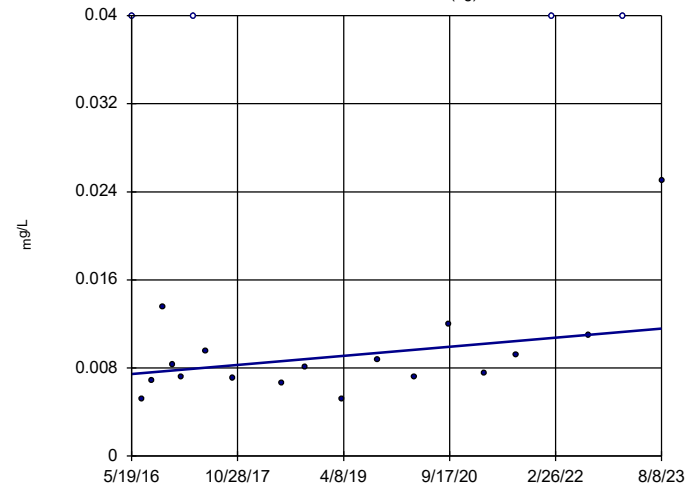


n = 10  
 Slope = 0.08822  
 units per year.  
 Mann-Kendall  
 statistic = 29  
 critical = 30  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-5 (bg)

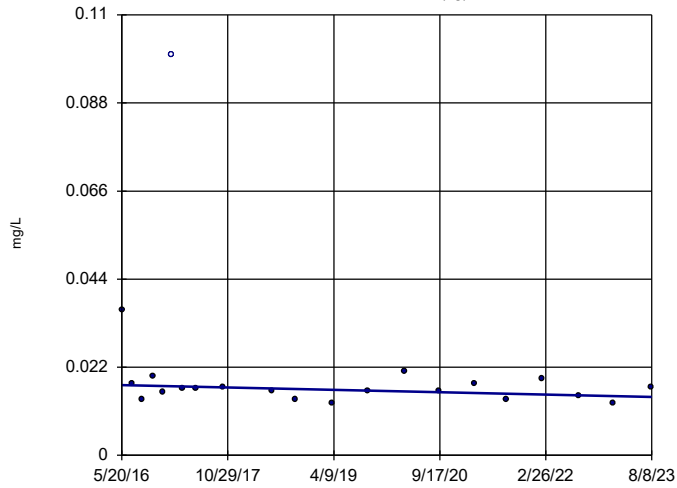


n = 21  
 Slope = 0.0005721  
 units per year.  
 Mann-Kendall  
 statistic = 50  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-6 (bg)

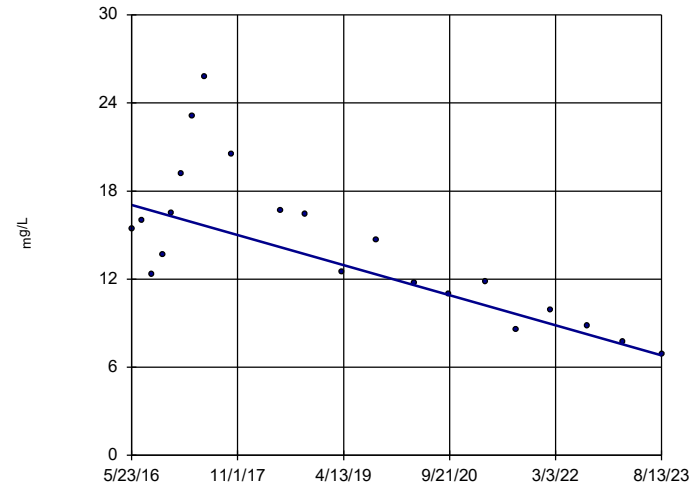


n = 21  
Slope = -0.000409  
units per year.  
Mann-Kendall  
statistic = -44  
critical = -87  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-14

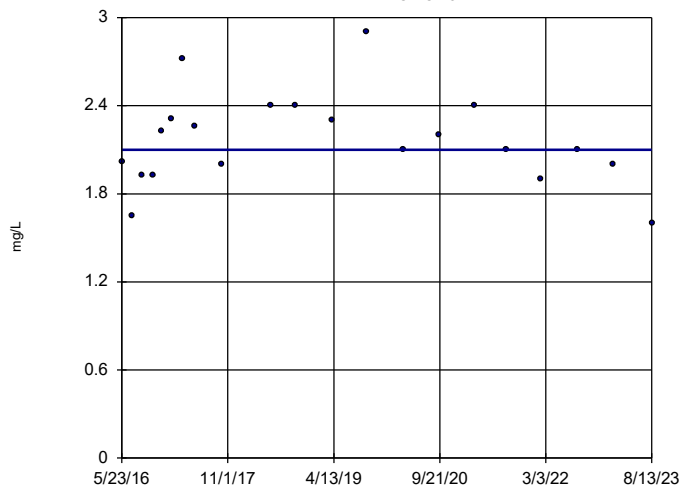


n = 21  
Slope = -1.418  
units per year.  
Mann-Kendall  
statistic = -116  
critical = -87  
Decreasing trend  
significant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-15

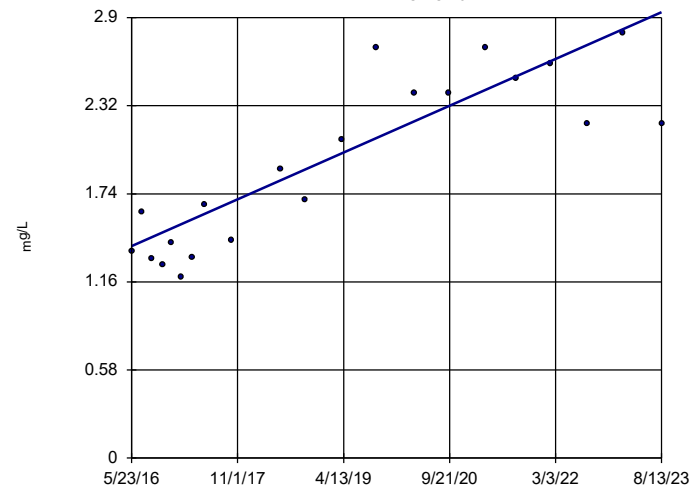


n = 21  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = -6  
critical = -87  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-16

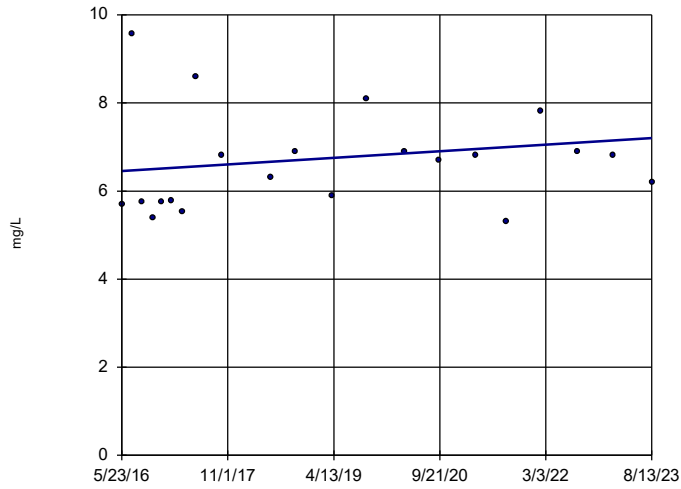


n = 21  
Slope = 0.213  
units per year.  
Mann-Kendall  
statistic = 135  
critical = 87  
Increasing trend  
significant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-17

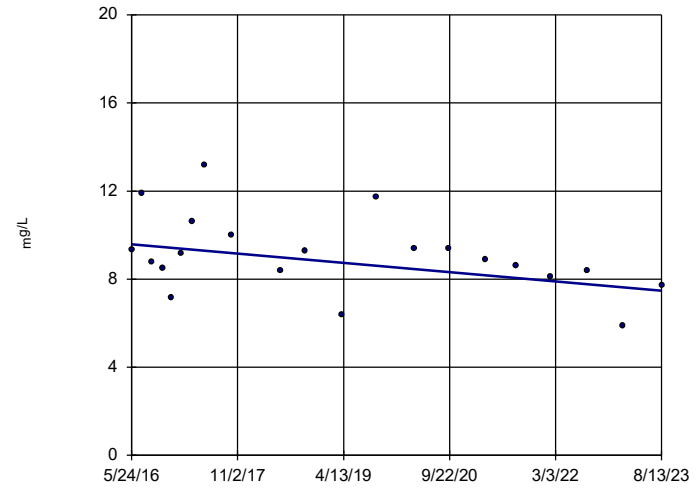


n = 21  
 Slope = 0.1028  
 units per year.  
 Mann-Kendall  
 statistic = 38  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-18

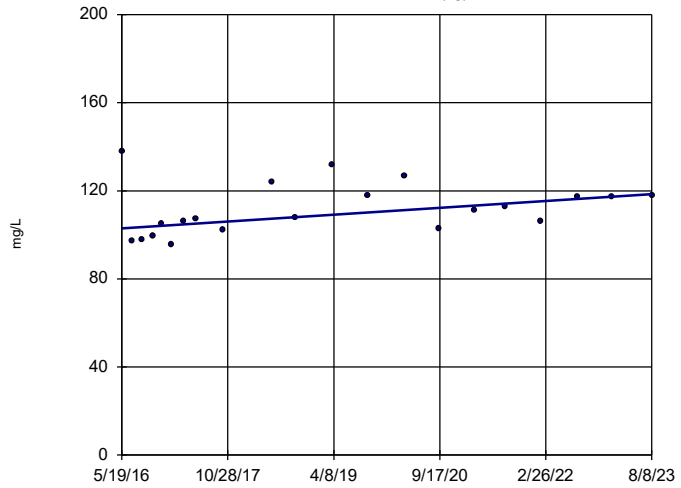


n = 21  
 Slope = -0.2917  
 units per year.  
 Mann-Kendall  
 statistic = -68  
 critical = -87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-1 (bg)

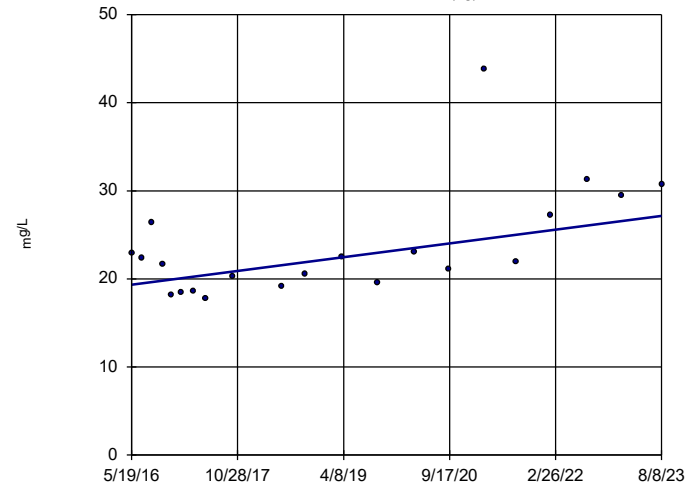


n = 21  
 Slope = 2.147  
 units per year.  
 Mann-Kendall  
 statistic = 75  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-2 (bg)

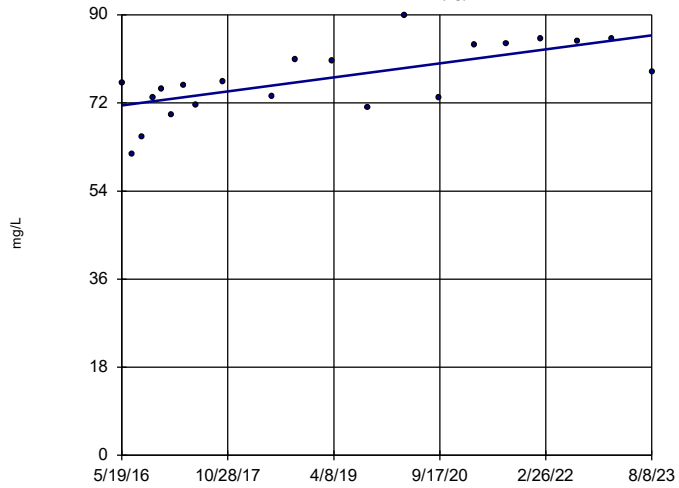


n = 21  
 Slope = 1.082  
 units per year.  
 Mann-Kendall  
 statistic = 82  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-3 (bg)

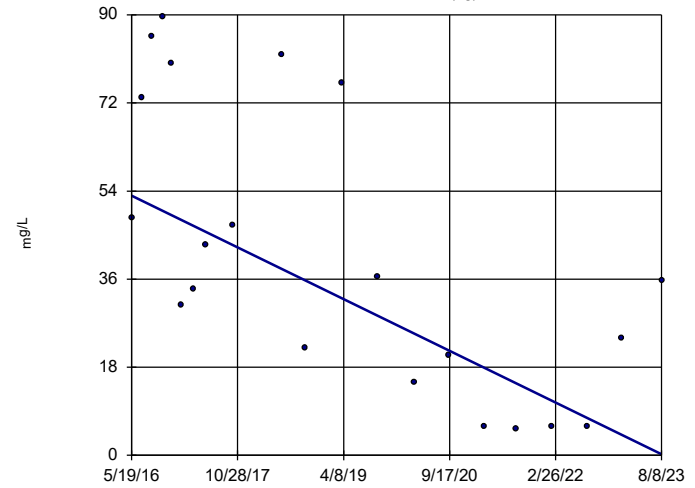


n = 21  
 Slope = 1.977  
 units per year.  
 Mann-Kendall  
 statistic = 110  
 critical = 87  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-4 (bg)

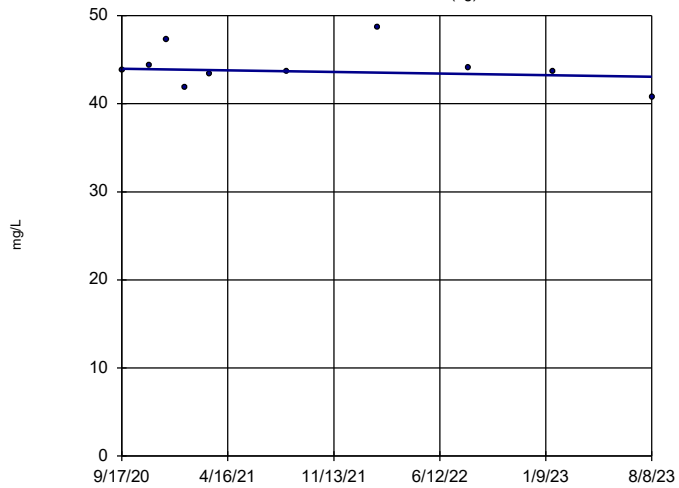


n = 21  
 Slope = -7.312  
 units per year.  
 Mann-Kendall  
 statistic = -103  
 critical = -87  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-42D (bg)

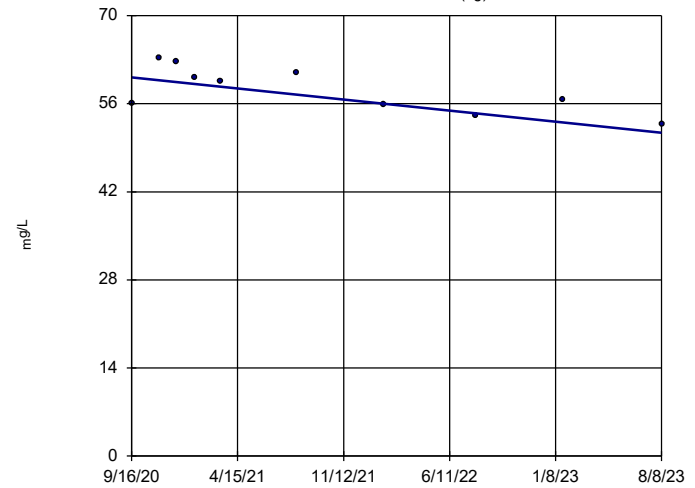


n = 10  
 Slope = -0.3182  
 units per year.  
 Mann-Kendall  
 statistic = -7  
 critical = -30  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-43D (bg)

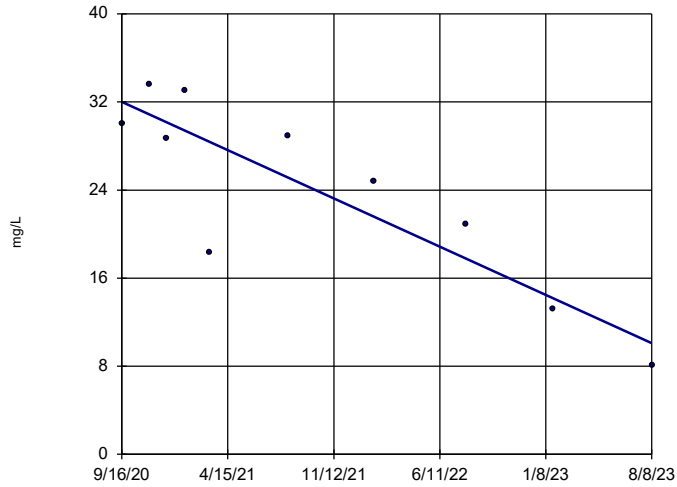


n = 10  
 Slope = -3.038  
 units per year.  
 Mann-Kendall  
 statistic = -25  
 critical = -30  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

HGWA-44D (bg)

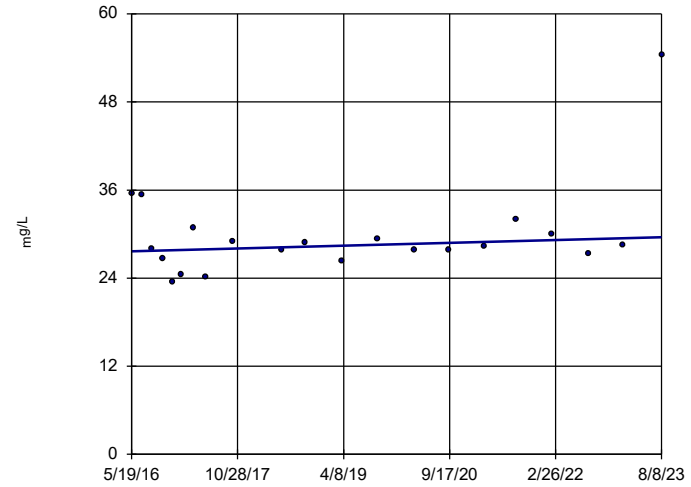


n = 10  
 Slope = -7.57  
 units per year.  
 Mann-Kendall  
 statistic = -31  
 critical = -30  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

HGWA-5 (bg)

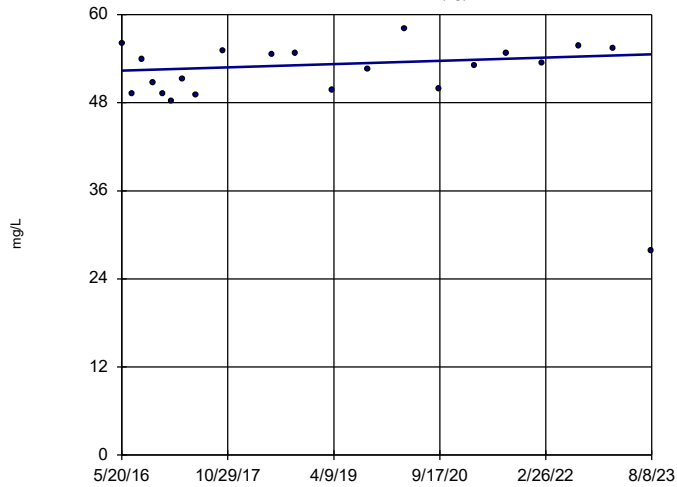


n = 21  
 Slope = 0.2632  
 units per year.  
 Mann-Kendall  
 statistic = 25  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

HGWA-6 (bg)

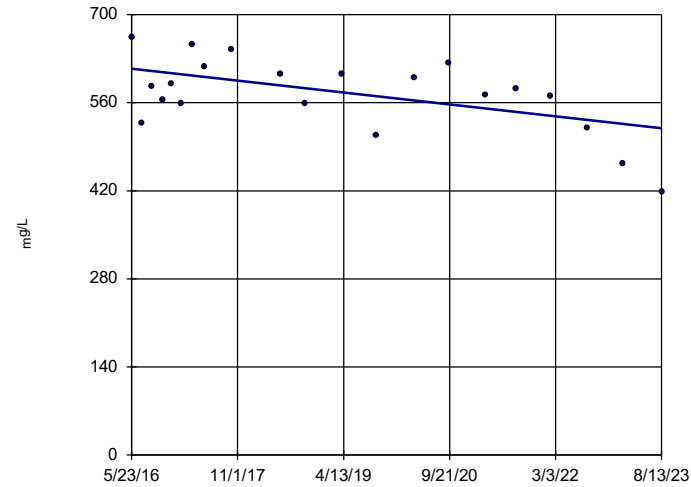


n = 21  
 Slope = 0.3126  
 units per year.  
 Mann-Kendall  
 statistic = 33  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

HGWC-14

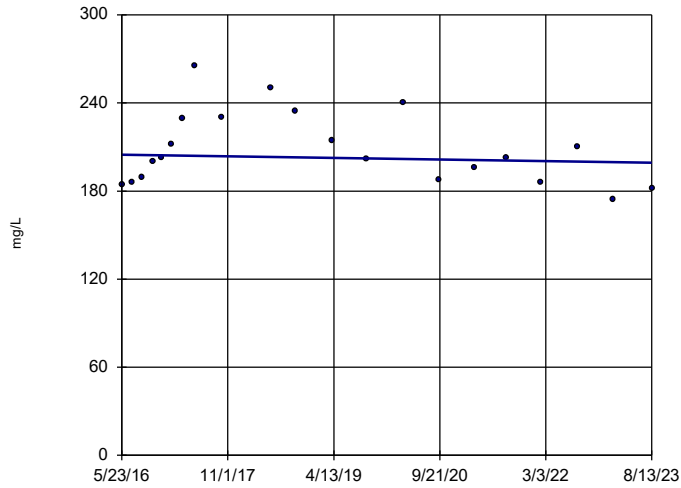


n = 21  
 Slope = -13.11  
 units per year.  
 Mann-Kendall  
 statistic = -70  
 critical = -87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-15

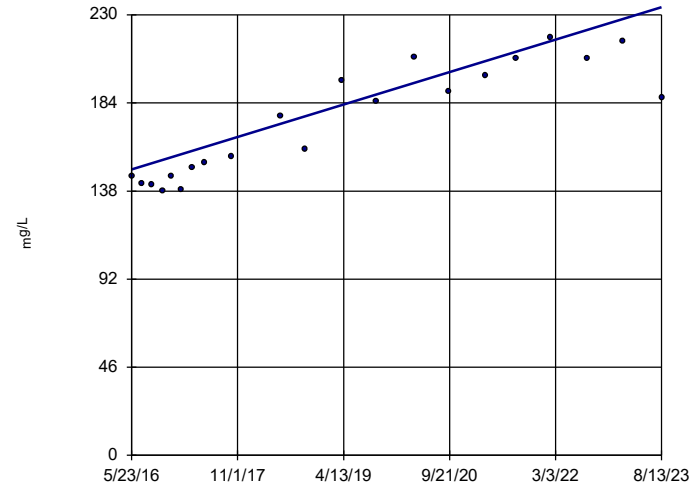


n = 21  
 Slope = -0.7372  
 units per year.  
 Mann-Kendall  
 statistic = -14  
 critical = -87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-16

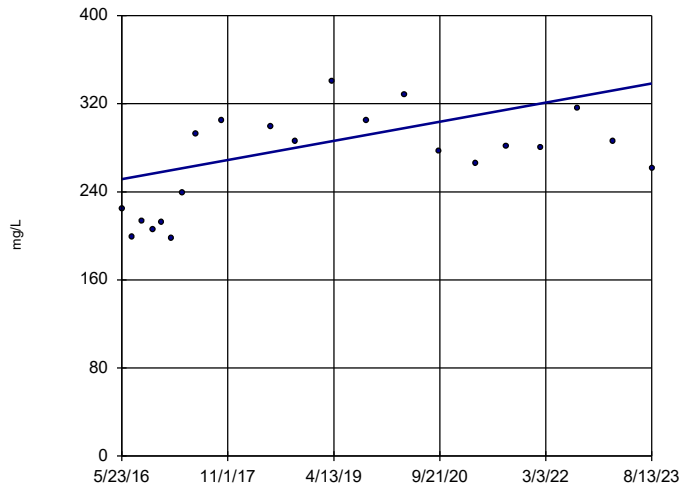


n = 21  
 Slope = 11.73  
 units per year.  
 Mann-Kendall  
 statistic = 154  
 critical = 87  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-17

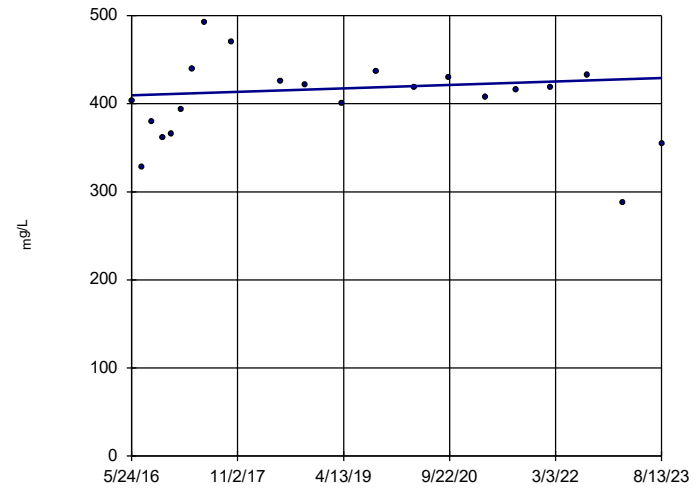


n = 21  
 Slope = 12.03  
 units per year.  
 Mann-Kendall  
 statistic = 70  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-18

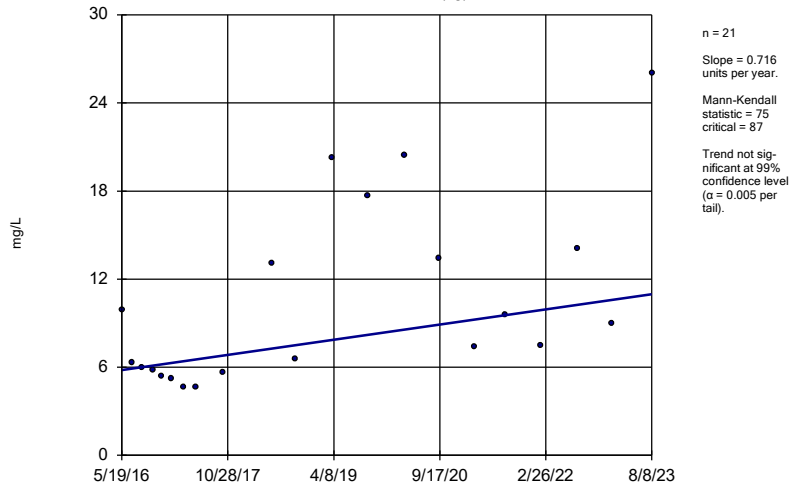


n = 21  
 Slope = 2.683  
 units per year.  
 Mann-Kendall  
 statistic = 13  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

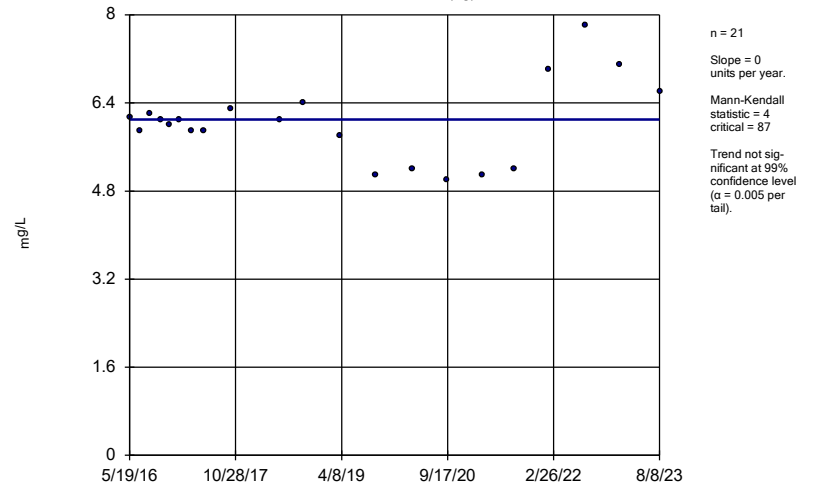
HGWA-1 (bg)



Constituent: Chloride Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

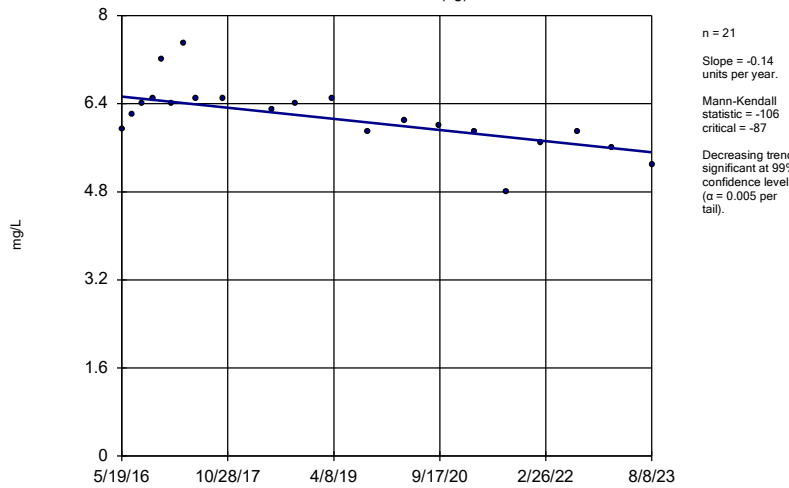
HGWA-2 (bg)



Constituent: Chloride Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

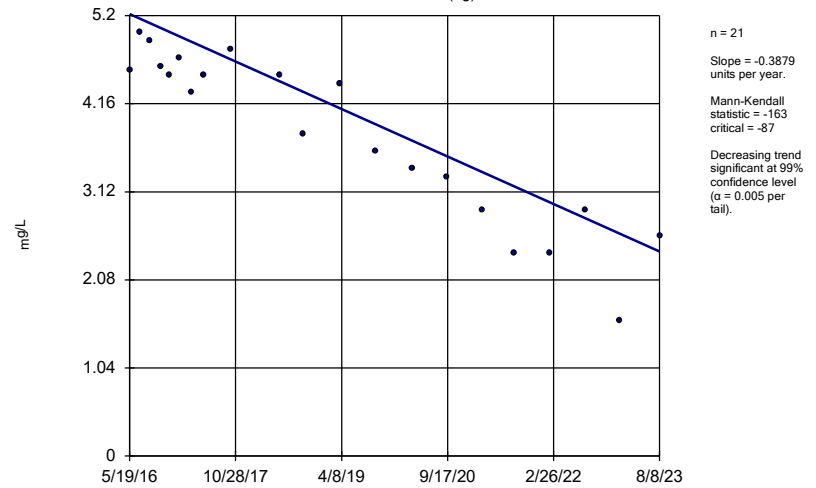
HGWA-3 (bg)



Constituent: Chloride Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

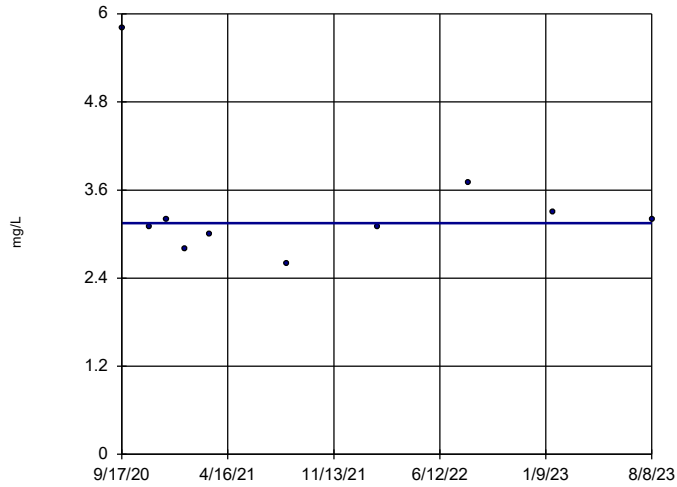
HGWA-4 (bg)



Constituent: Chloride Analysis Run 10/17/2023 2:03 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-42D (bg)

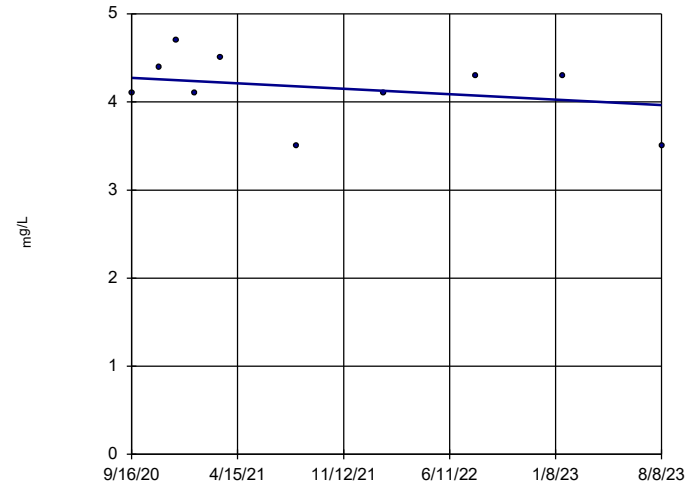


n = 10  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = 1  
 critical = 30  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-43D (bg)

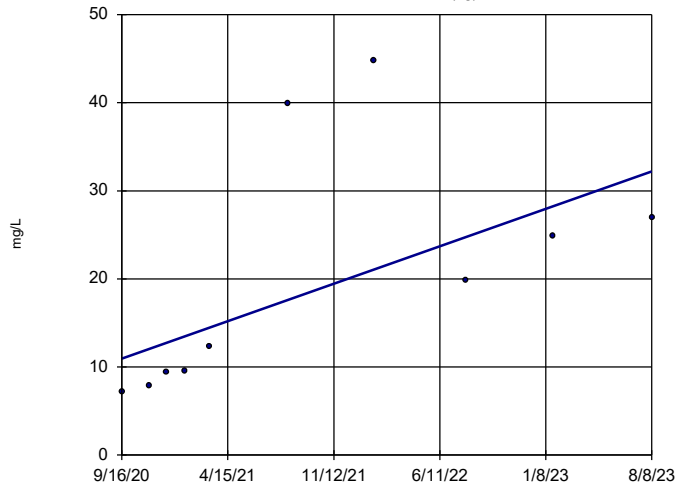


n = 10  
 Slope = -0.1067  
 units per year.  
 Mann-Kendall  
 statistic = -10  
 critical = -30  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-44D (bg)

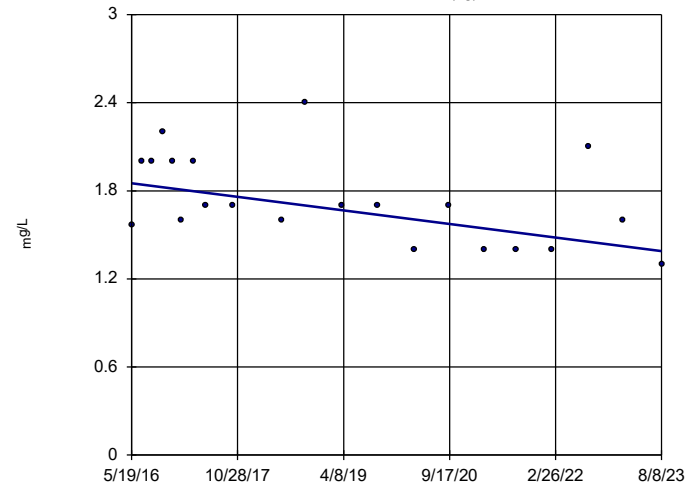


n = 10  
 Slope = 7.347  
 units per year.  
 Mann-Kendall  
 statistic = 33  
 critical = 30  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-5 (bg)



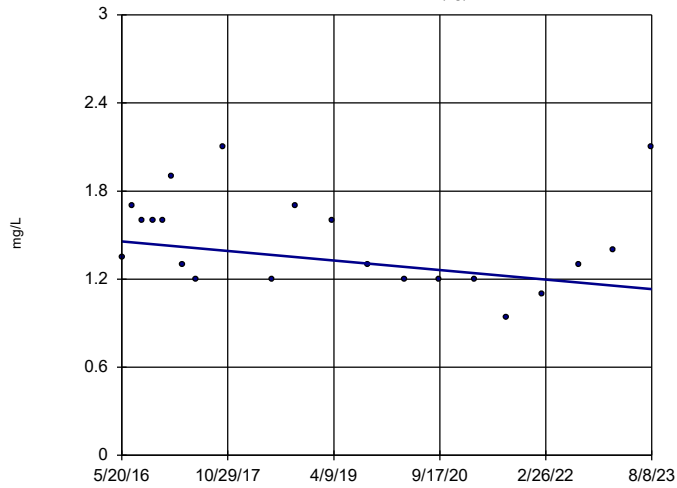
n = 21  
 Slope = -0.064  
 units per year.  
 Mann-Kendall  
 statistic = -75  
 critical = -87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2



### Sen's Slope Estimator

HGWA-6 (bg)

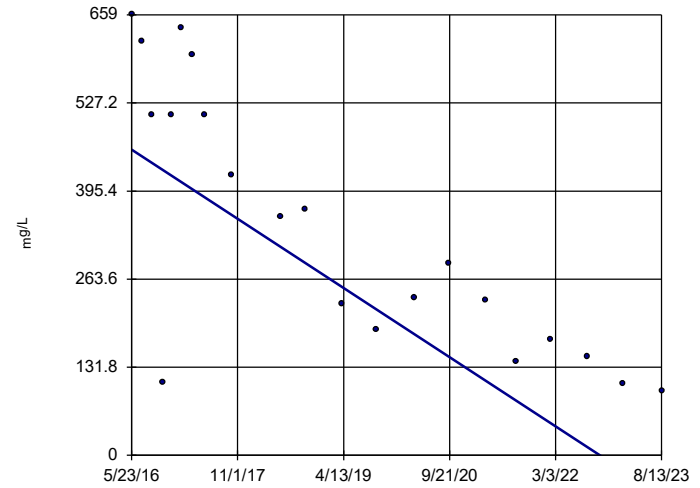


n = 21  
 Slope = -0.04474  
 units per year.  
 Mann-Kendall  
 statistic = -53  
 critical = -87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-14

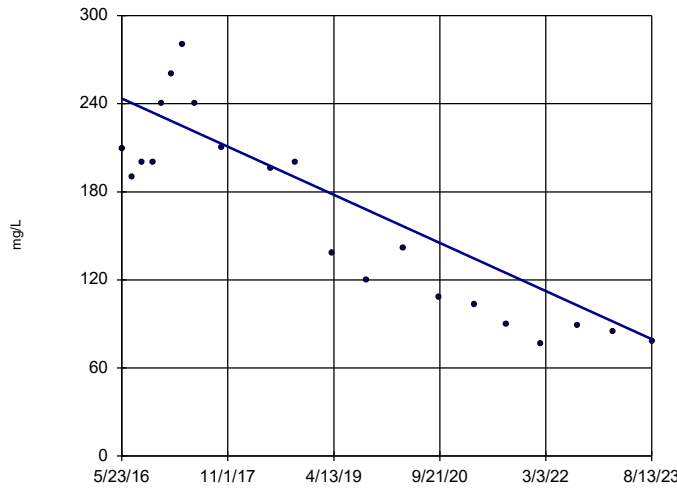


n = 21  
 Slope = -71.62  
 units per year.  
 Mann-Kendall  
 statistic = -147  
 critical = -87  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-15

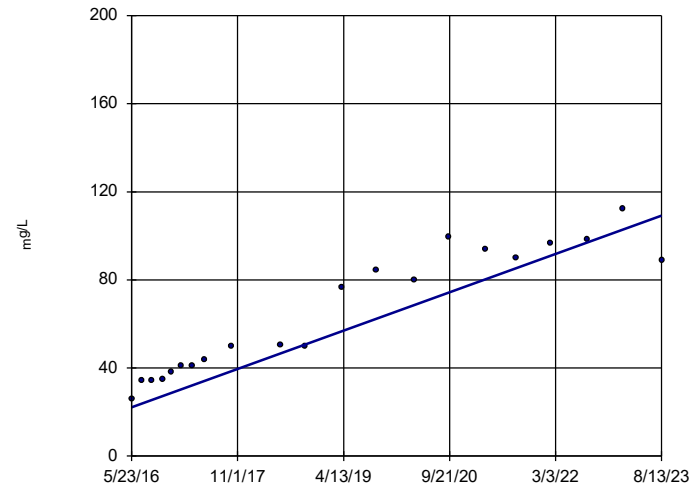


n = 21  
 Slope = -22.69  
 units per year.  
 Mann-Kendall  
 statistic = -140  
 critical = -87  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-16

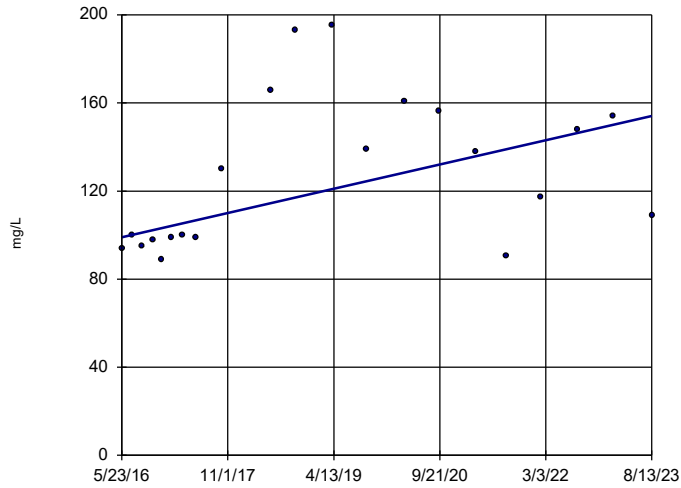


n = 21  
 Slope = 12.06  
 units per year.  
 Mann-Kendall  
 statistic = 180  
 critical = 87  
 Increasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-17

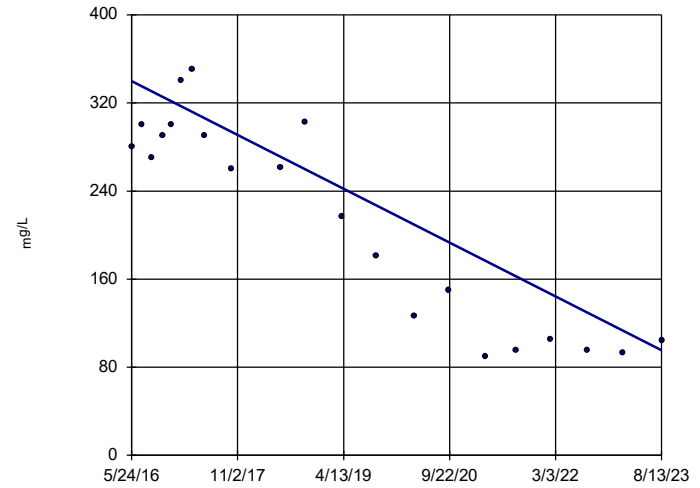


n = 21  
 Slope = 7.625  
 units per year.  
 Mann-Kendall  
 statistic = 70  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-18

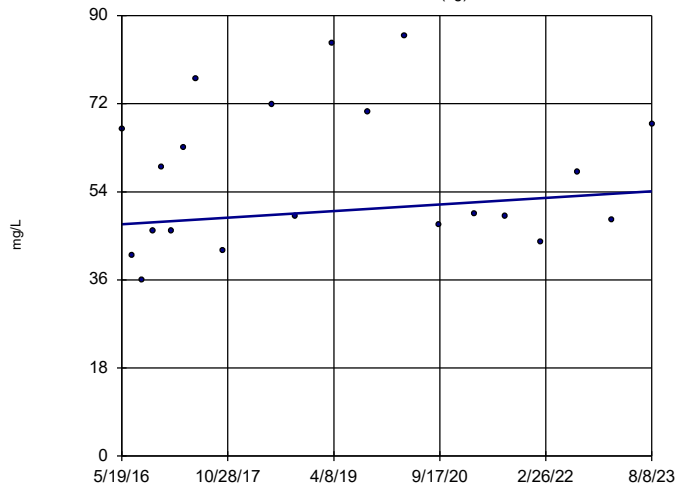


n = 21  
 Slope = -33.83  
 units per year.  
 Mann-Kendall  
 statistic = -132  
 critical = -87  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Chloride Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-1 (bg)

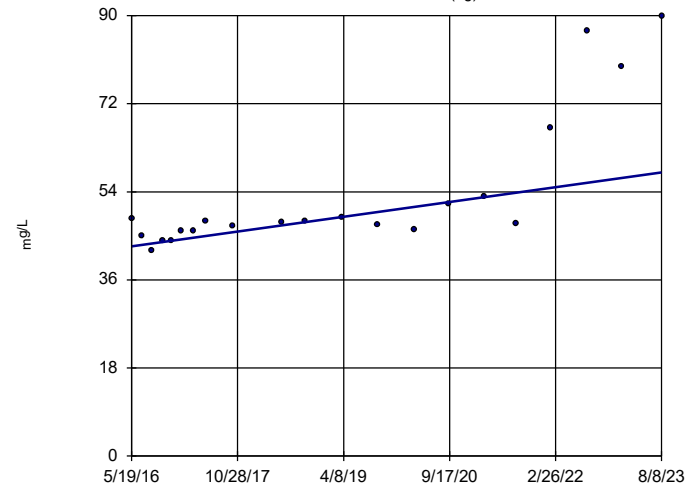


n = 21  
 Slope = 0.9291  
 units per year.  
 Mann-Kendall  
 statistic = 31  
 critical = 87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-2 (bg)

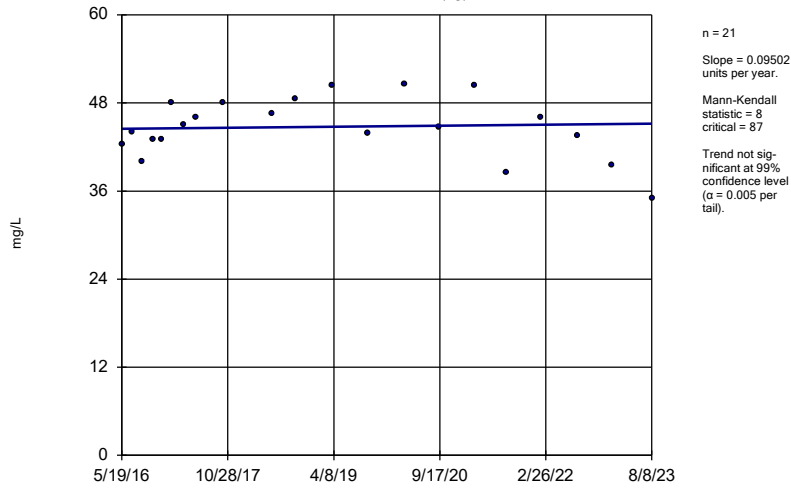


n = 21  
 Slope = 2.095  
 units per year.  
 Mann-Kendall  
 statistic = 138  
 critical = 87  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

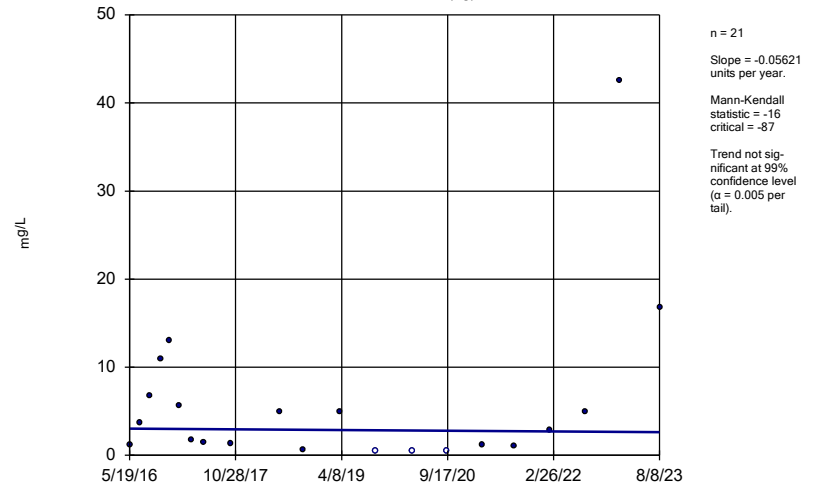
HGWA-3 (bg)



Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

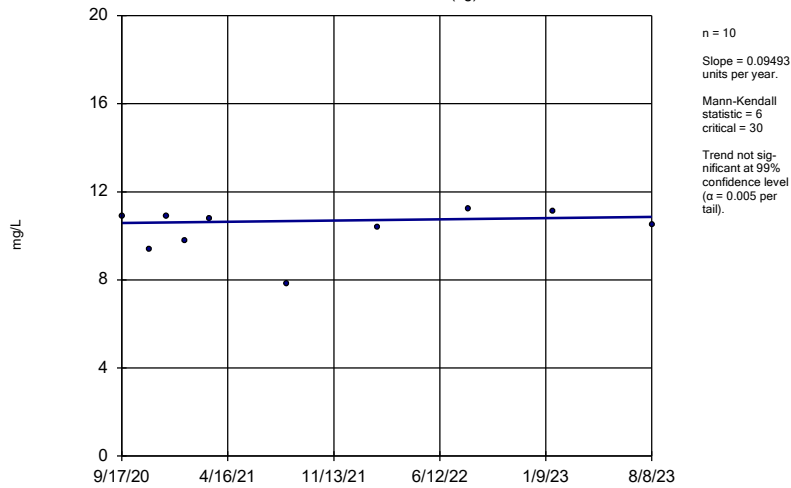
HGWA-4 (bg)



Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

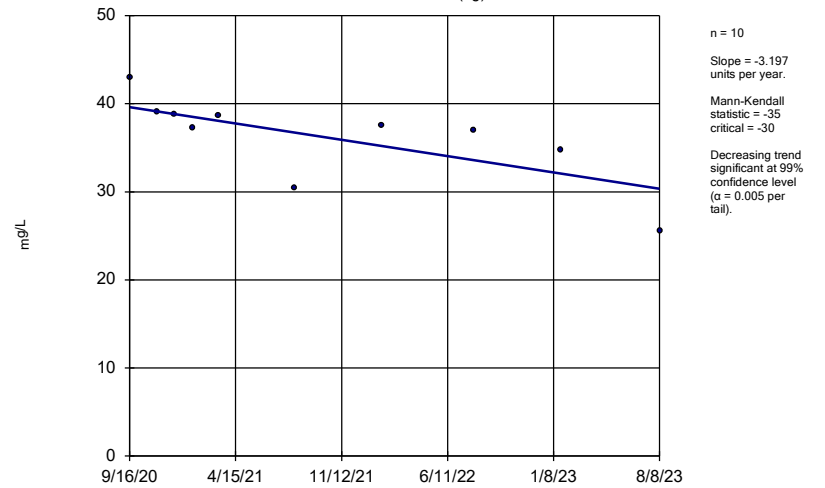
HGWA-42D (bg)



Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

Sen's Slope Estimator

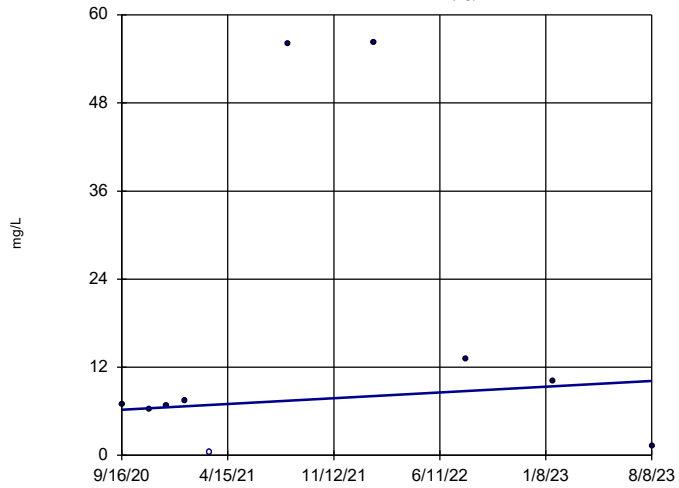
HGWA-43D (bg)



Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-44D (bg)

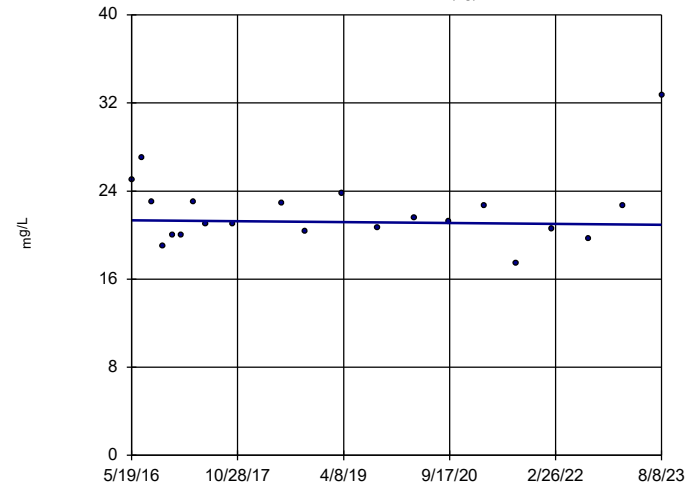


n = 10  
Slope = 1.358  
units per year.  
Mann-Kendall  
statistic = 7  
critical = 30  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-5 (bg)

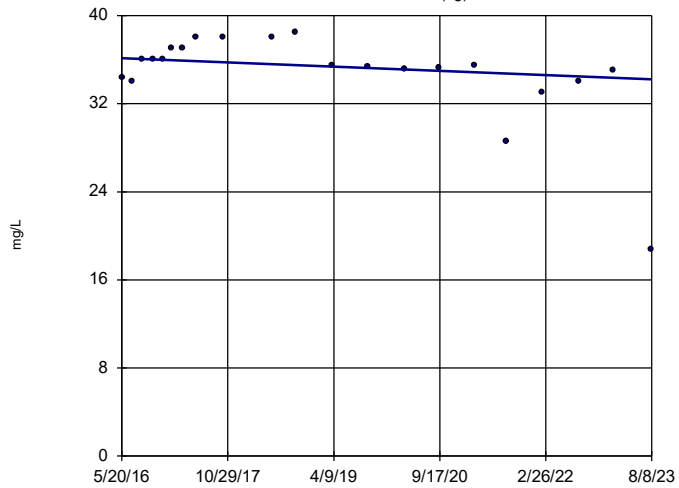


n = 21  
Slope = -0.05539  
units per year.  
Mann-Kendall  
statistic = -16  
critical = -87  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-6 (bg)

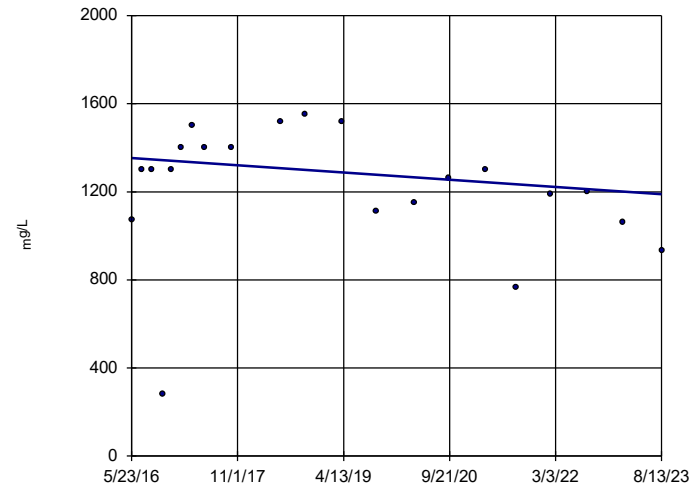


n = 21  
Slope = -0.264  
units per year.  
Mann-Kendall  
statistic = -63  
critical = -87  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-14

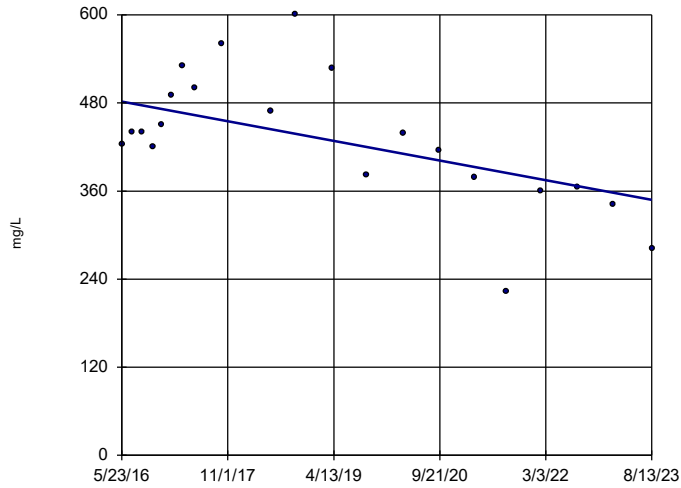


n = 21  
Slope = -22.7  
units per year.  
Mann-Kendall  
statistic = -34  
critical = -87  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

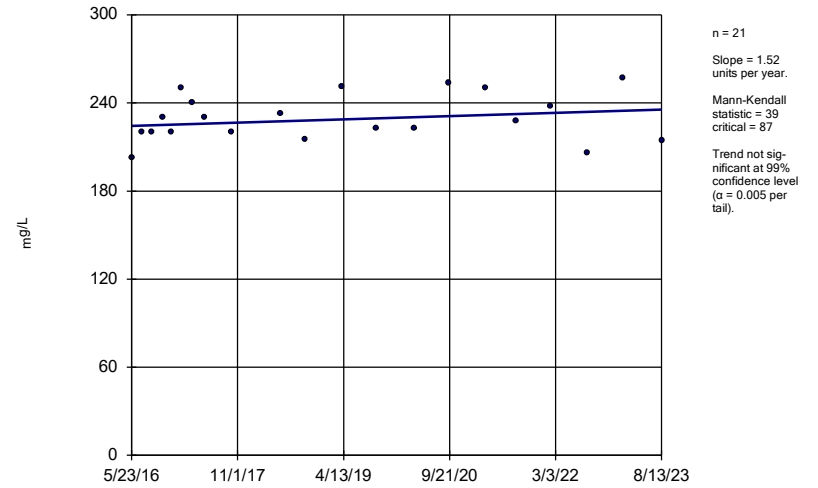
HGWC-15



Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

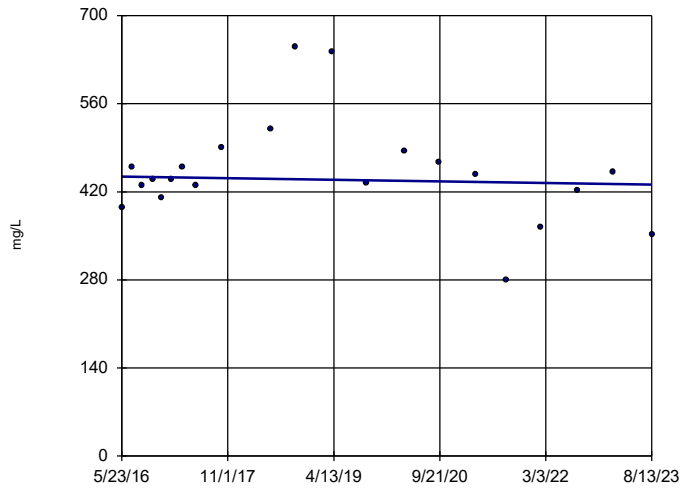
HGWC-16



Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

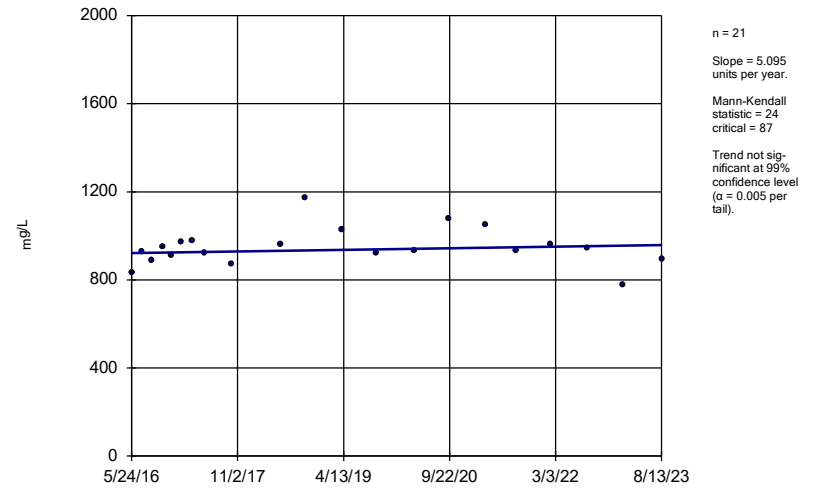
HGWC-17



Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

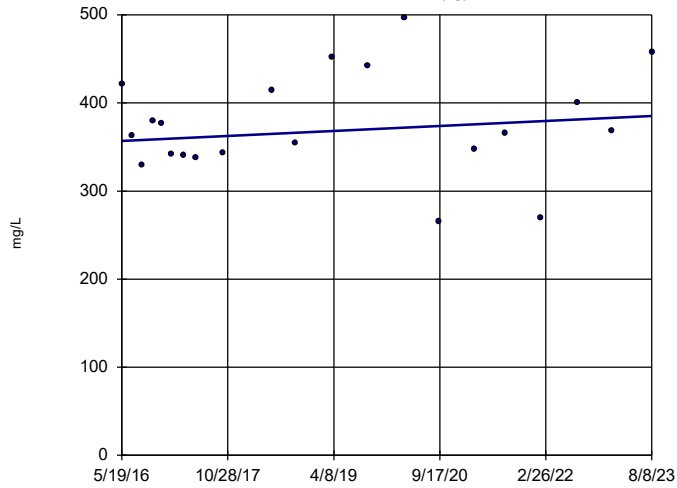
HGWC-18



Constituent: Sulfate Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-1 (bg)

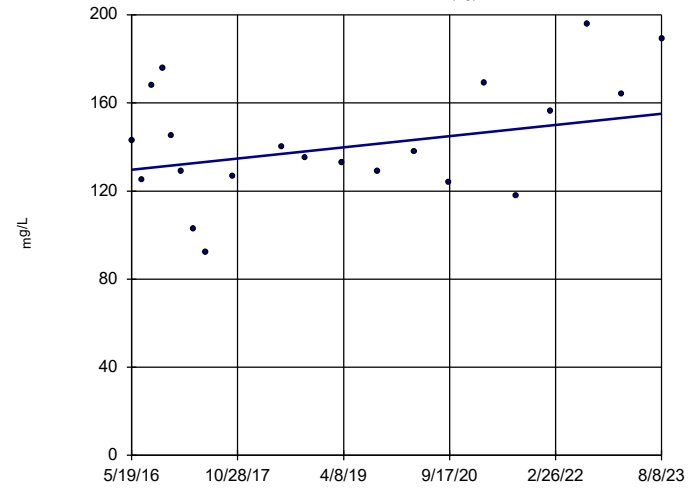


n = 21  
 Slope = 3.922 units per year.  
 Mann-Kendall statistic = 26  
 critical = 87  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-2 (bg)

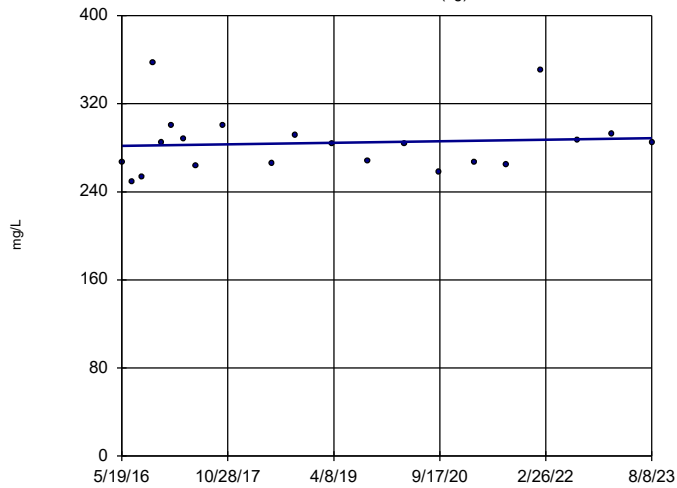


n = 21  
 Slope = 3.534 units per year.  
 Mann-Kendall statistic = 35  
 critical = 87  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-3 (bg)

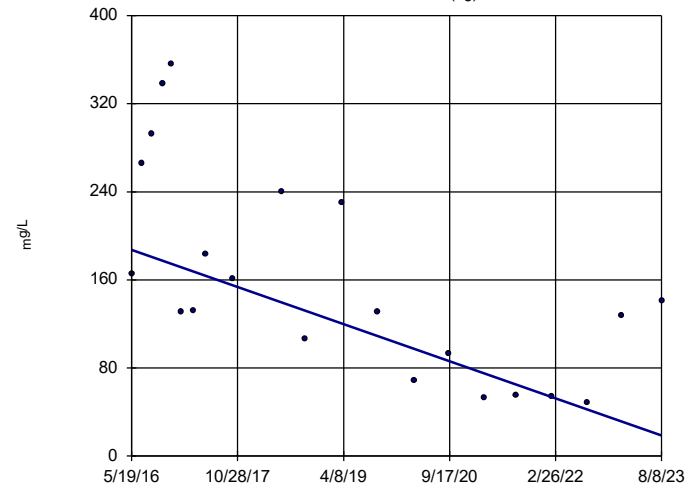


n = 21  
 Slope = 0.9434 units per year.  
 Mann-Kendall statistic = 22  
 critical = 87  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-4 (bg)

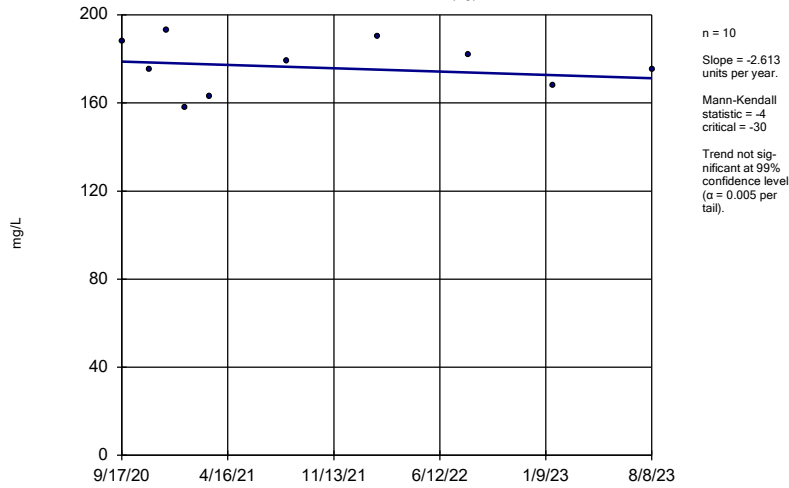


n = 21  
 Slope = -23.33 units per year.  
 Mann-Kendall statistic = -111  
 critical = -87  
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

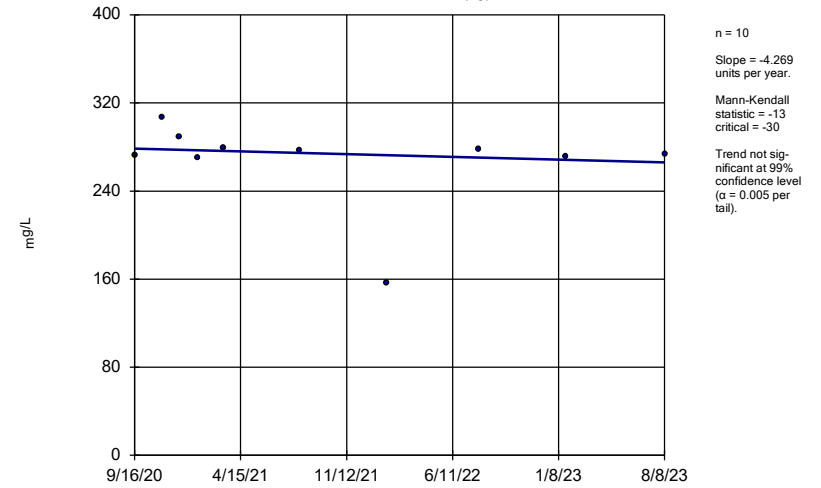
HGWA-42D (bg)



Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

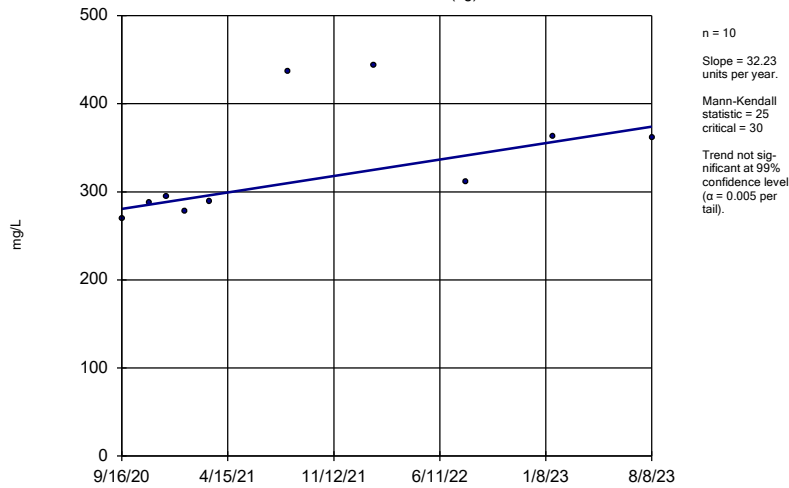
HGWA-43D (bg)



Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

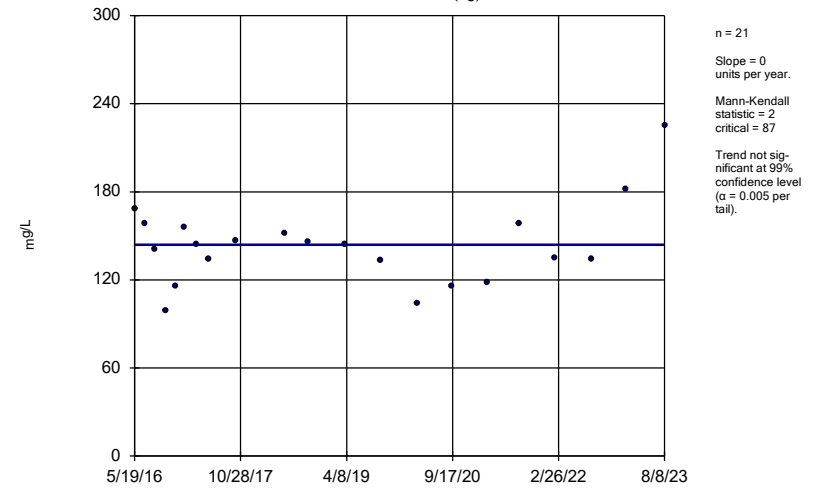
HGWA-44D (bg)



Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

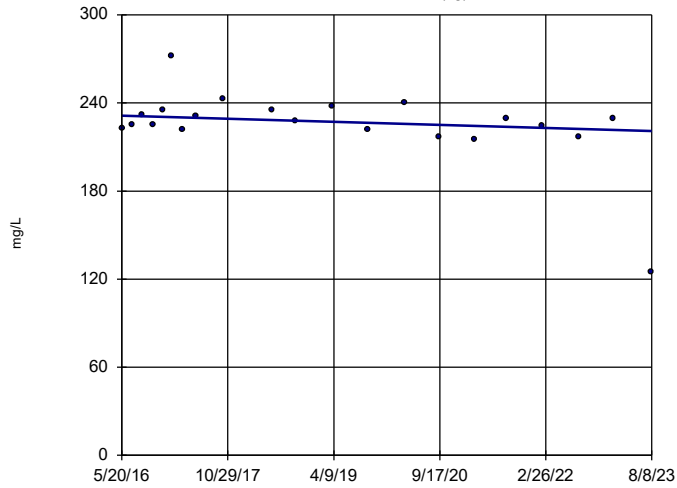
HGWA-5 (bg)



Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-6 (bg)

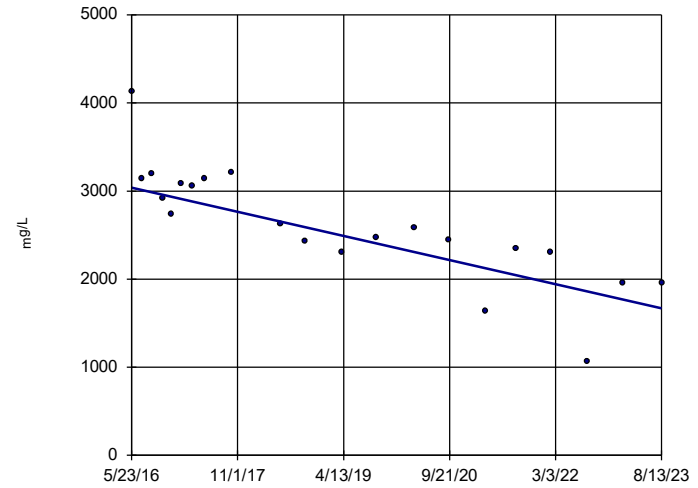


n = 21  
 Slope = -1.451  
 units per year.  
 Mann-Kendall  
 statistic = -49  
 critical = -87  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-14

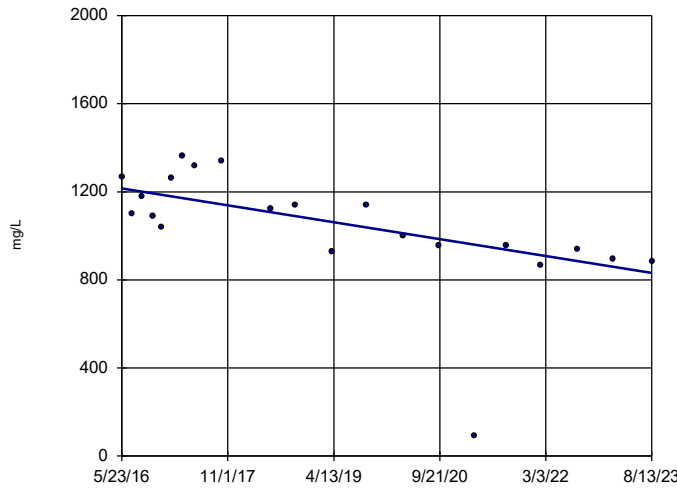


n = 21  
 Slope = -189.4  
 units per year.  
 Mann-Kendall  
 statistic = -146  
 critical = -87  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-15

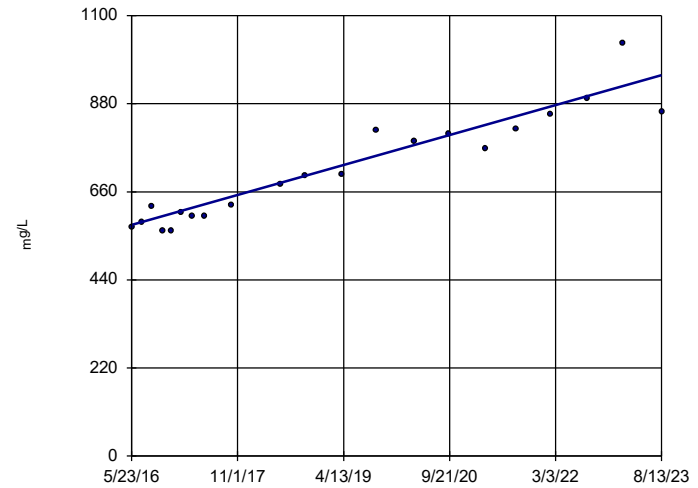


n = 21  
 Slope = -53.15  
 units per year.  
 Mann-Kendall  
 statistic = -111  
 critical = -87  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWC-16

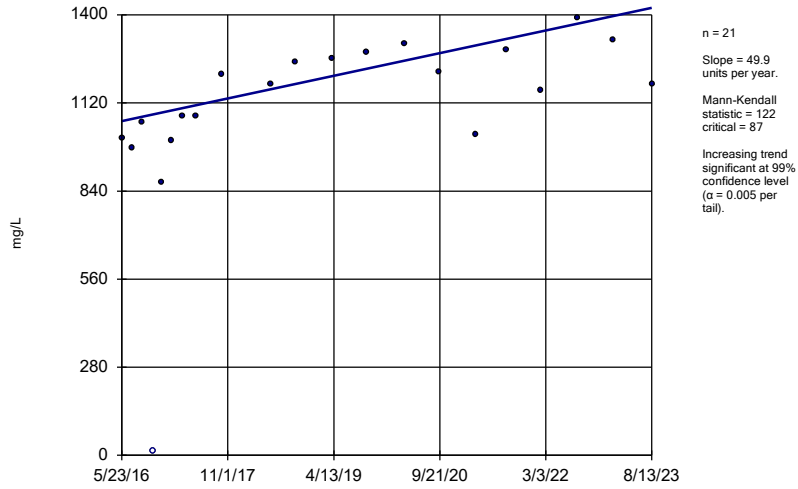


n = 21  
 Slope = 51.71  
 units per year.  
 Mann-Kendall  
 statistic = 170  
 critical = 87  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

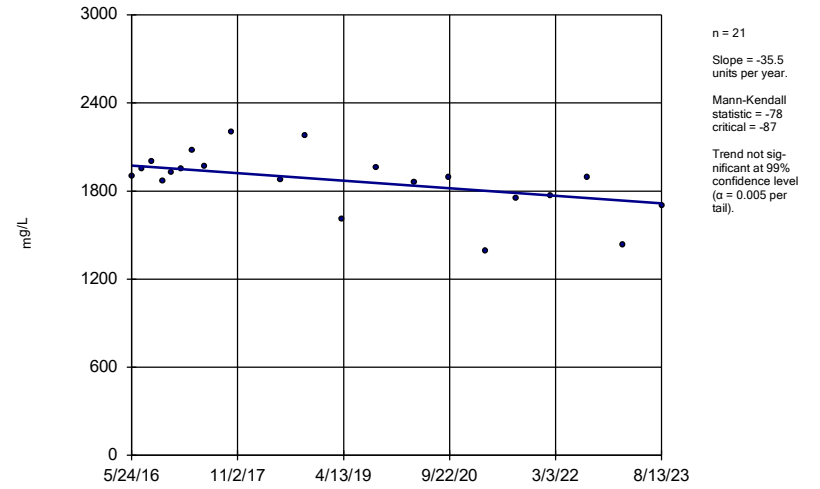


### Sen's Slope Estimator HGWC-17



Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator HGWC-18



Constituent: Total Dissolved Solids Analysis Run 10/17/2023 2:04 PM View: Appendix III - Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

FIGURE F.

# Upper Tolerance Limits Summary Table

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 11/15/2023, 1:33 PM

<u>Constituent</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	0.003	n/a	n/a	n/a	n/a	144	81.94	n/a	0.0006197	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	n/a	n/a	177	81.92	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.46	n/a	n/a	n/a	n/a	177	0	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	n/a	n/a	165	82.42	n/a	0.0002111	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	n/a	n/a	177	92.09	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.019	n/a	n/a	n/a	n/a	165	86.06	n/a	0.0002111	NP Inter(NDs)
Cobalt (mg/L)	0.038	n/a	n/a	n/a	n/a	177	69.49	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.594	n/a	n/a	n/a	n/a	176	0	sqrt(x)	0.05	Inter
Fluoride (mg/L)	1.3	n/a	n/a	n/a	n/a	183	29.51	n/a	NaN	NP Inter(normality)
Lead (mg/L)	0.001	n/a	n/a	n/a	n/a	165	76.36	n/a	0.0002111	NP Inter(NDs)
Lithium (mg/L)	0.064	n/a	n/a	n/a	n/a	174	17.82	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	n/a	n/a	121	93.39	n/a	0.002016	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	n/a	n/a	163	83.44	n/a	0.0002339	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	n/a	177	97.74	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	n/a	177	98.87	n/a	NaN	NP Inter(NDs)

FIGURE G.

<b>PLANT HAMMOND AP-2 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		0.46	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005
Chromium, Total (mg/L)	0.1		0.019	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.038	0.038
Combined Radium, Total (pCi/L)	5		1.59	5
Fluoride, Total (mg/L)	4		1.3	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015
Lithium, Total (mg/L)	n/a	0.04	0.064	0.064
Mercury, Total (mg/L)	0.002		0.0002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.01	0.1
Selenium, Total (mg/L)	0.05		0.005	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002

*\*Grey cell indicates background is higher than MCL or CCR-Rule*

*\*MCL = Maximum Contaminant Level*

*\*CCR = Coal Combustion Residuals*

*\*GWPS = Groundwater Protection Standard*

FIGURE H.

# Confidence Intervals Summary Table - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 1/22/2024, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	HGWC-18	0.1828	0.1555	0.038	Yes 24	0.1691	0.02675	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-33	0.05756	0.04517	0.038	Yes 11	0.05136	0.007433	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-35	0.09447	0.08264	0.038	Yes 9	0.08856	0.006126	0	None	No	0.01	Param.

# Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 1/22/2024, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	HGWC-14	0.0032	0.001	0.006	No 18	0.002607	0.0009443	77.78	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-15	0.003	0.0027	0.006	No 18	0.0028	0.0004298	77.78	None	No	0.01	NP (NDs)
Antimony (mg/L)	HGWC-18	0.003	0.0008	0.006	No 18	0.002878	0.0005185	94.44	None	No	0.01	NP (NDs)
Antimony (mg/L)	MW-22	0.003	0.0016	0.006	No 9	0.002844	0.0004667	88.89	None	No	0.002	NP (NDs)
Antimony (mg/L)	MW-33	0.003	0.00046	0.006	No 7	0.002637	0.00096	85.71	None	No	0.008	NP (NDs)
Antimony (mg/L)	MW-34D	0.003	0.0018	0.006	No 5	0.00276	0.0005367	80	None	No	0.031	NP (NDs)
Antimony (mg/L)	MW-35	0.003	0.00041	0.006	No 7	0.002616	0.0009733	71.43	None	No	0.008	NP (NDs)
Antimony (mg/L)	MW-37D	0.003	0.00079	0.006	No 7	0.002684	0.0008353	85.71	None	No	0.008	NP (NDs)
Arsenic (mg/L)	HGWC-14	0.007101	0.004359	0.01	No 24	0.005953	0.002966	12.5	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	HGWC-15	0.01	0.0008	0.01	No 24	0.008806	0.003229	87.5	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-16	0.01	0.0012	0.01	No 24	0.008454	0.003536	83.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-17	0.01	0.0017	0.01	No 24	0.007453	0.004073	70.83	None	No	0.01	NP (NDs)
Arsenic (mg/L)	HGWC-18	0.006653	0.004842	0.01	No 24	0.005748	0.001774	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-21D	0.01	0.0013	0.01	No 14	0.007535	0.004084	71.43	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-22	0.01	0.00045	0.01	No 13	0.009265	0.002649	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-23D	0.01	0.001	0.01	No 13	0.008602	0.003414	84.62	None	No	0.01	NP (NDs)
Arsenic (mg/L)	MW-33	0.008692	0.003908	0.01	No 10	0.0063	0.002681	10	None	No	0.01	Param.
Arsenic (mg/L)	MW-34D	0.005648	0.001838	0.01	No 7	0.003743	0.001604	14.29	None	No	0.01	Param.
Arsenic (mg/L)	MW-35	0.025	0.0043	0.01	No 9	0.009767	0.008681	22.22	None	No	0.002	NP (normality)
Arsenic (mg/L)	MW-37D	0.01	0.00095	0.01	No 9	0.007261	0.004124	66.67	None	No	0.002	NP (NDs)
Arsenic (mg/L)	MW-51	0.005469	0.002031	0.01	No 5	0.005	0.002977	20	Kaplan-Meier	No	0.01	Param.
Barium (mg/L)	HGWC-14	0.022	0.018	2	No 24	0.02438	0.02157	4.167	None	No	0.01	NP (normality)
Barium (mg/L)	HGWC-15	0.02623	0.01756	2	No 24	0.0219	0.008492	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-16	0.1108	0.1005	2	No 24	0.1056	0.01006	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-17	0.0263	0.02365	2	No 24	0.02498	0.002602	0	None	No	0.01	Param.
Barium (mg/L)	HGWC-18	0.032	0.028	2	No 24	0.03205	0.01511	4.167	None	No	0.01	NP (normality)
Barium (mg/L)	MW-21D	0.0642	0.03938	2	No 14	0.05179	0.01752	0	None	No	0.01	Param.
Barium (mg/L)	MW-22	0.02833	0.01531	2	No 13	0.02215	0.009503	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	MW-23D	0.06464	0.04936	2	No 13	0.057	0.01028	0	None	No	0.01	Param.
Barium (mg/L)	MW-33	0.02651	0.02049	2	No 10	0.0235	0.003375	0	None	No	0.01	Param.
Barium (mg/L)	MW-34D	0.04491	0.03395	2	No 7	0.03943	0.004614	0	None	No	0.01	Param.
Barium (mg/L)	MW-35	0.02895	0.02172	2	No 9	0.02533	0.003742	0	None	No	0.01	Param.
Barium (mg/L)	MW-37D	0.1586	0.1103	2	No 9	0.1344	0.02506	0	None	No	0.01	Param.
Barium (mg/L)	MW-51	0.04609	0.01991	2	No 5	0.033	0.00781	0	None	No	0.01	Param.
Beryllium (mg/L)	HGWC-14	0.00056	0.0004	0.004	No 22	0.0005582	0.0003148	9.091	None	No	0.01	NP (normality)
Beryllium (mg/L)	HGWC-17	0.0005	0.0001	0.004	No 22	0.0004015	0.0001862	77.27	None	No	0.01	NP (NDs)
Beryllium (mg/L)	HGWC-18	0.003347	0.002733	0.004	No 22	0.00304	0.0005717	4.545	None	No	0.01	Param.
Beryllium (mg/L)	MW-22	0.0005	0.000062	0.004	No 13	0.0003016	0.0002232	53.85	None	No	0.01	NP (NDs)
Beryllium (mg/L)	MW-33	0.001061	0.0007889	0.004	No 10	0.000891	0.0002636	0	None	x^3	0.01	Param.
Beryllium (mg/L)	MW-34D	0.0005	0.000065	0.004	No 7	0.0003879	0.0001931	71.43	None	No	0.008	NP (NDs)
Beryllium (mg/L)	MW-35	0.0006612	0.0004054	0.004	No 9	0.0005333	0.0001325	0	None	No	0.01	Param.
Beryllium (mg/L)	MW-37D	0.0005	0.00012	0.004	No 9	0.0004578	0.0001267	88.89	None	No	0.002	NP (NDs)
Beryllium (mg/L)	MW-51	0.0004587	0.00002532	0.004	No 5	0.000242	0.0001293	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-14	0.0005	0.00012	0.005	No 24	0.0003278	0.0001931	54.17	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-15	0.002113	0.001343	0.005	No 24	0.001728	0.0007551	0	None	No	0.01	Param.
Cadmium (mg/L)	HGWC-17	0.0005	0.00007	0.005	No 24	0.0004821	0.00008777	95.83	None	No	0.01	NP (NDs)
Cadmium (mg/L)	HGWC-18	0.0024	0.0017	0.005	No 24	0.002302	0.001714	4.167	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-22	0.002084	0.001657	0.005	No 13	0.001766	0.0005051	0	None	x^4	0.01	Param.
Cadmium (mg/L)	MW-23D	0.0025	0.00015	0.005	No 13	0.001151	0.001121	38.46	None	No	0.01	NP (normality)
Cadmium (mg/L)	MW-33	0.00022	0.00016	0.005	No 10	0.000287	0.0003394	10	None	No	0.011	NP (normality)
Cadmium (mg/L)	MW-34D	0.00153	0.0001696	0.005	No 7	0.00139	0.001179	28.57	Kaplan-Meier	x^(1/3)	0.01	Param.
Cadmium (mg/L)	MW-35	0.00175	0.0009679	0.005	No 9	0.001359	0.0004049	0	None	No	0.01	Param.
Cadmium (mg/L)	MW-51	0.0016	0.00019	0.005	No 5	0.000684	0.0005917	0	None	No	0.031	NP (selected)
Chromium (mg/L)	HGWC-14	0.005	0.00066	0.1	No 22	0.004595	0.001313	90.91	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-15	0.005	0.0012	0.1	No 22	0.004414	0.001515	86.36	None	No	0.01	NP (NDs)



# Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 1/22/2024, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	HGWC-16	0.005	0.0021	0.1	No 22	0.004464	0.001408	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-17	0.005	0.0018	0.1	No 22	0.004465	0.001392	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	HGWC-18	0.005	0.00063	0.1	No 22	0.004388	0.001578	86.36	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-21D	0.005	0.00074	0.1	No 14	0.004379	0.001578	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-22	0.005	0.00075	0.1	No 13	0.004319	0.001663	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-23D	0.005	0.00086	0.1	No 13	0.004361	0.00156	84.62	None	No	0.01	NP (NDs)
Chromium (mg/L)	MW-33	0.005	0.005	0.1	No 10	0.004569	0.001363	90	None	No	0.011	NP (NDs)
Chromium (mg/L)	MW-34D	0.0059	0.005	0.1	No 7	0.005129	0.0003402	85.71	None	No	0.008	NP (NDs)
Chromium (mg/L)	MW-35	0.005	0.00079	0.1	No 9	0.004069	0.001848	77.78	None	No	0.002	NP (NDs)
Chromium (mg/L)	MW-37D	0.005	0.0014	0.1	No 9	0.004578	0.001194	77.78	None	No	0.002	NP (NDs)
Cobalt (mg/L)	HGWC-14	0.034	0.0253	0.038	No 24	0.03294	0.02017	4.167	None	No	0.01	NP (normality)
Cobalt (mg/L)	HGWC-15	0.04137	0.02281	0.038	No 24	0.03209	0.01819	0	None	No	0.01	Param.
Cobalt (mg/L)	HGWC-16	0.005	0.00037	0.038	No 24	0.00461	0.00132	91.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	HGWC-17	0.01553	0.01256	0.038	No 24	0.01405	0.002906	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>HGWC-18</b>	<b>0.1828</b>	<b>0.1555</b>	<b>0.038</b>	<b>Yes 24</b>	<b>0.1691</b>	<b>0.02675</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-21D	0.005	0.00034	0.038	No 14	0.004667	0.001245	92.86	None	No	0.01	NP (NDs)
Cobalt (mg/L)	MW-22	0.03542	0.02087	0.038	No 13	0.02815	0.009779	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-23D	0.001121	0.0008868	0.038	No 13	0.001004	0.0001574	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>MW-33</b>	<b>0.05756</b>	<b>0.04517</b>	<b>0.038</b>	<b>Yes 11</b>	<b>0.05136</b>	<b>0.007433</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-34D	0.009785	0.005043	0.038	No 7	0.007414	0.001996	0	None	No	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>MW-35</b>	<b>0.09447</b>	<b>0.08264</b>	<b>0.038</b>	<b>Yes 9</b>	<b>0.08856</b>	<b>0.006126</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	MW-37D	0.005	0.00048	0.038	No 9	0.004109	0.001787	77.78	None	No	0.002	NP (NDs)
Cobalt (mg/L)	MW-51	0.03382	0.01858	0.038	No 5	0.0262	0.00455	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-14	1.535	1.078	5	No 24	1.307	0.4476	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-15	0.8714	0.4766	5	No 24	0.674	0.3868	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-16	0.9041	0.4959	5	No 24	0.7	0.4	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-17	0.9736	0.6475	5	No 24	0.8105	0.3195	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	HGWC-18	2.118	1.54	5	No 24	1.829	0.5665	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-21D	0.9666	0.4187	5	No 14	0.7166	0.4399	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-22	1.01	0.3925	5	No 13	0.7014	0.4155	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-23D	0.9983	0.4643	5	No 13	0.7313	0.359	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-33	2.206	0.9922	5	No 10	1.599	0.6805	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-34D	1.171	0.3514	5	No 7	0.7611	0.3449	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-35	2.47	0.8314	5	No 9	1.646	0.9403	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-37D	1.229	0.1585	5	No 9	0.6939	0.5545	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-51	1.204	0.2867	5	No 5	0.7456	0.2738	0	None	No	0.01	Param.
Fluoride (mg/L)	HGWC-14	0.1683	0.07801	4	No 25	0.1661	0.1497	20	Kaplan-Meier ln(x)		0.01	Param.
Fluoride (mg/L)	HGWC-15	0.12	0.097	4	No 25	0.1366	0.1125	40	None	No	0.01	NP (normality)
Fluoride (mg/L)	HGWC-16	0.1326	0.04524	4	No 25	0.1443	0.1152	48	Kaplan-Meier x^(1/3)		0.01	Param.
Fluoride (mg/L)	HGWC-17	0.1671	0.06062	4	No 25	0.211	0.2035	28	Kaplan-Meier x^(1/3)		0.01	Param.
Fluoride (mg/L)	HGWC-18	0.5952	0.3776	4	No 25	0.4864	0.2183	4	None	No	0.01	Param.
Fluoride (mg/L)	MW-21D	0.1	0.1	4	No 14	0.09329	0.01711	78.57	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-22	0.13	0.063	4	No 13	0.1072	0.05563	61.54	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-23D	0.14	0.061	4	No 13	0.09962	0.02738	61.54	None	No	0.01	NP (NDs)
Fluoride (mg/L)	MW-33	0.2685	0.1291	4	No 11	0.1988	0.08364	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-34D	0.08721	0.05021	4	No 7	0.06871	0.01557	14.29	None	No	0.01	Param.
Fluoride (mg/L)	MW-35	0.09166	0.055	4	No 9	0.07333	0.01899	11.11	None	No	0.01	Param.
Fluoride (mg/L)	MW-37D	0.09732	0.0569	4	No 9	0.07711	0.02093	0	None	No	0.01	Param.
Fluoride (mg/L)	MW-51	0.1803	0.03569	4	No 5	0.108	0.04315	0	None	No	0.01	Param.
Lead (mg/L)	HGWC-14	0.001646	0.001201	0.015	No 22	0.001423	0.0004144	9.091	None	No	0.01	Param.
Lead (mg/L)	HGWC-15	0.001	0.001	0.015	No 22	0.0008375	0.0003537	77.27	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-16	0.001	0.0001	0.015	No 22	0.0006374	0.000447	59.09	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-17	0.001	0.0001	0.015	No 22	0.0006498	0.0004387	59.09	None	No	0.01	NP (NDs)
Lead (mg/L)	HGWC-18	0.001379	0.001024	0.015	No 22	0.001201	0.0003312	9.091	None	No	0.01	Param.
Lead (mg/L)	MW-21D	0.001	0.000073	0.015	No 14	0.0007734	0.0003991	71.43	None	No	0.01	NP (NDs)

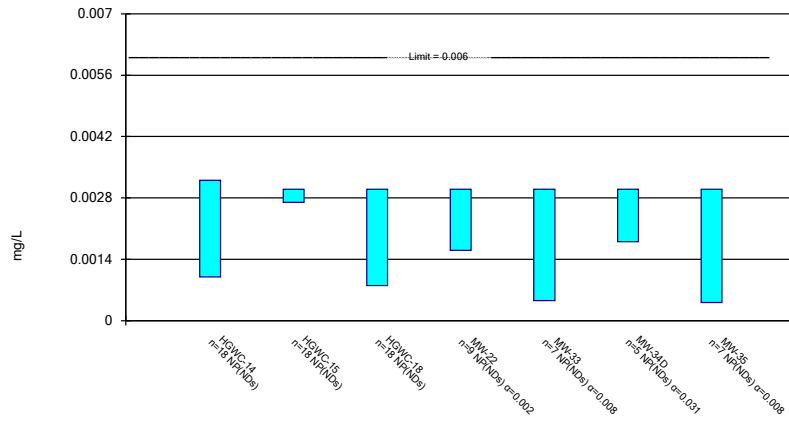
# Confidence Intervals Summary Table - All Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 1/22/2024, 1:54 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	MW-22	0.001	0.000094	0.015	No 13	0.0007869	0.0004052	76.92	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-23D	0.001	0.00016	0.015	No 13	0.0008624	0.0003367	84.62	None	No	0.01	NP (NDs)
Lead (mg/L)	MW-33	0.001631	0.001032	0.015	No 10	0.00147	0.0003199	20	Kaplan-Meier	x^4	0.01	Param.
Lead (mg/L)	MW-34D	0.001	0.00087	0.015	No 7	0.0009814	0.00004914	85.71	Kaplan-Meier	No	0.008	NP (NDs)
Lead (mg/L)	MW-35	0.001	0.00016	0.015	No 9	0.0007456	0.0003286	44.44	None	No	0.002	NP (normality)
Lead (mg/L)	MW-37D	0.0017	0.000082	0.015	No 9	0.000908	0.0004512	66.67	None	No	0.002	NP (NDs)
Lithium (mg/L)	HGWC-15	0.007165	0.002459	0.064	No 24	0.01372	0.01309	25	Kaplan-Meier	ln(x)	0.01	Param.
Lithium (mg/L)	HGWC-16	0.0041	0.0029	0.064	No 23	0.003978	0.002492	4.348	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-17	0.03	0.0012	0.064	No 23	0.01373	0.01459	43.48	None	No	0.01	NP (normality)
Lithium (mg/L)	HGWC-18	0.01415	0.01197	0.064	No 23	0.01306	0.002086	0	None	No	0.01	Param.
Lithium (mg/L)	MW-21D	0.02451	0.01992	0.064	No 14	0.02221	0.003239	0	None	No	0.01	Param.
Lithium (mg/L)	MW-22	0.0015	0.0011	0.064	No 13	0.001285	0.0002512	0	None	No	0.01	NP (normality)
Lithium (mg/L)	MW-23D	0.002528	0.002026	0.064	No 13	0.002277	0.000337	0	None	No	0.01	Param.
Lithium (mg/L)	MW-33	0.015	0.00077	0.064	No 9	0.002552	0.00467	11.11	None	No	0.002	NP (normality)
Lithium (mg/L)	MW-34D	0.002211	0.0007888	0.064	No 6	0.0015	0.0005177	0	None	No	0.01	Param.
Lithium (mg/L)	MW-35	0.015	0.0031	0.064	No 9	0.005111	0.003743	11.11	None	No	0.002	NP (normality)
Lithium (mg/L)	MW-37D	0.03654	0.02296	0.064	No 8	0.02975	0.006409	0	None	No	0.01	Param.
Lithium (mg/L)	MW-51	0.002248	0.0005844	0.064	No 5	0.001416	0.0004963	0	None	No	0.01	Param.
Mercury (mg/L)	HGWC-18	0.0002	0.00008	0.002	No 15	0.0001567	0.00006433	66.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	MW-22	0.0002	0.00016	0.002	No 7	0.0001943	0.00001512	85.71	None	No	0.008	NP (NDs)
Mercury (mg/L)	MW-23D	0.0002	0.00017	0.002	No 7	0.0001957	0.00001134	85.71	None	No	0.008	NP (NDs)
Mercury (mg/L)	MW-35	0.00084	0.00014	0.002	No 5	0.000304	0.0003011	40	None	No	0.031	NP (normality)
Mercury (mg/L)	MW-51	0.0002	0.00013	0.002	No 4	0.0001825	0.000035	75	None	No	0.0625	NP (NDs)
Molybdenum (mg/L)	HGWC-15	0.01	0.0007	0.1	No 22	0.009577	0.001983	95.45	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-21D	0.0298	0.018	0.1	No 14	0.02421	0.008972	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	MW-22	0.01	0.00013	0.1	No 13	0.009241	0.002737	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	MW-23D	0.004045	0.002709	0.1	No 13	0.003377	0.0008983	7.692	None	No	0.01	Param.
Molybdenum (mg/L)	MW-37D	0.01929	0.004584	0.1	No 8	0.01194	0.006938	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-14	0.01162	0.006176	0.05	No 24	0.008896	0.00533	0	None	No	0.01	Param.
Selenium (mg/L)	HGWC-15	0.005	0.0041	0.05	No 24	0.004463	0.001365	83.33	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-16	0.005	0.000089	0.05	No 24	0.004795	0.001002	95.83	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-17	0.005	0.0023	0.05	No 24	0.004533	0.001304	87.5	None	No	0.01	NP (NDs)
Selenium (mg/L)	HGWC-18	0.03308	0.01474	0.05	No 24	0.02636	0.02095	4.167	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	MW-22	0.005	0.002	0.05	No 13	0.004769	0.0008321	92.31	None	No	0.01	NP (NDs)
Selenium (mg/L)	MW-33	0.02357	0.007179	0.05	No 10	0.01553	0.01087	0	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	MW-34D	0.005	0.0016	0.05	No 7	0.004157	0.001463	71.43	None	No	0.008	NP (NDs)
Selenium (mg/L)	MW-35	0.02048	0.006174	0.05	No 9	0.01337	0.009555	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	MW-51	0.004228	0.001372	0.05	No 5	0.00368	0.001413	40	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	HGWC-14	0.0003	0.00027	0.002	No 24	0.0002973	0.00004862	0	None	No	0.01	NP (normality)
Thallium (mg/L)	HGWC-15	0.001	0.00022	0.002	No 24	0.0009675	0.0001592	95.83	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-17	0.001	0.00013	0.002	No 24	0.0007104	0.0004193	66.67	None	No	0.01	NP (NDs)
Thallium (mg/L)	HGWC-18	0.001	0.00016	0.002	No 24	0.0005846	0.0004248	50	None	No	0.01	NP (normality)
Thallium (mg/L)	MW-33	0.0004	0.00022	0.002	No 10	0.0005	0.0007048	10	None	No	0.011	NP (normality)
Thallium (mg/L)	MW-34D	0.001	0.00015	0.002	No 7	0.0008786	0.0003213	85.71	None	No	0.008	NP (NDs)
Thallium (mg/L)	MW-35	0.001	0.00013	0.002	No 9	0.0009033	0.00029	88.89	None	No	0.002	NP (NDs)

### Non-Parametric Confidence Interval

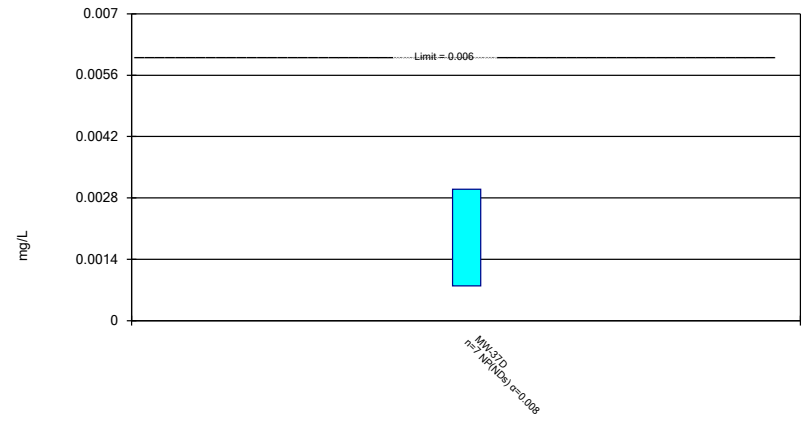
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Antimony Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

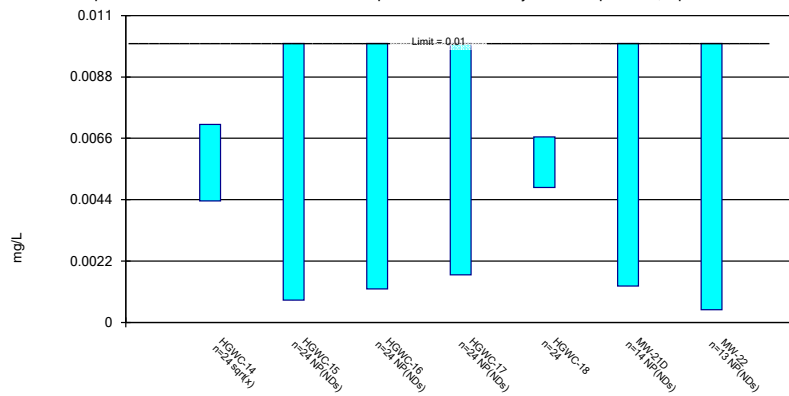
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

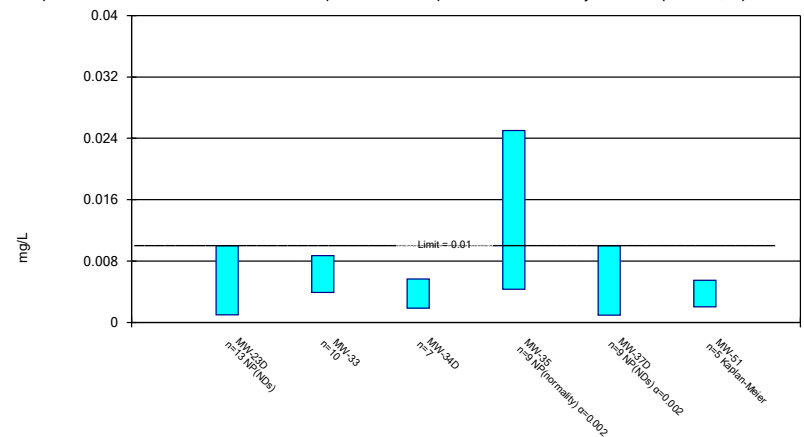
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

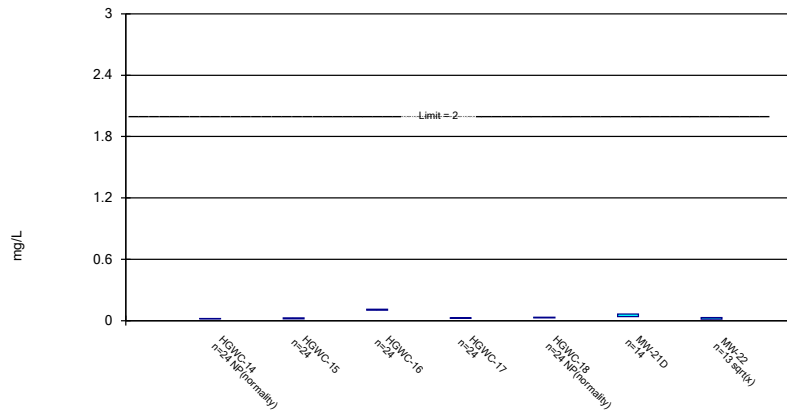
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

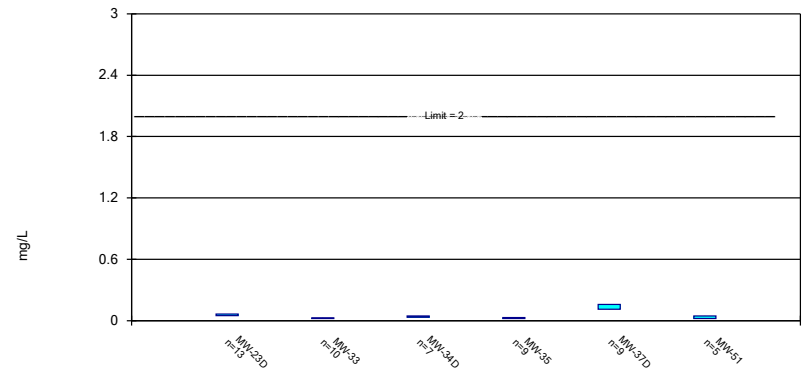
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric Confidence Interval

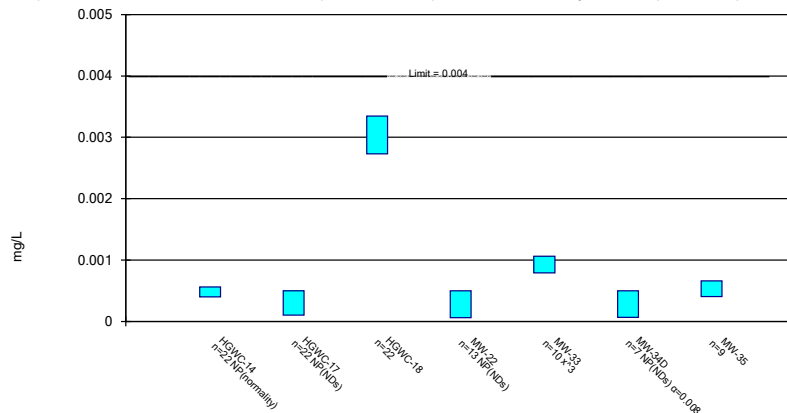
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

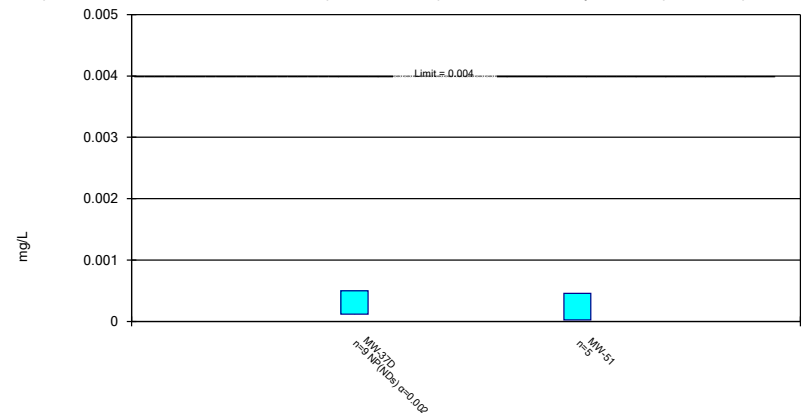
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

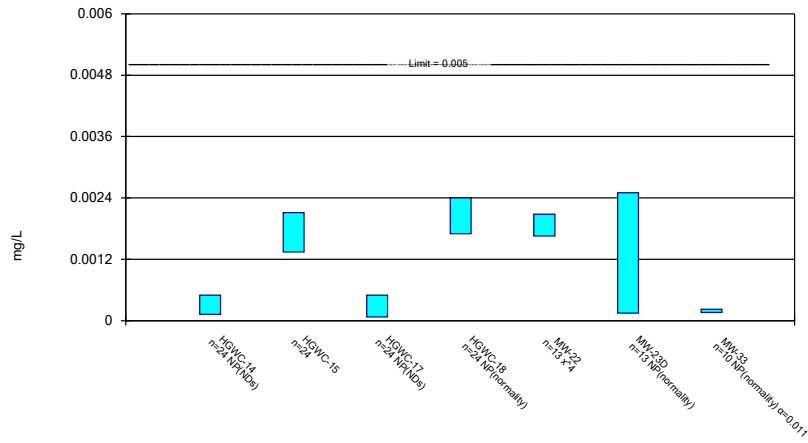
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

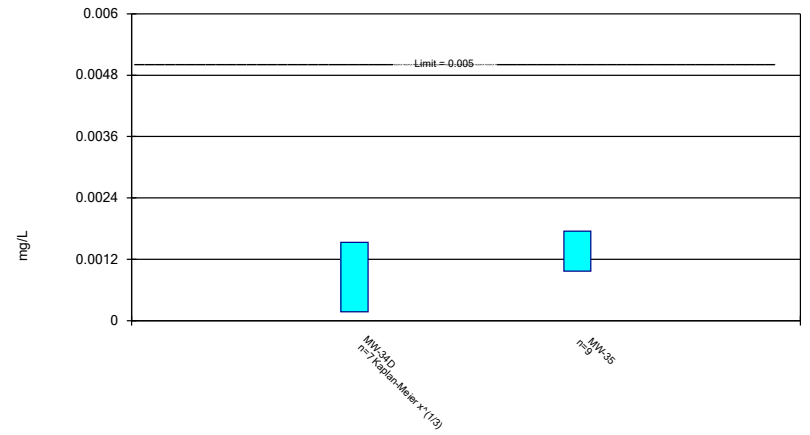
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric Confidence Interval

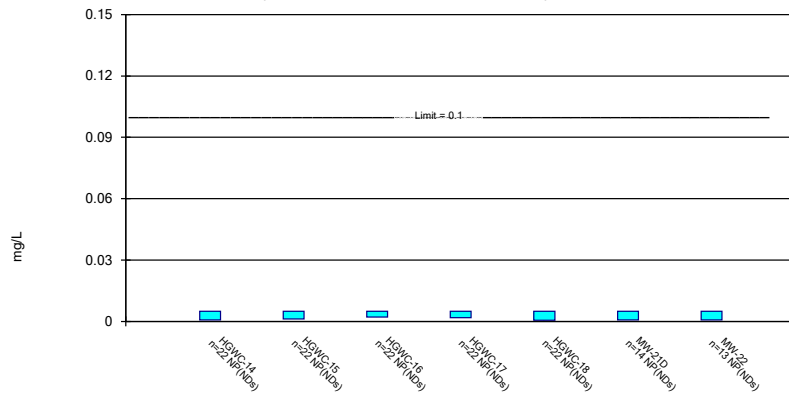
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

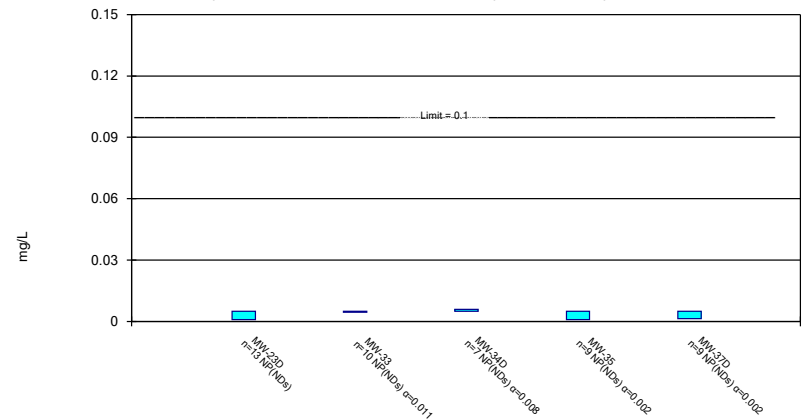
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

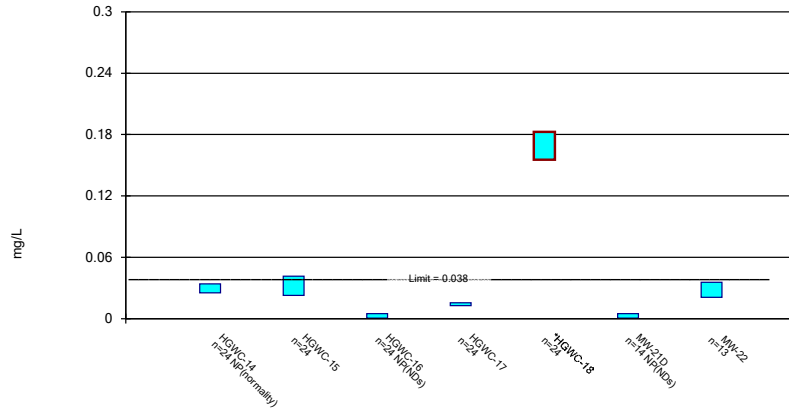
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

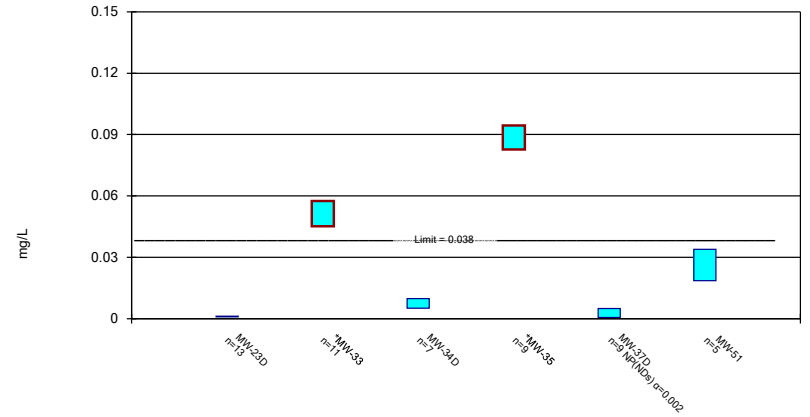
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

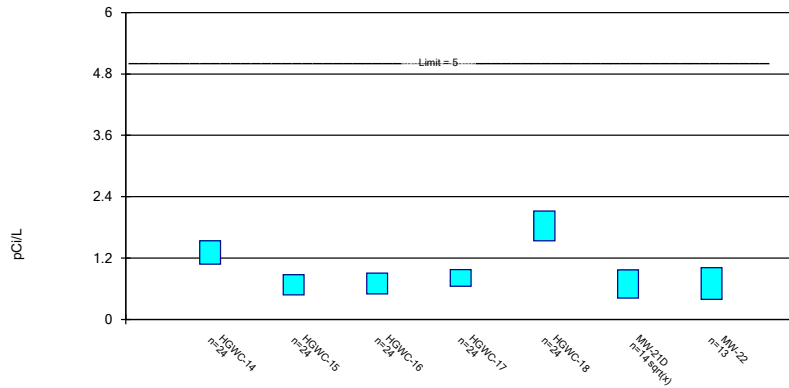
Compliance limit is exceeded.\* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric Confidence Interval

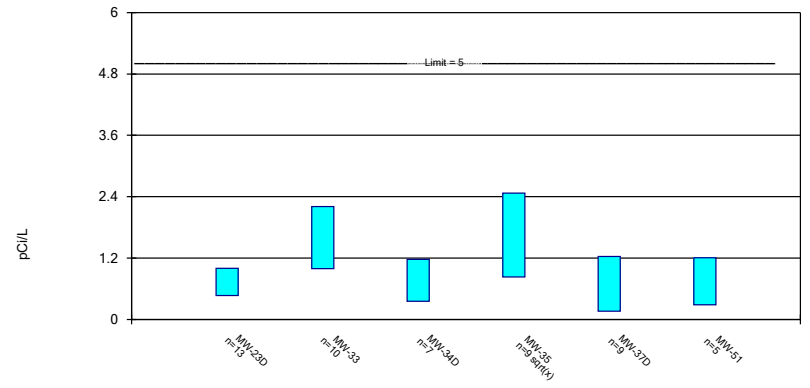
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confiden  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric Confidence Interval

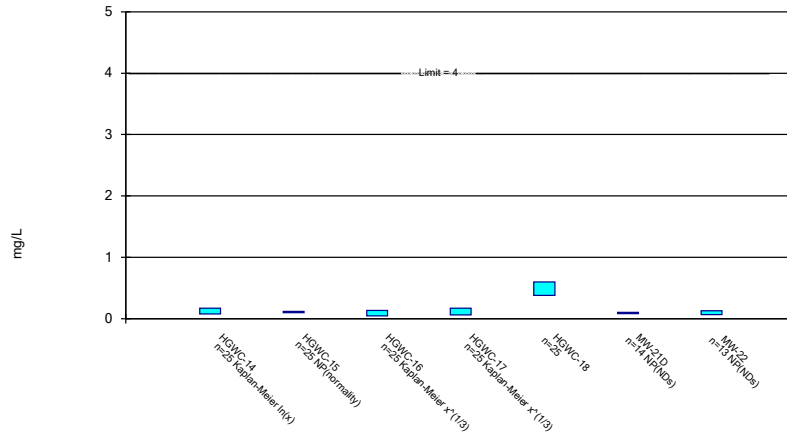
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confiden  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

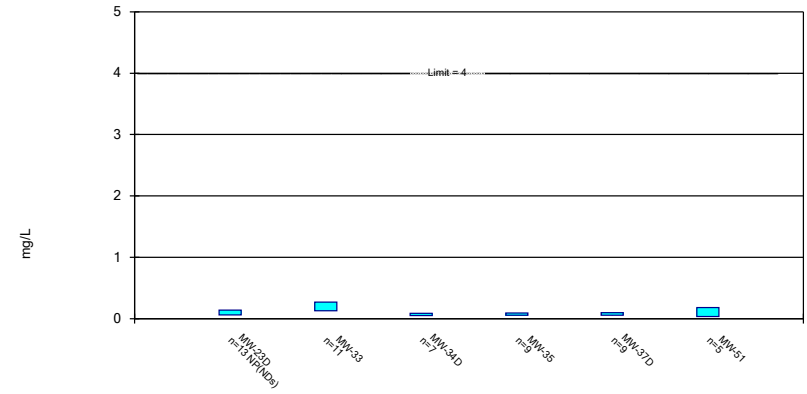
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

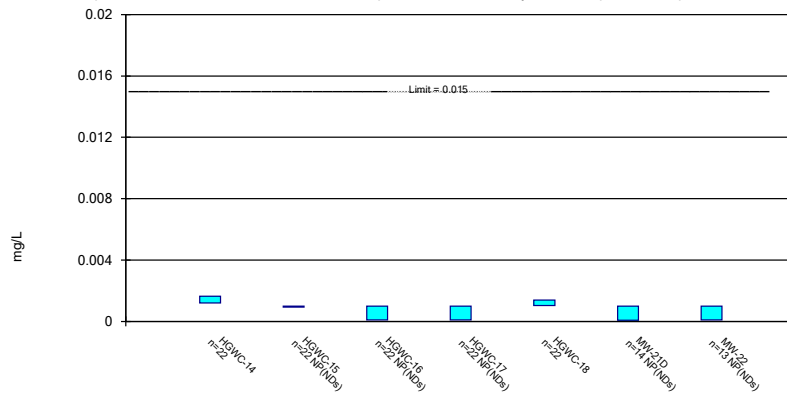
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

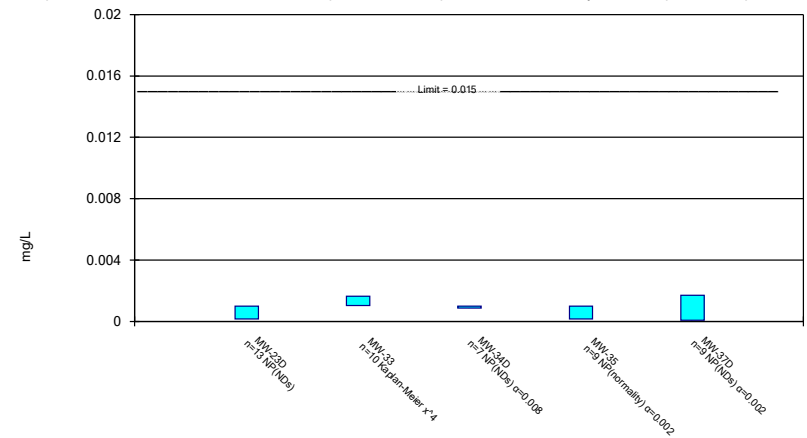
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

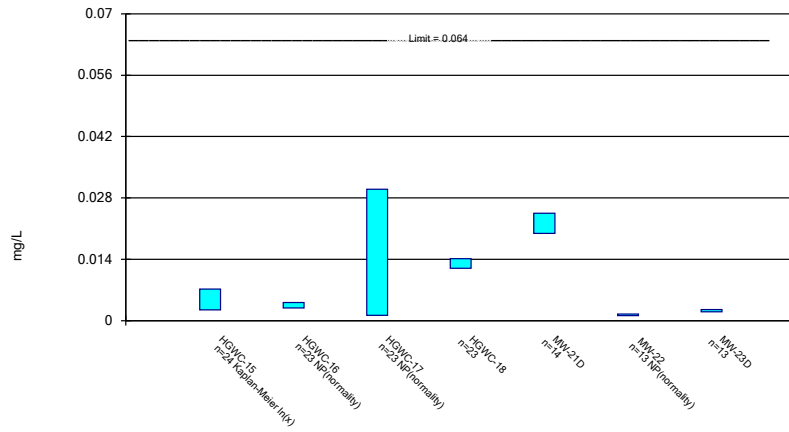
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

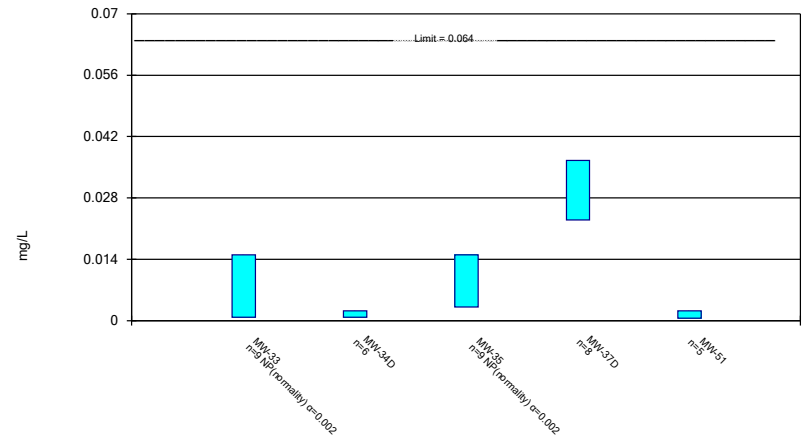
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/22/2024 1:51 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

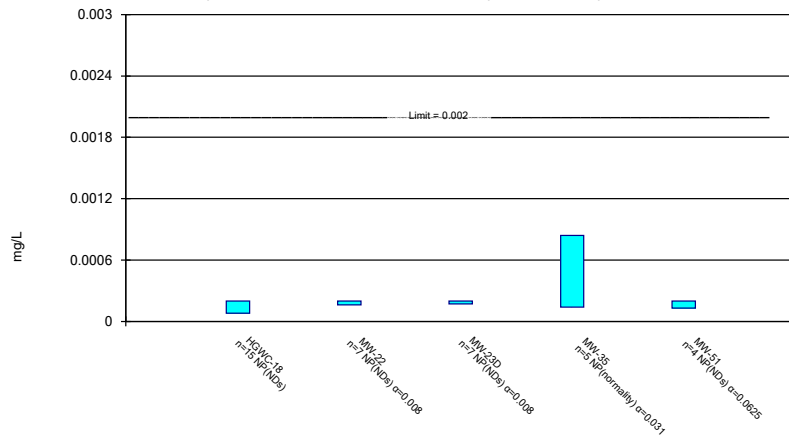
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/22/2024 1:52 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

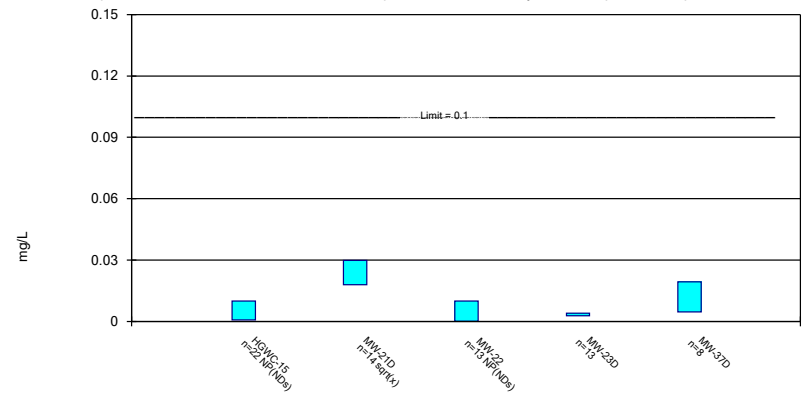
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Mercury Analysis Run 1/22/2024 1:52 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

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

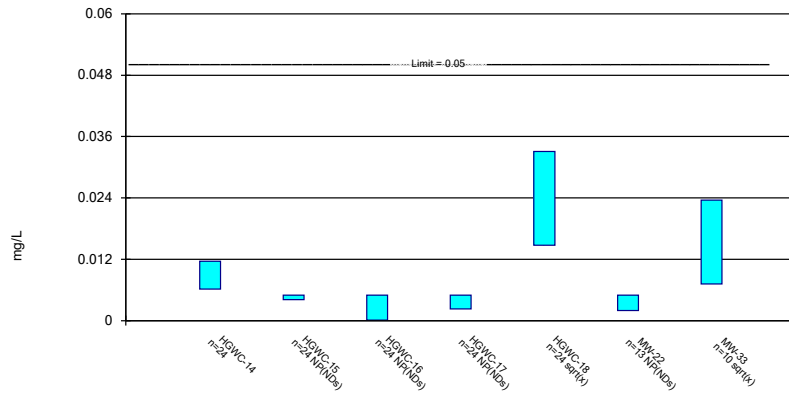


Constituent: Molybdenum Analysis Run 1/22/2024 1:52 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2



### Parametric and Non-Parametric (NP) Confidence Interval

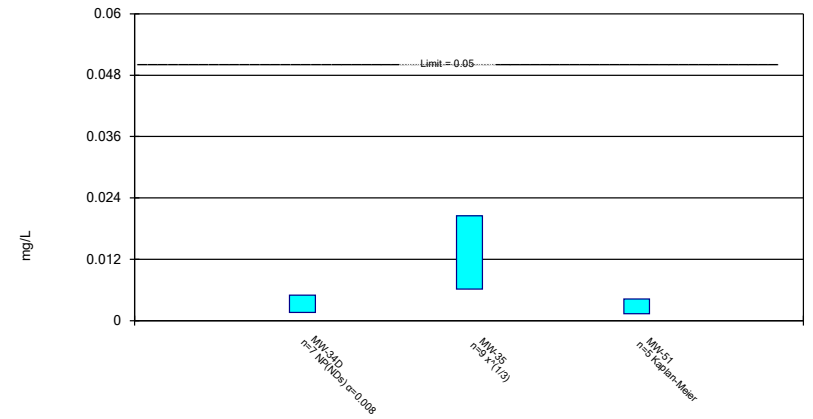
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 1/22/2024 1:52 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Parametric and Non-Parametric (NP) Confidence Interval

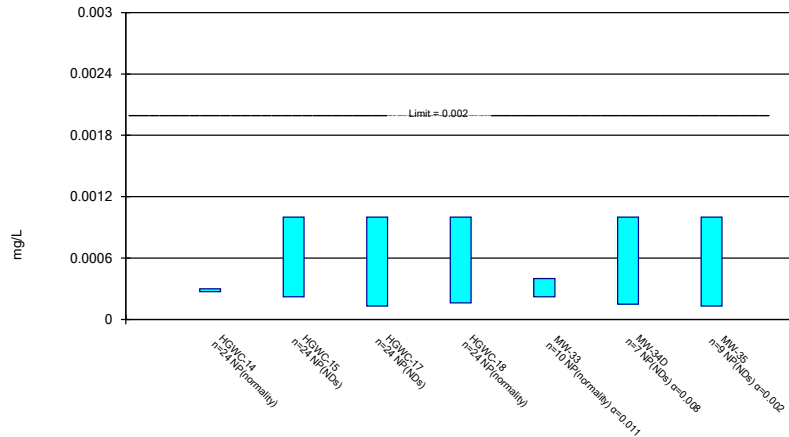
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 1/22/2024 1:52 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Non-Parametric Confidence Interval

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



Constituent: Thallium Analysis Run 1/22/2024 1:52 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-18	MW-22	MW-33	MW-34D	MW-35
5/23/2016	<0.003	<0.003					
5/24/2016			<0.003				
7/12/2016	0.0003 (J)	<0.003	<0.003				
9/1/2016	<0.003	<0.003	<0.003				
10/24/2016	<0.003	<0.003					
10/25/2016			<0.003				
12/7/2016	<0.003	<0.003					
12/8/2016			<0.003				
1/26/2017	<0.003	<0.003	<0.003				
3/23/2017	<0.003	<0.003	<0.003				
5/24/2017	<0.003	<0.003					
5/25/2017			<0.003				
4/3/2018		<0.003	<0.003				
4/4/2018	<0.003						
3/14/2019	<0.003	<0.003	<0.003				
3/15/2019				<0.003			
3/2/2020				<0.003			
3/3/2020	<0.003	<0.003	<0.003				
2/11/2021	0.00043 (J)		<0.003				
2/12/2021		<0.003			0.00046 (J)		
2/15/2021				<0.003			0.00041 (J)
3/16/2021		<0.003					
3/17/2021	<0.003			<0.003			
3/18/2021			<0.003		<0.003		
3/19/2021							<0.003
8/16/2021						<0.003	
8/18/2021	<0.003				<0.003		<0.003
8/19/2021		<0.003	0.0008 (J)	0.0016 (J)			
2/8/2022		0.002 (J)	<0.003	<0.003	<0.003		0.0029 (J)
2/9/2022	<0.003					<0.003	
8/10/2022			<0.003		<0.003	<0.003	
8/11/2022	0.001 (J)	0.0016 (J)		<0.003			<0.003
1/27/2023					<0.003		
1/30/2023				<0.003		0.0018 (J)	
2/1/2023	<0.003	0.0021 (J)	<0.003				<0.003
8/12/2023						<0.003	<0.003
8/13/2023	0.0032	0.0027 (J)	<0.003	<0.003	<0.003		
Mean	0.002607	0.0028	0.002878	0.002844	0.002637	0.00276	0.002616
Std. Dev.	0.0009443	0.0004298	0.0005185	0.0004667	0.00096	0.0005367	0.0009733
Upper Lim.	0.0032	0.003	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.001	0.0027	0.0008	0.0016	0.00046	0.0018	0.00041

# Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-37D
2/11/2021	0.00079 (J)
3/12/2021	<0.003
8/18/2021	<0.003
2/8/2022	<0.003
8/10/2022	<0.003
1/30/2023	<0.003
8/13/2023	<0.003
Mean	0.002684
Std. Dev.	0.0008353
Upper Lim.	0.003
Lower Lim.	0.00079

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
5/23/2016	0.00268 (J)	<0.01	<0.01	<0.01			
5/24/2016					0.00294 (J)		
7/12/2016	0.0059	<0.01	<0.01	<0.01	0.0074		
9/1/2016	0.0056	<0.01	<0.01	<0.01	0.0073		
10/24/2016	0.0058	<0.01					
10/25/2016			<0.01	<0.01	0.006		
12/7/2016	<0.025	<0.01	<0.01	<0.01			
12/8/2016					0.007		
1/26/2017	0.0089	<0.01	<0.01	<0.01	0.0068		
3/22/2017			0.0005 (J)	0.0007 (J)			
3/23/2017	0.0069	0.0008 (J)			0.0082		
5/24/2017	0.0048 (J)	<0.01	<0.01				
5/25/2017				0.0007 (J)	0.006		
4/3/2018		<0.01	<0.01	<0.01	0.0062		
4/4/2018	0.0052						
6/5/2018					0.008		
6/6/2018	0.0059	<0.01	<0.01	0.00097 (J)			
10/3/2018	0.0032 (J)	<0.01	<0.01	<0.01	0.0039 (J)		
3/14/2019	0.0029 (J)	<0.01			0.0036 (J)		
3/15/2019			<0.01	<0.01		<0.01	<0.01
4/4/2019		0.00017 (J)	0.0001 (J)			0.00019 (J)	
4/5/2019	<0.025			<0.01	0.0015 (J)		<0.01
9/24/2019	0.0039 (J)	0.00037 (J)					
9/25/2019			<0.01	<0.01	0.0044 (J)	<0.01	
9/27/2019							0.00045 (J)
3/2/2020							<0.01
3/3/2020	0.0035 (J)	<0.01	<0.01	<0.01	0.0057	<0.01	
3/26/2020		<0.01					
3/27/2020							<0.01
3/30/2020	0.0051		0.0011 (J)				
3/31/2020				0.0008 (J)	0.0056		
4/1/2020						0.0013 (J)	
6/17/2020						<0.01	
9/15/2020					0.0074		
9/16/2020				<0.01			
9/17/2020		<0.01	<0.01				<0.01
9/18/2020	0.0029 (J)						
9/21/2020						<0.01	
2/10/2021			0.0012 (J)				
2/11/2021	0.0062			0.0012 (J)	0.0069 (B)	0.001 (J)	
2/12/2021		<0.01					
2/15/2021							<0.01
3/16/2021		<0.01					
3/17/2021	<0.025		<0.01				<0.01
3/18/2021				<0.01	0.0083 (J)	<0.01	
8/18/2021	0.0035 (J)			<0.01			
8/19/2021		<0.01	<0.01		0.0045 (J)	<0.01	<0.01
2/8/2022		<0.01	<0.01	0.0017 (J)	0.005 (J)	<0.01	<0.01
2/9/2022	0.0077						
8/10/2022			<0.01	<0.01	0.0058		
8/11/2022	0.006	<0.01				0.003 (J)	<0.01
1/27/2023						<0.01	

# Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
1/30/2023				0.0028 (J)			<0.01
2/1/2023	0.004 (J)	<0.01	<0.01		0.0036 (J)		
8/12/2023						<0.01	
8/13/2023	0.0048 (J)	<0.01	<0.01	<0.01	0.0059 (J)		<0.01
Mean	0.005953	0.008806	0.008454	0.007453	0.005748	0.007535	0.009265
Std. Dev.	0.002966	0.003229	0.003536	0.004073	0.001774	0.004084	0.002649
Upper Lim.	0.007101	0.01	0.01	0.01	0.006653	0.01	0.01
Lower Lim.	0.004359	0.0008	0.0012	0.0017	0.004842	0.0013	0.00045

# Confidence Interval

Constituent: Arsenic (mg/L)    Analysis Run 1/22/2024 1:54 PM    View: Appendix IV - Confidence Intervals  
 Plant Hammond    Client: Southern Company    Data: Hammond AP-2

	MW-23D	MW-33	MW-34D	MW-35	MW-37D	MW-51
3/14/2019	<0.01					
4/5/2019	<0.01					
9/26/2019	<0.01					
3/2/2020	<0.01					
4/1/2020	0.00082 (J)	0.0061				
6/17/2020		0.0031 (J)				
6/18/2020			0.0032 (J)	0.005 (J)	0.0021 (J)	
9/17/2020	<0.01					
9/21/2020		0.0083		0.0059		
9/23/2020			0.001 (J)		0.00095 (J)	
2/11/2021					0.0023 (J)	
2/12/2021	0.001 (J)	0.0059				
2/15/2021				0.005		
3/12/2021					<0.01	
3/17/2021	<0.01					
3/18/2021		0.0054 (J)				
3/19/2021				<0.025		
8/16/2021			0.0024 (J)			
8/18/2021		0.0058		0.0043 (J)	<0.01	0.002 (J)
8/19/2021	<0.01					
2/8/2022		0.0069		0.0072	<0.01	0.0046 (J)
2/9/2022			0.0054			
2/10/2022	<0.01					
8/10/2022		<0.025	0.0045 (J)		<0.01	
8/11/2022	<0.01			<0.025		0.0043 (J)
1/27/2023		0.0031 (J)				
1/30/2023			0.0047 (J)		<0.01	
2/1/2023	<0.01			0.006		0.0041 (J)
8/12/2023			<0.01	0.0045 (J)		<0.01
8/13/2023	<0.01	0.0059 (J)			<0.01	
Mean	0.008602	0.0063	0.003743	0.009767	0.007261	0.005
Std. Dev.	0.003414	0.002681	0.001604	0.008681	0.004124	0.002977
Upper Lim.	0.01	0.008692	0.005648	0.025	0.01	0.005469
Lower Lim.	0.001	0.003908	0.001838	0.0043	0.00095	0.002031

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
5/23/2016	<0.25	0.0315 (J)	0.0841	0.0222 (J)			
5/24/2016					<0.2		
7/12/2016	0.0214	0.0372	0.0886	0.0221	0.0346		
9/1/2016	0.0208	0.0364	0.0934	0.0227	0.0336		
10/24/2016	0.0208	0.0326					
10/25/2016			0.0991	0.0225	0.0349		
12/7/2016	0.022	0.0301	0.101	0.0227			
12/8/2016					0.0339		
1/26/2017	0.0238	0.0287	0.105	0.0229	0.0293		
3/22/2017			0.11	0.0248			
3/23/2017	0.0244	0.0329			0.0313		
5/24/2017	0.0228	0.0283	0.106				
5/25/2017				0.0255	0.0336		
4/3/2018		0.019	0.099	0.025	0.028		
4/4/2018	0.021						
6/5/2018					0.03		
6/6/2018	0.022	0.022	0.11	0.028			
10/3/2018	0.02	0.025	0.11	0.028	0.032		
3/14/2019	0.019	0.021			0.029		
3/15/2019			0.13	0.029		0.09	0.044
4/4/2019		0.018	0.11			0.075	
4/5/2019	0.016			0.022	0.021		0.036
9/24/2019	0.021	0.019					
9/25/2019			0.11	0.025	0.03	0.066	
9/27/2019							0.028
3/2/2020							0.027
3/3/2020	0.018	0.018	0.12	0.026	0.026	0.058	
3/26/2020		0.016					
3/27/2020							0.025
3/30/2020	0.02		0.11				
3/31/2020				0.029	0.029		
4/1/2020						0.066	
6/17/2020						0.054	
9/15/2020					0.03		
9/16/2020				0.025			
9/17/2020		0.017	0.11				0.02
9/18/2020	0.019						
9/21/2020						0.049	
2/10/2021			0.11				
2/11/2021	0.02			0.025	0.03	0.044	
2/12/2021		0.014					
2/15/2021							0.017
3/16/2021		0.012					
3/17/2021	0.023		0.12				0.018
3/18/2021				0.027	0.031	0.047	
8/18/2021	0.018			0.022			
8/19/2021		0.01	0.1		0.031	0.042	0.018
2/8/2022		0.0098	0.1	0.021	0.02	0.033	0.014
2/9/2022	0.017						
8/10/2022			0.1	0.027	0.026		
8/11/2022	0.017	0.015				0.037	0.014
1/27/2023						0.031	

# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
1/30/2023				0.03			0.014
2/1/2023	0.017	0.021	0.11		0.019		
8/12/2023						0.033	
8/13/2023	0.016	0.011	0.099	0.025	0.026		0.013
Mean	0.02438	0.0219	0.1056	0.02498	0.03205	0.05179	0.02215
Std. Dev.	0.02157	0.008492	0.01006	0.002602	0.01511	0.01752	0.009503
Upper Lim.	0.022	0.02623	0.1108	0.0263	0.032	0.0642	0.02833
Lower Lim.	0.018	0.01756	0.1005	0.02365	0.028	0.03938	0.01531



# Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-23D	MW-33	MW-34D	MW-35	MW-37D	MW-51
3/14/2019	0.082					
4/5/2019	0.061					
9/26/2019	0.064					
3/2/2020	0.06					
4/1/2020	0.065	0.027				
6/17/2020		0.024				
6/18/2020			0.044	0.029	0.19	
9/17/2020	0.057					
9/21/2020		0.024		0.028		
9/23/2020			0.038		0.14	
2/11/2021					0.14	
2/12/2021	0.056	0.025				
2/15/2021				0.026		
3/12/2021					0.12	
3/17/2021	0.058					
3/18/2021		0.029				
3/19/2021				0.032		
8/16/2021			0.035			
8/18/2021		0.025		0.025	0.12	0.032
8/19/2021	0.05					
2/8/2022		0.02		0.023	0.11	0.046
2/9/2022			0.04			
2/10/2022	0.05					
8/10/2022		0.02 (J)	0.046		0.11	
8/11/2022	0.05			0.022 (J)		0.028
1/27/2023		0.018				
1/30/2023			0.04		0.13	
2/1/2023	0.047			0.022		0.033
8/12/2023			0.033	0.021		0.026
8/13/2023	0.041	0.023			0.15	
Mean	0.057	0.0235	0.03943	0.02533	0.1344	0.033
Std. Dev.	0.01028	0.003375	0.004614	0.003742	0.02506	0.00781
Upper Lim.	0.06464	0.02651	0.04491	0.02895	0.1586	0.04609
Lower Lim.	0.04936	0.02049	0.03395	0.02172	0.1103	0.01991

# Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-17	HGWC-18	MW-22	MW-33	MW-34D	MW-35
5/23/2016	<0.003	<0.0005					
5/24/2016			0.00278 (J)				
7/12/2016	0.0005 (J)	<0.0005	0.0032				
9/1/2016	0.0005 (J)	<0.0005	0.0034				
10/24/2016	0.0005 (J)						
10/25/2016		<0.0005	0.0034				
12/7/2016	0.0006 (J)	<0.0005					
12/8/2016			0.0033				
1/26/2017	0.0005 (J)	<0.0005	0.0034				
3/22/2017		<0.0005					
3/23/2017	0.0006 (J)		0.0036				
5/24/2017	0.0005 (J)						
5/25/2017		<0.0005	0.0036				
4/3/2018		<0.0005	<0.003				
4/4/2018	<0.003						
3/14/2019	0.00043 (J)		0.0026 (J)				
3/15/2019		<0.0005		<0.0005			
4/5/2019	0.00027 (J)	<0.0005	0.0022 (J)	<0.0005			
9/24/2019	0.00044 (J)						
9/25/2019		<0.0005	0.0031				
9/27/2019				<0.0005			
3/2/2020				<0.0005			
3/3/2020	0.00043 (J)	<0.0005	0.0029 (J)				
3/27/2020				<0.0005			
3/30/2020	0.00043 (J)						
3/31/2020		<0.0005	0.003				
4/1/2020					0.0011 (J)		
6/17/2020					0.00099 (J)		
6/18/2020						0.00015 (J)	0.00032 (J)
9/15/2020			0.0033				
9/16/2020		<0.0005					
9/17/2020				4.7E-05 (J)			
9/18/2020	0.00043 (J)						
9/21/2020					0.0009 (J)		0.0004 (J)
9/23/2020						<0.0005	
2/11/2021	0.00044 (J)	6.7E-05 (J)	0.0036				
2/12/2021					0.001 (J)		
2/15/2021				6.2E-05 (J)			0.0006 (J)
3/17/2021	0.00058			8.2E-05 (J)			
3/18/2021		4.8E-05 (J)	0.0038		0.0011		
3/19/2021							0.00061
8/16/2021						<0.0005	
8/18/2021	0.00039 (J)	<0.0005			0.00097		0.00061
8/19/2021			0.0034	7E-05 (J)			
2/8/2022		<0.0005	0.0026	7.9E-05 (J)	0.00087 (J)		0.0007 (J)
2/9/2022	0.00056					6.5E-05 (J)	
8/10/2022		6E-05 (J)	0.0032		0.0008	<0.0005	
8/11/2022	0.00039 (J)			<0.0005			0.00066 (J)
1/27/2023					0.00019 (J)		
1/30/2023		5.7E-05 (J)		8.1E-05 (J)		<0.0005	
2/1/2023	0.00039 (J)		0.002				0.00049 (J)
8/12/2023						<0.0005	0.00041 (J)

# Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-17	HGWC-18	MW-22	MW-33	MW-34D	MW-35
8/13/2023	0.0004 (J)	0.0001 (J)	0.003	<0.0005	0.00099		
Mean	0.0005582	0.0004015	0.00304	0.0003016	0.000891	0.0003879	0.0005333
Std. Dev.	0.0003148	0.0001862	0.0005717	0.0002232	0.0002636	0.0001931	0.0001325
Upper Lim.	0.00056	0.0005	0.003347	0.0005	0.001061	0.0005	0.0006612
Lower Lim.	0.0004	0.0001	0.002733	6.2E-05	0.0007889	6.5E-05	0.0004054

# Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-37D	MW-51
6/18/2020	0.00012 (J)	
9/23/2020	<0.0005	
2/11/2021	<0.0005	
3/12/2021	<0.0005	
8/18/2021	<0.0005	0.00042 (J)
2/8/2022	<0.0005	0.00011 (J)
8/10/2022	<0.0005	
8/11/2022		0.00028 (J)
1/30/2023	<0.0005	
2/1/2023		0.00028 (J)
8/12/2023		0.00012 (J)
8/13/2023	<0.0005	
Mean	0.0004578	0.000242
Std. Dev.	0.0001267	0.0001293
Upper Lim.	0.0005	0.0004587
Lower Lim.	0.00012	2.532E-05

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-17	HGWC-18	MW-22	MW-23D	MW-33
5/23/2016	0.000139 (J)	0.00271 (J)	<0.0005				
5/24/2016				<0.02			
7/12/2016	<0.0005	0.0019	<0.0005	0.0022			
9/1/2016	0.0001 (J)	0.0017	<0.0005	0.0024			
10/24/2016	0.0002 (J)	0.0018					
10/25/2016			<0.0005	0.0022			
12/7/2016	0.0001 (J)	0.0018	<0.0005				
12/8/2016				0.0024			
1/26/2017	0.0001 (J)	0.0013	<0.0005	0.0025			
3/22/2017			7E-05 (J)				
3/23/2017	0.0002 (J)	0.002		0.0025			
5/24/2017	0.0001 (J)	0.0041					
5/25/2017			<0.0005	0.0027			
4/3/2018		0.0022	<0.0005	0.0022			
4/4/2018	<0.0005						
6/5/2018				0.0022			
6/6/2018	0.00012 (J)	0.0021	<0.0005				
10/3/2018	0.0001 (J)	0.0026	<0.0005	0.0027			
3/14/2019	<0.0005	0.0024		0.0019		<0.0025	
3/15/2019			<0.0005		0.00082 (J)		
4/4/2019		0.0018					
4/5/2019	7.9E-05 (J)		<0.0005	0.0017	0.00064 (J)	<0.0025	
9/24/2019	<0.0005	0.0014 (J)					
9/25/2019			<0.0005	0.0023 (J)			
9/26/2019						<0.0025	
9/27/2019					0.0014 (J)		
3/2/2020					0.0021 (J)	<0.0025	
3/3/2020	<0.0005	0.0015 (J)	<0.0005	0.0021 (J)			
3/26/2020		0.0016 (J)					
3/27/2020					0.0019 (J)		
3/30/2020	<0.0005						
3/31/2020			<0.0005	0.0017 (J)			
4/1/2020						<0.0025	0.00022 (J)
6/17/2020							0.00021 (J)
9/15/2020				0.0019 (J)			
9/16/2020			<0.0005				
9/17/2020		0.0016 (J)			0.0021 (J)	0.0006 (J)	
9/18/2020	<0.0005						
9/21/2020							0.00016 (J)
2/11/2021	<0.0005		<0.0005	0.0016 (J)			
2/12/2021		0.0014 (J)				0.00045 (J)	0.00017 (J)
2/15/2021					0.002 (J)		
3/16/2021		0.0011					
3/17/2021	<0.0005				0.0022	0.00057	
3/18/2021			<0.0005	0.0015			0.00019 (J)
8/18/2021	0.00013 (J)		<0.0005				0.00017 (J)
8/19/2021		0.0012		0.0014	0.0021	0.00012 (J)	
2/8/2022		0.0011	<0.0005	0.00076	0.002		0.00013 (J)
2/9/2022	<0.0005						
2/10/2022						0.00024 (J)	
8/10/2022			<0.0005	0.0017			<0.0025
8/11/2022	<0.0005	0.00095			0.002	0.00021 (J)	

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-17	HGWC-18	MW-22	MW-23D	MW-33
1/27/2023							0.00017 (J)
1/30/2023			<0.0005		0.0017		
2/1/2023	<0.0005	0.00088		0.001		0.00012 (J)	
8/13/2023	<0.0005	0.00033 (J)	<0.0005	0.0017	0.002	0.00015 (J)	0.0002 (J)
Mean	0.0003278	0.001728	0.0004821	0.002302	0.001766	0.001151	0.000287
Std. Dev.	0.0001931	0.0007551	8.777E-05	0.001714	0.0005051	0.001121	0.0003394
Upper Lim.	0.0005	0.002113	0.0005	0.0024	0.002084	0.0025	0.00022
Lower Lim.	0.00012	0.001343	7E-05	0.0017	0.001657	0.00015	0.00016

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35
6/18/2020	<0.0025	0.00053 (J)
9/21/2020		0.001 (J)
9/23/2020	<0.0025	
2/15/2021		0.0017 (J)
3/19/2021		0.0018
8/16/2021	0.00023 (J)	
8/18/2021		0.0015
2/8/2022		0.0015
2/9/2022	0.00072	
8/10/2022	0.00041 (J)	
8/11/2022		0.0013 (J)
1/30/2023	0.00047 (J)	
2/1/2023		0.0017
8/12/2023	0.0029	0.0012
Mean	0.00139	0.001359
Std. Dev.	0.001179	0.0004049
Upper Lim.	0.00153	0.00175
Lower Lim.	0.0001696	0.0009679

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
5/23/2016	<0.005	<0.005	<0.005	<0.005			
5/24/2016					<0.005		
7/12/2016	<0.005	<0.005	<0.005	<0.005	<0.005		
9/1/2016	<0.005	<0.005	<0.005	<0.005	<0.005		
10/24/2016	<0.005	<0.005					
10/25/2016			<0.005	<0.005	<0.005		
12/7/2016	<0.005	<0.005	<0.005	<0.005			
12/8/2016					<0.005		
1/26/2017	<0.005	<0.005	<0.005	<0.005	<0.005		
3/22/2017			0.0021 (J)	<0.005			
3/23/2017	<0.005	0.0005 (J)			0.0005 (J)		
5/24/2017	<0.005	<0.005	<0.005				
5/25/2017				<0.005	<0.005		
4/3/2018		<0.005	<0.005	<0.005	<0.005		
4/4/2018	<0.005						
3/14/2019	<0.005	<0.005			<0.005		
3/15/2019			<0.005	<0.005		<0.005	<0.005
4/4/2019		<0.005	<0.005			<0.005	
4/5/2019	<0.005			<0.005	<0.005		<0.005
9/24/2019	<0.005	0.00041 (J)					
9/25/2019			<0.005	<0.005	<0.005	<0.005	
9/27/2019							0.0004 (J)
3/2/2020							<0.005
3/3/2020	0.00042 (J)	<0.005	0.00071 (J)	0.0018 (J)	0.0004 (J)	<0.005	
3/26/2020		<0.005					
3/27/2020							<0.005
3/30/2020	0.00066 (J)		0.0004 (J)				
3/31/2020				<0.005	<0.005		
4/1/2020						<0.005	
6/17/2020						0.00057 (J)	
9/15/2020					0.00063 (J)		
9/16/2020				<0.005			
9/17/2020		<0.005	<0.005				<0.005
9/18/2020	<0.005						
9/21/2020						<0.005	
2/10/2021			<0.005				
2/11/2021	<0.005			0.00074 (J)	<0.005	<0.005	
2/12/2021		<0.005					
2/15/2021							<0.005
3/16/2021		0.0012 (J)					
3/17/2021	<0.005		<0.005				0.00075 (J)
3/18/2021				0.00069 (J)	<0.005	0.00074 (J)	
8/18/2021	<0.005			<0.005			
8/19/2021		<0.005	<0.005		<0.005	<0.005	<0.005
2/8/2022		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2/9/2022	<0.005						
8/10/2022			<0.005	<0.005	<0.005		
8/11/2022	<0.005	<0.005				<0.005	<0.005
1/27/2023						<0.005	
1/30/2023				<0.005			<0.005
2/1/2023	<0.005	<0.005	<0.005		<0.005		
8/12/2023						<0.005	



# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
8/13/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Mean	0.004595	0.004414	0.004464	0.004465	0.004388	0.004379	0.004319
Std. Dev.	0.001313	0.001515	0.001408	0.001392	0.001578	0.001578	0.001663
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00066	0.0012	0.0021	0.0018	0.00063	0.00074	0.00075

# Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-23D	MW-33	MW-34D	MW-35	MW-37D
3/14/2019	<0.005				
4/5/2019	<0.005				
9/26/2019	<0.005				
3/2/2020	<0.005				
4/1/2020	0.00086 (J)	0.00069 (J)			
6/17/2020		<0.005			
6/18/2020			0.0059 (J)	<0.005	0.0048 (J)
9/17/2020	<0.005				
9/21/2020		<0.005		0.00079 (J)	
9/23/2020			<0.005		<0.005
2/11/2021					0.0014 (J)
2/12/2021	<0.005	<0.005			
2/15/2021				<0.005	
3/12/2021					<0.005
3/17/2021	0.00083 (J)				
3/18/2021		<0.005			
3/19/2021				0.00083 (J)	
8/16/2021			<0.005		
8/18/2021		<0.005		<0.005	<0.005
8/19/2021	<0.005				
2/8/2022		<0.005		<0.005	<0.005
2/9/2022			<0.005		
2/10/2022	<0.005				
8/10/2022		<0.005	<0.005		<0.005
8/11/2022	<0.005			<0.005	
1/27/2023		<0.005			
1/30/2023			<0.005		<0.005
2/1/2023	<0.005			<0.005	
8/12/2023			<0.005	<0.005	
8/13/2023	<0.005	<0.005			<0.005
Mean	0.004361	0.004569	0.005129	0.004069	0.004578
Std. Dev.	0.00156	0.001363	0.0003402	0.001848	0.001194
Upper Lim.	0.005	0.005	0.0059	0.005	0.005
Lower Lim.	0.00086	0.005	0.005	0.00079	0.0014

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
5/23/2016	<0.25	0.0419 (J)	<0.005	0.0167			
5/24/2016					0.17 (J)		
7/12/2016	0.0232	0.0393	<0.005	0.0148			0.168
9/1/2016	0.0248	0.045	<0.005	0.0151			0.18
10/24/2016	0.0253	0.0557					
10/25/2016			<0.005	0.0141			0.188
12/7/2016	0.0269	0.0536	<0.005	0.0141			
12/8/2016							0.206
1/26/2017	0.0294	0.055	<0.005	0.0154			0.195
3/22/2017			<0.005	0.0169			
3/23/2017	0.0311	0.0715					0.223
5/24/2017	0.0279	0.0446	<0.005				
5/25/2017				0.0154			0.209
4/3/2018		0.032	<0.005	0.016			0.19
4/4/2018	0.025						
6/5/2018							0.19
6/6/2018	0.027	0.032	<0.005	0.018			
10/3/2018	0.023	0.051	<0.005	0.016			0.19
3/14/2019	0.025	0.038					0.16
3/15/2019			<0.005	0.017		<0.005	0.028
4/4/2019		0.035	0.00028 (J)			0.00034 (J)	
4/5/2019	0.021			0.016	0.14		0.022
9/24/2019	0.026	0.022					
9/25/2019			<0.005	0.015	0.18	<0.005	
9/27/2019							0.035
3/2/2020							0.043
3/3/2020	0.029	0.03	0.00037 (J)	0.016	0.15	<0.005	
3/26/2020		0.022					
3/27/2020							0.025
3/30/2020	0.028		<0.005				
3/31/2020				0.016	0.16		
4/1/2020						<0.005	
6/17/2020						<0.005	
9/15/2020					0.16		
9/16/2020				0.013			
9/17/2020		0.026	<0.005				0.029
9/18/2020	0.027						
9/21/2020						<0.005	
2/10/2021			<0.005				
2/11/2021	0.033			0.012	0.14	<0.005	
2/12/2021		0.019					
2/15/2021							0.038
3/16/2021		0.018					
3/17/2021	0.034		<0.005				0.039
3/18/2021				0.012	0.14	<0.005	
8/18/2021	0.033			0.009			
8/19/2021		0.011	<0.005		0.15	<0.005	0.022
2/8/2022		0.0081	<0.005	0.0066	0.16	<0.005	0.034
2/9/2022	0.038						
8/10/2022			<0.005	0.012	0.16		
8/11/2022	0.037	0.0088				<0.005	0.015
1/27/2023						<0.005	

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
1/30/2023				0.011			0.027
2/1/2023	0.035	0.0091	<0.005		0.11		
8/12/2023						<0.005	
8/13/2023	0.036	0.0016 (J)	<0.005	0.009	0.14		0.0089
Mean	0.03294	0.03209	0.00461	0.01405	0.1691	0.004667	0.02815
Std. Dev.	0.02017	0.01819	0.00132	0.002906	0.02675	0.001245	0.009779
Upper Lim.	0.034	0.04137	0.005	0.01553	0.1828	0.005	0.03542
Lower Lim.	0.0253	0.02281	0.00037	0.01256	0.1555	0.00034	0.02087

# Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-23D	MW-33	MW-34D	MW-35	MW-37D	MW-51
3/14/2019	0.0013 (J)					
4/5/2019	0.0012 (J)					
9/26/2019	0.00098 (J)					
1/22/2020		0.052				
3/2/2020	0.0011 (J)					
4/1/2020	0.0011 (J)	0.058				
6/17/2020		0.053				
6/18/2020			0.011	0.091	0.0015 (J)	
9/17/2020	0.00096 (J)					
9/21/2020		0.047		0.084		
9/23/2020			0.0056		<0.005	
2/11/2021					0.00048 (J)	
2/12/2021	0.001 (J)	0.055				
2/15/2021				0.095		
3/12/2021					<0.005	
3/17/2021	0.0011 (J)					
3/18/2021		0.057				
3/19/2021				0.1		
8/16/2021			0.0093			
8/18/2021		0.054		0.085	<0.005	0.03
8/19/2021	0.00089 (J)					
2/8/2022		0.048		0.09	<0.005	0.031
2/9/2022			0.0065			
2/10/2022	0.001 (J)					
8/10/2022		0.046	0.0066		<0.005	
8/11/2022	0.00088 (J)			0.082		0.027
1/27/2023		0.034				
1/30/2023			0.0071		<0.005	
2/1/2023	0.00081 (J)			0.088		0.021 (J)
8/12/2023			0.0058	0.082		0.022
8/13/2023	0.00073 (J)	0.061			<0.005	
Mean	0.001004	0.05136	0.007414	0.08856	0.004109	0.0262
Std. Dev.	0.0001574	0.007433	0.001996	0.006126	0.001787	0.00455
Upper Lim.	0.001121	0.05756	0.009785	0.09447	0.005	0.03382
Lower Lim.	0.0008868	0.04517	0.005043	0.08264	0.00048	0.01858

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
5/23/2016	0.568 (U)	0.171 (U)		0.618 (U)			
5/24/2016					1.82		
7/1/2016			0 (U)				
7/12/2016	1.31	0.611 (U)	0.182 (U)	0.867	1.76		
9/1/2016	1.64	0.766 (U)	1.23	0.857 (U)	1.51		
10/24/2016	1.88	0.969					
10/25/2016			1.05 (U)	1.11 (U)	2.69		
12/7/2016	1.35	0.302 (U)	1.11 (U)	0.964 (U)			
12/8/2016					2.21		
1/26/2017	2.1	0.626 (U)	1.29 (U)	0.612 (U)	2.26		
3/22/2017			0.453 (U)	0.437 (U)			
3/23/2017	1.17	0.662 (U)			1.81		
5/24/2017	1 (U)	0.202 (U)	1.05 (U)				
5/25/2017				1.21 (U)	1.63		
4/3/2018		0.384 (U)	0.783 (U)	0.409 (U)	2.53		
4/4/2018	1.72						
6/5/2018					1.91		
6/6/2018	1.31 (U)	1.32 (U)	0.595 (U)	0.772 (U)			
10/3/2018	1.48	0.858 (U)	1.03 (U)	1.08 (U)	2.22		
3/14/2019	1.5	0.462 (U)			1.37 (U)		
3/15/2019			0.591 (U)	0.917 (U)		0.972 (U)	0.977
4/4/2019		0.512 (U)	0.96 (U)			0.791 (U)	
4/5/2019	1.43 (U)			1.07 (U)	2.22		1.06 (U)
9/24/2019	1.17	0.582 (U)					
9/25/2019			0.643 (U)	1.54	2.77	0.751 (U)	
9/27/2019							1.44 (U)
3/2/2020							0.872 (U)
3/3/2020	1.84	1.43	1.32 (U)	1.33	2.35	1.94	
3/26/2020		0.855 (U)					
3/27/2020							0.96 (U)
3/30/2020	1.08 (U)		0.288 (U)				
3/31/2020				0.591 (U)	2.7		
4/1/2020						0.758 (U)	
6/17/2020						0.691 (U)	
9/15/2020					1.65		
9/16/2020				0.295 (U)			
9/17/2020		0.395 (U)	1.1 (U)				0.0879 (U)
9/18/2020	1.8 (U)						
9/21/2020						0.436 (U)	
2/10/2021			0.773 (U)				
2/11/2021	0.73 (U)			0.831 (U)	1.11	0.317 (U)	
2/12/2021		1.65					
2/15/2021							0.215 (U)
3/16/2021		0.801 (U)					
3/17/2021	1.84		0.228 (U)				0.981 (U)
3/18/2021				0.856 (U)	1.63	0.5 (U)	
8/18/2021	0.858 (U)			0.548 (U)			
8/19/2021		0.527 (U)	0.668 (U)		1.45	1.17	0.689 (U)
2/8/2022		0.0242 (U)	0.168 (U)	1 (U)	0.93 (U)	0.463 (U)	0.0657 (U)
2/9/2022	0.346 (U)						
8/11/2022	1.31	0.656 (U)	0.249 (U)	0.361 (U)	1.46	0.691 (U)	0.789 (U)
1/27/2023						0.256 (U)	

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
1/30/2023				0.5 (U)			0.621 (U)
2/1/2023	1.13	0.626 (U)	0.757 (U)		0.871		
8/12/2023						0.297 (U)	
8/13/2023	0.801 (U)	0.785 (U)	0.281 (U)	0.678 (U)	1.03		0.361 (U)
Mean	1.307	0.674	0.7	0.8105	1.829	0.7166	0.7014
Std. Dev.	0.4476	0.3868	0.4	0.3195	0.5665	0.4399	0.4155
Upper Lim.	1.535	0.8714	0.9041	0.9736	2.118	0.9666	1.01
Lower Lim.	1.078	0.4766	0.4959	0.6475	1.54	0.4187	0.3925

# Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-23D	MW-33	MW-34D	MW-35	MW-37D	MW-51
3/14/2019	0.872 (U)					
4/5/2019	0.932 (U)					
9/26/2019	1.25					
3/2/2020	0.964 (U)					
4/1/2020	0.914 (U)	2.57				
6/17/2020		1.43 (U)				
6/18/2020			1.36	2.02	1.79	
9/17/2020	0.32 (U)					
9/21/2020		2.53		3.85		
9/23/2020			0.563 (U)		0.98 (U)	
2/11/2021					0.12 (U)	
2/12/2021	1.21 (U)	2.26				
2/15/2021				1.52		
3/12/2021					0.578 (U)	
3/17/2021	0.579 (U)					
3/18/2021		0.733 (U)				
3/19/2021				0.524 (U)		
8/16/2021			0.693 (U)			
8/18/2021		1.77		1.67	1.31	0.973 (U)
8/19/2021	0.69 (U)					
2/8/2022		0.967 (U)		1.38	0.345 (U)	0.431 (U)
2/9/2022			0.297 (U)			
2/10/2022	0.919 (U)					
8/11/2022	0.39 (U)	1.52	1.05	1.71	0.505 (U)	1.02
1/27/2023		1.44 (U)				
1/30/2023			0.689 (U)		0.309 (U)	
2/1/2023	0.406 (U)			1.24		0.82 (U)
8/12/2023			0.676 (U)	0.897 (U)		0.484 (U)
8/13/2023	0.0608 (U)	0.773 (U)			0.308 (U)	
Mean	0.7313	1.599	0.7611	1.646	0.6939	0.7456
Std. Dev.	0.359	0.6805	0.3449	0.9403	0.5545	0.2738
Upper Lim.	0.9983	2.206	1.171	2.47	1.229	1.204
Lower Lim.	0.4643	0.9922	0.3514	0.8314	0.1585	0.2867



# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
5/23/2016	<0.1	<0.1	0.038 (J)	<0.3			
5/24/2016					<0.3		
7/12/2016	0.2 (J)	0.09 (J)	0.26 (J)	0.09 (J)	0.54		
9/1/2016	0.08 (J)	0.22 (J)	0.42	0.03 (J)	0.49		
10/24/2016	0.04 (J)	0.07 (J)					
10/25/2016			0.25 (J)	0.07 (J)	0.58		
12/7/2016	0.11 (J)	0.23 (J)	0.23 (J)	0.54			
12/8/2016					0.63		
1/26/2017	0.13 (J)	<0.1	0.02 (J)	<0.3	0.71		
3/22/2017			0.3	0.07 (J)			
3/23/2017	0.28 (J)	0.12 (J)			0.57		
5/24/2017	0.32	0.31	0.46				
5/25/2017				0.42	0.54		
10/4/2017	0.52	0.6	<0.1	0.93	0.95		
4/3/2018		<0.1	<0.1	<0.3	0.33		
4/4/2018	<0.1						
6/5/2018					0.66		
6/6/2018	0.25 (J)	0.17 (J)	<0.1	0.23 (J)			
10/3/2018	0.21 (J)	<0.1	<0.1	<0.3	0.32		
3/14/2019	0.24 (J)	<0.1			0.88		
3/15/2019			<0.1	<0.3		<0.1	<0.1
4/4/2019		0.066 (J)	<0.1			0.1 (J)	
4/5/2019	0.66			0.16 (J)	0.37		0.13 (J)
9/24/2019	0.053 (J)	0.12 (J)					
9/25/2019			<0.1	0.081 (J)	0.73	<0.1	
9/27/2019							0.28 (J)
3/2/2020							<0.1
3/3/2020	<0.1	0.064 (J)	<0.1	<0.3	0.34	<0.1	
3/26/2020		<0.1					
3/27/2020							<0.1
3/30/2020	0.092 (J)		0.059 (J)				
3/31/2020				<0.3	0.45		
4/1/2020						<0.1	
6/17/2020						<0.1	
9/15/2020					0.31		
9/16/2020				0.058 (J)			
9/17/2020		<0.1	<0.1				<0.1
9/18/2020	<0.1						
9/21/2020						<0.1	
2/10/2021			0.21				
2/11/2021	0.059 (J)			0.058 (J)	0.71	<0.1	
2/12/2021		0.053 (J)					
2/15/2021							<0.1
3/16/2021		<0.1					
3/17/2021	0.076 (J)		<0.1				<0.1
3/18/2021				0.057 (J)	0.64	<0.1	
8/18/2021	<0.1			0.062 (J)			
8/19/2021		<0.1	<0.1		0.31	<0.1	<0.1
2/8/2022		<0.1	<0.1	0.055 (J)	0.19	<0.1	<0.1
2/9/2022	0.053 (J)						
8/10/2022			0.054 (J)	0.086 (J)	0.3		
8/11/2022	0.085 (J)	0.097 (J)				0.056 (J)	0.063 (J)

# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
1/27/2023						0.05 (J)	
1/30/2023				0.097 (J)			0.064 (J)
2/1/2023	0.094 (J)	0.086 (J)	0.053 (J)		0.21		
8/12/2023						<0.1	
8/13/2023	0.1	0.12	0.053 (J)	0.081 (J)	0.25		0.057 (J)
Mean	0.1661	0.1366	0.1443	0.211	0.4864	0.09329	0.1072
Std. Dev.	0.1497	0.1125	0.1152	0.2035	0.2183	0.01711	0.05563
Upper Lim.	0.1683	0.12	0.1326	0.1671	0.5952	0.1	0.13
Lower Lim.	0.07801	0.097	0.04524	0.06062	0.3776	0.1	0.063

# Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-23D	MW-33	MW-34D	MW-35	MW-37D	MW-51
3/14/2019	<0.1					
4/5/2019	0.14 (J)					
9/26/2019	0.16 (J)					
1/22/2020		0.18 (J)				
3/2/2020	<0.1					
4/1/2020	<0.1	0.15 (J)				
6/17/2020		0.25				
6/18/2020			0.082 (J)	0.053 (J)	0.1	
9/17/2020	<0.1					
9/21/2020		0.14		<0.1		
9/23/2020			<0.1		0.065 (J)	
2/11/2021					0.077 (J)	
2/12/2021	<0.1	0.25				
2/15/2021				0.093 (J)		
3/12/2021					0.061 (J)	
3/17/2021	<0.1					
3/18/2021		0.4				
3/19/2021				0.082 (J)		
8/16/2021			0.066 (J)			
8/18/2021		0.16		0.052 (J)	0.05 (J)	0.072 (J)
8/19/2021	<0.1					
2/8/2022		0.14		0.065 (J)	0.055 (J)	0.078 (J)
2/9/2022			0.051 (J)			
2/10/2022	<0.1					
8/10/2022		0.21	0.081 (J)		0.084 (J)	
8/11/2022	0.06 (J)			0.088 (J)		0.11
1/27/2023		0.087 (J)				
1/30/2023			0.089 (J)		0.092 (J)	
2/1/2023	0.074 (J)			0.1		0.18
8/12/2023			0.062 (J)	0.077 (J)		0.1
8/13/2023	0.061 (J)	0.22			0.11	
Mean	0.09962	0.1988	0.06871	0.07333	0.07711	0.108
Std. Dev.	0.02738	0.08364	0.01557	0.01899	0.02093	0.04315
Upper Lim.	0.14	0.2685	0.08721	0.09166	0.09732	0.1803
Lower Lim.	0.061	0.1291	0.05021	0.055	0.0569	0.03569

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
5/23/2016	0.00182 (J)	<0.001	<0.001	<0.001			
5/24/2016					0.00154 (J)		
7/12/2016	0.0015 (J)	<0.001	<0.001	<0.001	0.0012 (J)		
9/1/2016	0.0016 (J)	<0.001	<0.001	<0.001	0.0014 (J)		
10/24/2016	0.0016 (J)	<0.001					
10/25/2016			<0.001	<0.001	0.0015 (J)		
12/7/2016	0.0018 (J)	<0.001	<0.001	<0.001			
12/8/2016					0.0017 (J)		
1/26/2017	0.002 (J)	<0.001	0.0001 (J)	<0.001	0.0013 (J)		
3/22/2017			0.0002 (J)	0.0001 (J)			
3/23/2017	0.0019 (J)	0.001 (J)			0.001 (J)		
5/24/2017	0.0016 (J)	0.0001 (J)	0.0001 (J)				
5/25/2017				<0.001	0.0012 (J)		
4/3/2018		<0.001	<0.001	<0.001	<0.001		
4/4/2018	<0.001						
3/14/2019	0.0014 (J)	<0.001			0.0015 (J)		
3/15/2019			<0.001	<0.001		<0.001	<0.001
4/4/2019		7.2E-05 (J)	0.00016 (J)			<0.001	
4/5/2019	0.0012 (J)			7.6E-05 (J)	0.0015 (J)		<0.001
9/24/2019	0.0013 (J)	0.0002 (J)					
9/25/2019			<0.001	8.9E-05 (J)	0.0015 (J)	<0.001	
9/27/2019							0.0001 (J)
3/2/2020							9.4E-05 (J)
3/3/2020	0.0017 (J)	5.3E-05 (J)	0.00016 (J)	0.00013 (J)	0.0013 (J)	4.7E-05 (J)	
3/26/2020		<0.001					
3/27/2020							<0.001
3/30/2020	0.0015 (J)		7.3E-05 (J)				
3/31/2020				7.7E-05 (J)	0.0014 (J)		
4/1/2020						4.8E-05 (J)	
6/17/2020						<0.001	
9/15/2020					0.0014 (J)		
9/16/2020				6.5E-05 (J)			
9/17/2020		<0.001	7.8E-05 (J)				<0.001
9/18/2020	0.0012 (J)						
9/21/2020					<0.001		
2/10/2021			9.4E-05 (J)				
2/11/2021	0.0015 (J)			0.00018 (J)	0.00098 (J)	0.00066 (J)	
2/12/2021		<0.001					
2/15/2021							3.6E-05 (J)
3/16/2021		<0.001					
3/17/2021	0.0019		5.8E-05 (J)				<0.001
3/18/2021				8.8E-05 (J)	0.00096 (J)	7.3E-05 (J)	
8/18/2021	0.0015			<0.001			
8/19/2021		<0.001	<0.001		0.0013	<0.001	<0.001
2/8/2022		<0.001	<0.001	<0.001	0.0009 (J)	<0.001	<0.001
2/9/2022	0.0014						
8/10/2022			<0.001	<0.001	0.0011		
8/11/2022	<0.001	<0.001				<0.001	<0.001
1/27/2023						<0.001	
1/30/2023				<0.001			<0.001
2/1/2023	0.0011	<0.001	<0.001		<0.001		
8/12/2023						<0.001	

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22
8/13/2023	0.00079 (J)	<0.001	<0.001	0.00049 (J)	0.00075 (J)		<0.001
Mean	0.001423	0.0008375	0.0006374	0.0006498	0.001201	0.0007734	0.0007869
Std. Dev.	0.0004144	0.0003537	0.000447	0.0004387	0.0003312	0.0003991	0.0004052
Upper Lim.	0.001646	0.001	0.001	0.001	0.001379	0.001	0.001
Lower Lim.	0.001201	0.001	0.0001	0.0001	0.001024	7.3E-05	9.4E-05

# Confidence Interval

Constituent: Lead (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-23D	MW-33	MW-34D	MW-35	MW-37D
3/14/2019	<0.001				
4/5/2019	<0.001				
9/26/2019	<0.001				
3/2/2020	5.1E-05 (J)				
4/1/2020	<0.001	0.0017 (J)			
6/17/2020		0.0017 (J)			
6/18/2020			0.00087 (J)	0.00016 (J)	0.0017 (J)
9/17/2020	0.00016 (J)				
9/21/2020		0.0017 (J)		0.00099 (J)	
9/23/2020			<0.001		8.2E-05 (J)
2/11/2021					0.00039 (J)
2/12/2021	<0.001	0.0018 (J)			
2/15/2021				0.00055 (J)	
3/12/2021					<0.001
3/17/2021	<0.001				
3/18/2021		0.0017			
3/19/2021				0.00066 (J)	
8/16/2021			<0.001		
8/18/2021		0.0016		<0.001	<0.001
8/19/2021	<0.001				
2/8/2022		0.0014		<0.001	<0.001
2/9/2022			<0.001		
2/10/2022	<0.001				
8/10/2022		<0.001	<0.001		<0.001
8/11/2022	<0.001			<0.001	
1/27/2023		<0.001			
1/30/2023			<0.001		<0.001
2/1/2023	<0.001			<0.001	
8/12/2023			<0.001	0.00035 (J)	
8/13/2023	<0.001	0.0011			<0.001
Mean	0.0008624	0.00147	0.0009814	0.0007456	0.000908
Std. Dev.	0.0003367	0.0003199	4.914E-05	0.0003286	0.0004512
Upper Lim.	0.001	0.001631	0.001	0.001	0.0017
Lower Lim.	0.00016	0.001032	0.00087	0.00016	8.2E-05

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D
5/23/2016	<0.03	<0.03	<0.03				
5/24/2016				0.0142 (J)			
7/12/2016	<0.03	0.0037 (J)	<0.03	0.0141 (J)			
9/1/2016	0.0021 (J)	0.0033 (J)	<0.03	0.0158 (J)			
10/24/2016	<0.03						
10/25/2016		0.0029 (J)	<0.03	0.016 (J)			
12/7/2016	<0.03	0.0029 (J)	<0.03				
12/8/2016				0.0144 (J)			
1/26/2017	<0.03	0.0028 (J)	<0.03	0.0136 (J)			
3/22/2017		0.0025 (J)	<0.03				
3/23/2017	0.0016 (J)			0.0151 (J)			
5/24/2017	0.0029 (J)	0.0029 (J)					
5/25/2017			0.0011 (J)	0.0154 (J)			
4/3/2018	0.0026 (J)	0.0028 (J)	<0.03	0.013 (J)			
6/5/2018				0.013 (J)			
6/6/2018	0.0013 (J)	0.0031 (J)	<0.03				
10/3/2018	0.0017 (J)	0.0026 (J)	<0.03	0.015 (J)			
3/14/2019	<0.03			0.011 (J)			0.0028 (J)
3/15/2019		0.0041 (J)	0.0011 (J)		0.025 (J)	0.002 (J)	
4/4/2019	0.0009 (J)	0.0032 (J)			0.019 (J)		
4/5/2019			0.00074 (J)	0.0084 (J)		0.0013 (J)	0.0021 (J)
9/24/2019	0.0012 (J)						
9/25/2019		0.0038 (J)	0.0011 (J)	0.015 (J)	0.024 (J)		
9/26/2019							0.0023 (J)
9/27/2019						0.0013 (J)	
3/2/2020						0.0015 (J)	0.0025 (J)
3/3/2020	0.0084 (J)	0.0047 (J)	0.0012 (J)	0.012 (J)	0.026 (J)		
3/26/2020	0.0061 (J)						
3/27/2020						0.0013 (J)	
3/30/2020		0.0041 (J)					
3/31/2020			0.0009 (J)	0.012 (J)			
4/1/2020					0.026 (J)		0.0024 (J)
6/17/2020					0.023 (J)		
9/15/2020				0.014 (J)			
9/16/2020			0.0012 (J)				
9/17/2020	0.0094 (J)	0.0043 (J)				0.0011 (J)	0.0021 (J)
9/21/2020					0.022 (J)		
2/10/2021		0.0038 (J)					
2/11/2021			0.0013 (J)	0.011 (J)	0.021 (J)		
2/12/2021	0.036						0.0023 (J)
2/15/2021						0.0011 (J)	
3/16/2021	0.032						
3/17/2021		0.0048 (J)				0.0012 (J)	0.0024 (J)
3/18/2021			0.0014 (J)	0.013 (J)	0.026 (J)		
8/18/2021			0.0012 (J)				
8/19/2021	0.0058 (J)	0.0042 (J)		0.013 (J)	0.022 (J)	0.0012 (J)	0.0022 (J)
2/8/2022	0.014 (J)	0.0034 (J)	0.0014 (J)	0.01 (J)	0.022 (J)	0.0011 (J)	
2/10/2022							0.0029 (J)
8/11/2022	0.0025 (J)				0.022 (J)	0.0011 (J)	0.002 (J)
1/27/2023					0.018 (J)		
1/30/2023			0.0014 (J)			0.0011 (J)	
2/1/2023	0.016 (J)	0.0036 (J)		0.0093 (J)			0.0019 (J)

# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-21D	MW-22	MW-23D
8/12/2023					0.015 (J)		
8/13/2023	0.0047 (J)	0.003 (J)	0.0018 (J)	0.012 (J)		0.0014 (J)	0.0017 (J)
Mean	0.01372	0.003978	0.01373	0.01306	0.02221	0.001285	0.002277
Std. Dev.	0.01309	0.002492	0.01459	0.002086	0.003239	0.0002512	0.000337
Upper Lim.	0.007165	0.0041	0.03	0.01415	0.02451	0.0015	0.002528
Lower Lim.	0.002459	0.0029	0.0012	0.01197	0.01992	0.0011	0.002026



# Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-33	MW-34D	MW-35	MW-37D	MW-51
4/1/2020	0.0011 (J)				
6/17/2020	0.00097 (J)				
6/18/2020		0.0021 (J)	0.0046 (J)	0.038 (J)	
9/21/2020	0.00086 (J)		0.0036 (J)		
9/23/2020		0.0011 (J)		0.031	
2/11/2021				0.034	
2/12/2021	0.0011 (J)				
2/15/2021			0.0043 (J)		
3/12/2021				0.035	
3/18/2021	0.0012 (J)				
3/19/2021			0.0045 (J)		
8/16/2021		0.001 (J)			
8/18/2021	0.00097 (J)		0.0036 (J)	0.03	0.0022 (J)
2/8/2022	0.001 (J)		0.0039 (J)	0.029 (J)	0.001 (J)
2/9/2022		0.0022 (J)			
8/11/2022			<0.03		0.0014 (J)
1/27/2023	<0.03				
1/30/2023		0.0013 (J)		0.021 (J)	
2/1/2023			0.0034 (J)		0.0015 (J)
8/12/2023		0.0013 (J)	0.0031 (J)		0.00098 (J)
8/13/2023	0.00077 (J)			0.02 (J)	
Mean	0.002552	0.0015	0.005111	0.02975	0.001416
Std. Dev.	0.00467	0.0005177	0.003743	0.006409	0.0004963
Upper Lim.	0.015	0.002211	0.015	0.03654	0.002248
Lower Lim.	0.00077	0.0007888	0.0031	0.02296	0.0005844

# Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-18	MW-22	MW-23D	MW-35	MW-51
5/24/2016	<0.0002				
7/12/2016	<0.0002				
9/1/2016	6E-05 (J)				
10/25/2016	4E-05 (J)				
12/8/2016	<0.0002				
1/26/2017	8E-05 (J)				
3/23/2017	9E-05 (J)				
5/25/2017	8E-05 (J)				
4/3/2018	<0.0002				
3/14/2019	<0.0002		<0.0002		
3/15/2019		<0.0002			
3/2/2020		<0.0002	<0.0002		
3/3/2020	<0.0002				
2/11/2021	<0.0002				
2/12/2021			<0.0002		
2/15/2021		<0.0002		<0.0002	
2/8/2022	<0.0002	<0.0002		0.00014 (J)	<0.0002
2/10/2022			<0.0002		
8/11/2022		0.00016 (J)	0.00017 (J)	0.00014 (J)	0.00013 (J)
1/30/2023		<0.0002			
2/1/2023	<0.0002		<0.0002	0.00084	<0.0002
8/12/2023				<0.0002	<0.0002
8/13/2023	<0.0002	<0.0002	<0.0002		
Mean	0.0001567	0.0001943	0.0001957	0.000304	0.0001825
Std. Dev.	6.433E-05	1.512E-05	1.134E-05	0.0003011	3.5E-05
Upper Lim.	0.0002	0.0002	0.0002	0.00084	0.0002
Lower Lim.	8E-05	0.00016	0.00017	0.00014	0.00013

# Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-15	MW-21D	MW-22	MW-23D	MW-37D
5/23/2016	<0.01				
7/12/2016	0.0007 (J)				
9/1/2016	<0.01				
10/24/2016	<0.01				
12/7/2016	<0.01				
1/26/2017	<0.01				
3/23/2017	<0.01				
5/24/2017	<0.01				
4/3/2018	<0.01				
3/14/2019	<0.01			<0.01	
3/15/2019		0.045	<0.01		
4/4/2019	<0.01	0.033			
4/5/2019			0.00013 (J)	0.0014 (J)	
9/24/2019	<0.01				
9/25/2019		0.038			
9/26/2019				0.0025 (J)	
9/27/2019			<0.01		
3/2/2020			<0.01	0.003 (J)	
3/3/2020	<0.01	0.025			
3/26/2020	<0.01				
3/27/2020			<0.01		
4/1/2020		0.024		0.0032 (J)	
6/17/2020		0.019			
6/18/2020					0.023
9/17/2020	<0.01		<0.01	0.0026 (J)	
9/21/2020		0.017			
9/23/2020					0.015
2/11/2021		0.016			0.019
2/12/2021	<0.01			0.0039 (J)	
2/15/2021			<0.01		
3/12/2021					0.014
3/16/2021	<0.01				
3/17/2021			<0.01	0.0034 (J)	
3/18/2021		0.016			
8/18/2021					0.0083 (J)
8/19/2021	<0.01	0.018	<0.01	0.0034 (J)	
2/8/2022	<0.01	0.016	<0.01		0.007 (J)
2/10/2022				0.0034 (J)	
8/11/2022	<0.01	0.023	<0.01	0.0039 (J)	
1/27/2023		0.028			
1/30/2023			<0.01		0.0063 (J)
2/1/2023	<0.01			0.0041 (J)	
8/12/2023		0.021			
8/13/2023	<0.01		<0.01	0.0041 (J)	0.0029 (J)
Mean	0.009577	0.02421	0.009241	0.003377	0.01194
Std. Dev.	0.001983	0.008972	0.002737	0.0008983	0.006938
Upper Lim.	0.01	0.0298	0.01	0.004045	0.01929
Lower Lim.	0.0007	0.018	0.00013	0.002709	0.004584

# Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-22	MW-33
5/23/2016	0.017	<0.005	<0.005	<0.005			
5/24/2016					<0.2		
7/12/2016	0.0146	<0.005	<0.005	<0.005	0.036		
9/1/2016	0.0137	<0.005	<0.005	0.0014 (J)	0.0347		
10/24/2016	0.0135	0.0012 (J)					
10/25/2016			<0.005	<0.005	0.0282		
12/7/2016	0.01 (J)	0.0041 (J)	<0.005	0.0023 (J)			
12/8/2016					0.0373		
1/26/2017	0.0214	<0.005	<0.005	<0.005	0.0385		
3/22/2017			<0.005	<0.005			
3/23/2017	0.0167	0.0016 (J)			0.0414		
5/24/2017	0.0083 (J)	<0.005	<0.005				
5/25/2017				<0.005	0.019		
4/3/2018		<0.005	<0.005	<0.005	0.029		
4/4/2018	0.012						
6/5/2018					0.038		
6/6/2018	0.014	<0.005	<0.005	<0.005			
10/3/2018	0.0056 (J)	<0.005	<0.005	<0.005	0.017		
3/14/2019	0.0048 (J)	<0.005			0.016		
3/15/2019			<0.005	<0.005		<0.005	
4/4/2019		0.00021 (J)	8.9E-05 (J)				
4/5/2019	0.00091 (J)			9.3E-05 (J)	0.0018 (J)	<0.005	
9/24/2019	0.0064 (J)	<0.005					
9/25/2019			<0.005	<0.005	0.02		
9/27/2019						<0.005	
3/2/2020						<0.005	
3/3/2020	0.0045 (J)	<0.005	<0.005	<0.005	0.014		
3/26/2020		<0.005					
3/27/2020						<0.005	
3/30/2020	0.0049 (J)		<0.005				
3/31/2020				<0.005	0.019		
4/1/2020							0.011
6/17/2020							0.014
9/15/2020					0.059		
9/16/2020				<0.005			
9/17/2020		<0.005	<0.005			0.002 (J)	
9/18/2020	0.0045 (J)						
9/21/2020							0.041
2/10/2021			<0.005				
2/11/2021	0.0072 (J)			<0.005	0.023		
2/12/2021		<0.005					0.011
2/15/2021						<0.005	
3/16/2021		<0.005					
3/17/2021	0.01 (J)		<0.005			<0.005	
3/18/2021				<0.005	0.019 (J)		0.028
8/18/2021	0.0077			<0.005			0.014
8/19/2021		<0.005	<0.005		0.01	<0.005	
2/8/2022		<0.005	<0.005	<0.005	0.0082	<0.005	0.0078
2/9/2022	0.0047 (J)						
8/10/2022			<0.005	<0.005	0.0096		0.007 (J)
8/11/2022	0.0037 (J)	<0.005				<0.005	
1/27/2023							0.015

# Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-16	HGWC-17	HGWC-18	MW-22	MW-33
1/30/2023				<0.005		<0.005	
2/1/2023	0.0036 (J)	<0.005	<0.005		0.0054		
8/13/2023	0.0038 (J)	<0.005	<0.005	<0.005	0.0085	<0.005	0.0065
Mean	0.008896	0.004463	0.004795	0.004533	0.02636	0.004769	0.01553
Std. Dev.	0.00533	0.001365	0.001002	0.001304	0.02095	0.0008321	0.01087
Upper Lim.	0.01162	0.005	0.005	0.005	0.03308	0.005	0.02357
Lower Lim.	0.006176	0.0041	8.9E-05	0.0023	0.01474	0.002	0.007179

# Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals

Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-34D	MW-35	MW-51
6/18/2020	0.0025 (J)	0.014	
9/21/2020		0.037	
9/23/2020	<0.005		
2/15/2021		0.01	
3/19/2021		0.016 (J)	
8/16/2021	<0.005		
8/18/2021		0.014	0.004 (J)
2/8/2022		0.0083	<0.005
2/9/2022	<0.005		
8/10/2022	<0.005		
8/11/2022		0.0089 (J)	0.0023 (J)
1/30/2023	0.0016 (J)		
2/1/2023		0.0063	0.0021 (J)
8/12/2023	<0.005	0.0058	<0.005
Mean	0.004157	0.01337	0.00368
Std. Dev.	0.001463	0.009555	0.001413
Upper Lim.	0.005	0.02048	0.004228
Lower Lim.	0.0016	0.006174	0.001372

# Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-17	HGWC-18	MW-33	MW-34D	MW-35
5/23/2016	0.000306 (J)	<0.001	<0.001				
5/24/2016				<0.001			
7/12/2016	0.0003 (J)	<0.001	0.0001 (J)	0.0002 (J)			
9/1/2016	0.0003 (J)	<0.001	<0.001	<0.001			
10/24/2016	0.0004	<0.001					
10/25/2016			<0.001	<0.001			
12/7/2016	0.0003 (J)	<0.001	<0.001				
12/8/2016				<0.001			
1/26/2017	0.0003 (J)	<0.001	<0.001	<0.001			
3/22/2017			0.0001 (J)				
3/23/2017	0.0003 (J)	<0.001		0.0002 (J)			
5/24/2017	0.0003 (J)	<0.001					
5/25/2017			0.0001 (J)	0.0002 (J)			
4/3/2018		<0.001	<0.001	0.00014 (J)			
4/4/2018	0.00028 (J)						
6/5/2018				0.00016 (J)			
6/6/2018	0.00029 (J)	<0.001	<0.001				
10/3/2018	0.00029 (J)	<0.001	<0.001	<0.001			
3/14/2019	0.00028 (J)	<0.001		<0.001			
3/15/2019			<0.001				
4/4/2019		<0.001					
4/5/2019	0.00028 (J)		0.00013 (J)	0.00014 (J)			
9/24/2019	0.0003 (J)	<0.001					
9/25/2019			0.00012 (J)	0.00019 (J)			
3/3/2020	0.00026 (J)	<0.001	0.00011 (J)	0.00013 (J)			
3/26/2020		<0.001					
3/30/2020	0.00028 (J)						
3/31/2020			0.00014 (J)	0.00015 (J)			
4/1/2020					0.00029 (J)		
6/17/2020					0.00028 (J)		
6/18/2020						0.00015 (J)	0.00013 (J)
9/15/2020				0.00016 (J)			
9/16/2020			<0.001				
9/17/2020		<0.001					
9/18/2020	0.00028 (J)						
9/21/2020					0.00029 (J)		<0.001
9/23/2020						<0.001	
2/11/2021	0.00026 (J)		<0.001	<0.001			
2/12/2021		<0.001			0.00025 (J)		
2/15/2021							<0.001
3/16/2021		<0.001					
3/17/2021	0.00034 (J)						
3/18/2021			<0.001	0.00016 (J)	0.00031 (J)		
3/19/2021							<0.001
8/16/2021						<0.001	
8/18/2021	0.00027 (J)		<0.001		0.0004 (J)		<0.001
8/19/2021		<0.001		0.0002 (J)			
2/8/2022		<0.001	<0.001	<0.001	0.00025 (J)		<0.001
2/9/2022	0.00025 (J)					<0.001	
8/10/2022			<0.001	<0.001	<0.005	<0.001	
8/11/2022	0.00024 (J)	<0.001					<0.001
1/27/2023					0.00021 (J)		

# Confidence Interval

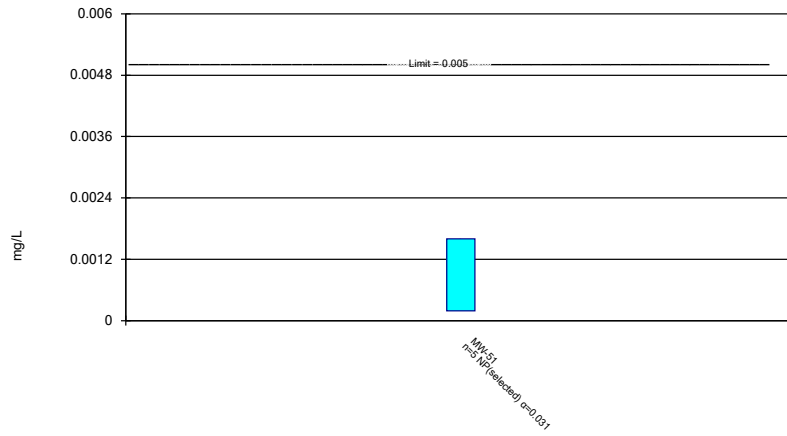
Constituent: Thallium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	HGWC-14	HGWC-15	HGWC-17	HGWC-18	MW-33	MW-34D	MW-35
1/30/2023			0.00025 (J)			<0.001	
2/1/2023	0.00047 (J)	0.00022 (J)		<0.001			<0.001
8/12/2023						<0.001	<0.001
8/13/2023	0.00026 (J)	<0.001	<0.001	<0.001	0.00022 (J)		
Mean	0.0002973	0.0009675	0.0007104	0.0005846	0.0005	0.0008786	0.0009033
Std. Dev.	4.862E-05	0.0001592	0.0004193	0.0004248	0.0007048	0.0003213	0.00029
Upper Lim.	0.0003	0.001	0.001	0.001	0.0004	0.001	0.001
Lower Lim.	0.00027	0.00022	0.00013	0.00016	0.00022	0.00015	0.00013



### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

Constituent: Cadmium Analysis Run 1/22/2024 1:52 PM View: Appendix IV - Nonparametric Confidence In  
Plant Hammond Client: Southern Company Data: Hammond AP-2

# Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/22/2024 1:54 PM View: Appendix IV - Nonparametric Confidence Intervals  
Plant Hammond Client: Southern Company Data: Hammond AP-2

	MW-51
8/18/2021	0.00094
2/8/2022	0.00024 (J)
8/11/2022	0.00045 (J)
2/1/2023	0.0016
8/12/2023	0.00019 (J)
Mean	0.000684
Std. Dev.	0.0005917
Upper Lim.	0.0016
Lower Lim.	0.00019

FIGURE I.

# Appendix IV Trend Tests - Significant Results

Plant Hammond Client: Southern Company Data: Hammond AP-2 Printed 10/25/2023, 1:28 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWA-4 (bg)	-0.0001892	-141	-81	Yes	24	62.5	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWC-18	-0.008278	-135	-81	Yes	24	0	n/a	n/a	0.05	NP

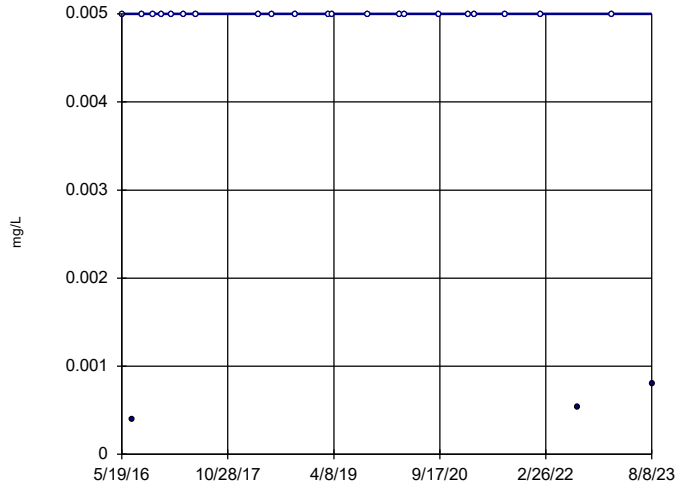
# Appendix IV Trend Tests - All Results

Plant Hammond    Client: Southern Company    Data: Hammond AP-2    Printed 10/25/2023, 1:28 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	HGWA-1 (bg)	0	-18	-81	No	24	87.5	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-2 (bg)	-0.0001971	-22	-81	No	24	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-3 (bg)	0	0	81	No	24	100	n/a	n/a	0.05	NP
<b>Cobalt (mg/L)</b>	<b>HGWA-4 (bg)</b>	<b>-0.0001892</b>	<b>-141</b>	<b>-81</b>	<b>Yes</b>	<b>24</b>	<b>62.5</b>	<b>n/a</b>	<b>n/a</b>	<b>0.05</b>	<b>NP</b>
Cobalt (mg/L)	HGWA-42D (bg)	0	6	27	No	11	90.91	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-43D (bg)	0	0	27	No	11	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-44D (bg)	0	0	27	No	11	100	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-5 (bg)	0	8	81	No	24	29.17	n/a	n/a	0.05	NP
Cobalt (mg/L)	HGWA-6 (bg)	0	0	81	No	24	100	n/a	n/a	0.05	NP
<b>Cobalt (mg/L)</b>	<b>HGWC-18</b>	<b>-0.008278</b>	<b>-135</b>	<b>-81</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.05</b>	<b>NP</b>
Cobalt (mg/L)	MW-33	-0.002352	-9	-27	No	11	0	n/a	n/a	0.05	NP
Cobalt (mg/L)	MW-35	-0.002448	-13	-20	No	9	0	n/a	n/a	0.05	NP

### Sen's Slope Estimator

HGWA-1 (bg)

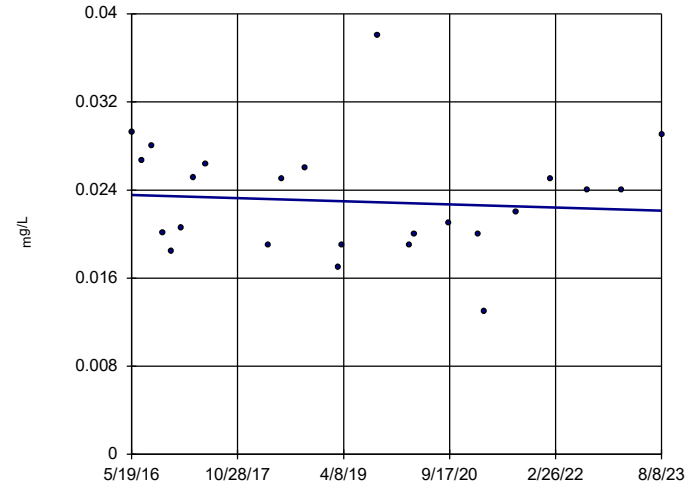


n = 24  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = -18  
 critical = -81  
 Trend not sig-  
 nificant at 95%  
 confidence level  
 (α = 0.025 per  
 tail).

Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-2 (bg)

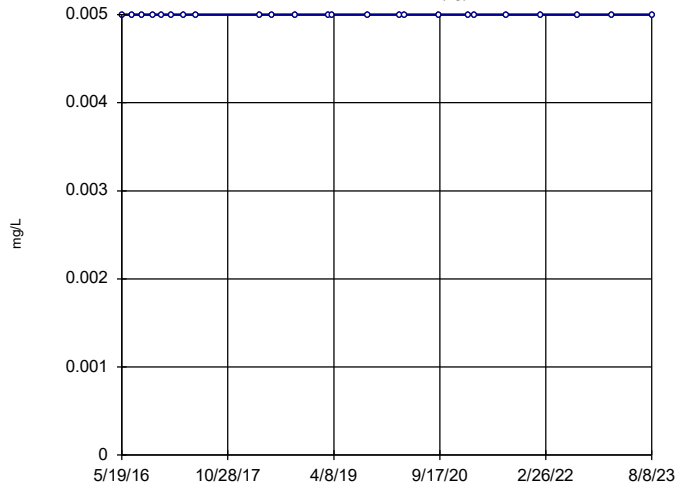


n = 24  
 Slope = -0.0001971  
 units per year.  
 Mann-Kendall  
 statistic = -22  
 critical = -81  
 Trend not sig-  
 nificant at 95%  
 confidence level  
 (α = 0.025 per  
 tail).

Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-3 (bg)

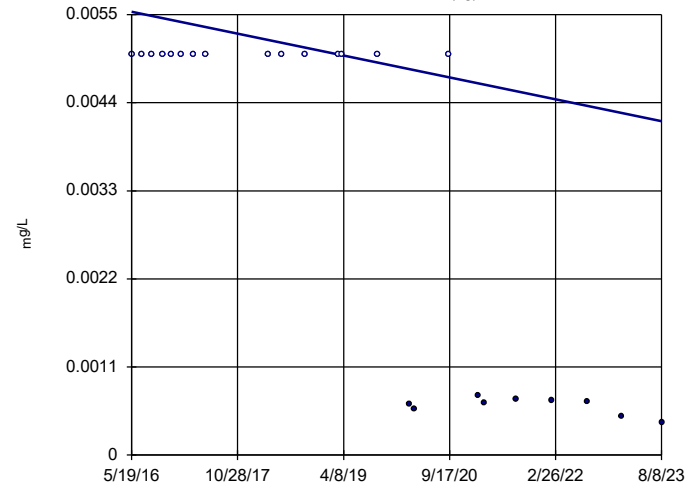


n = 24  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = 0  
 critical = 81  
 Trend not sig-  
 nificant at 95%  
 confidence level  
 (α = 0.025 per  
 tail).

Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-4 (bg)

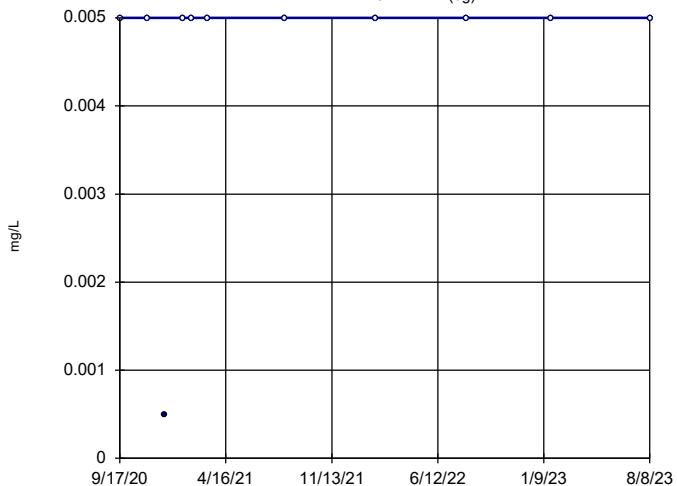


n = 24  
 Slope = -0.0001892  
 units per year.  
 Mann-Kendall  
 statistic = -141  
 critical = -81  
 Decreasing trend  
 significant at 95%  
 confidence level  
 (α = 0.025 per  
 tail).

Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
 Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-42D (bg)

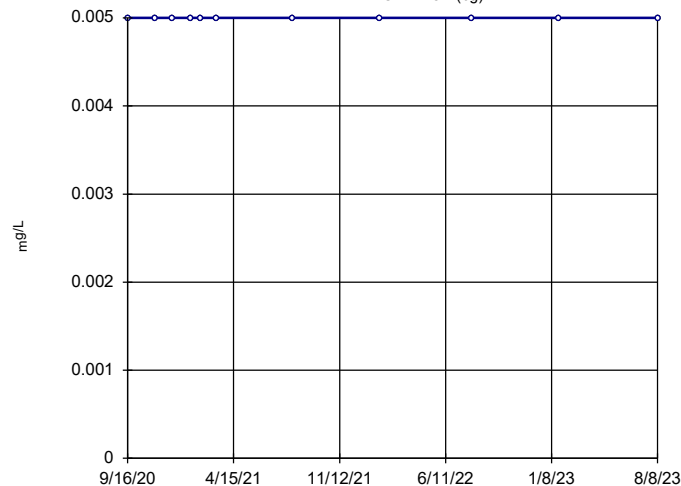


n = 11  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 6  
critical = 27  
Trend not sig-  
nificant at 95%  
confidence level  
( $\alpha = 0.025$  per  
tail).

Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-43D (bg)

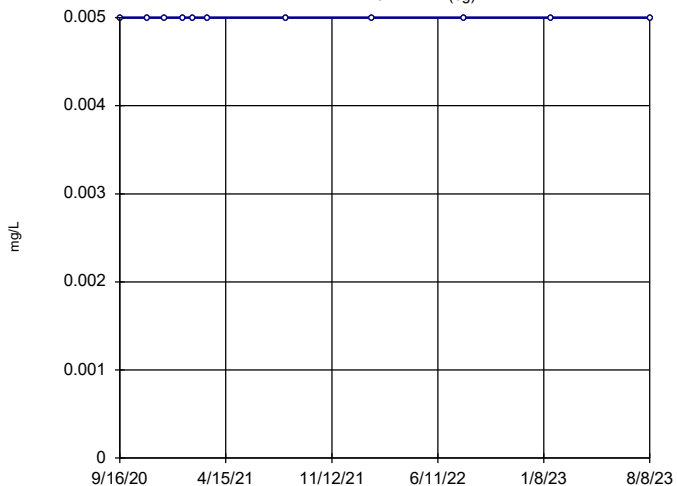


n = 11  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 0  
critical = 27  
Trend not sig-  
nificant at 95%  
confidence level  
( $\alpha = 0.025$  per  
tail).

Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

### Sen's Slope Estimator

HGWA-44D (bg)

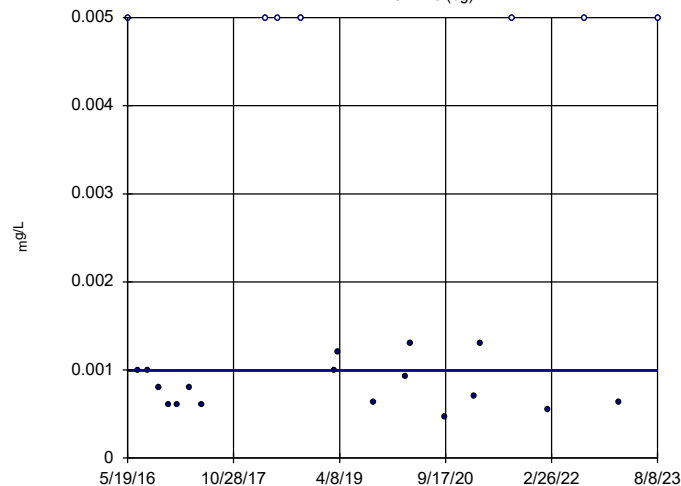


n = 11  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 0  
critical = 27  
Trend not sig-  
nificant at 95%  
confidence level  
( $\alpha = 0.025$  per  
tail).

Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2

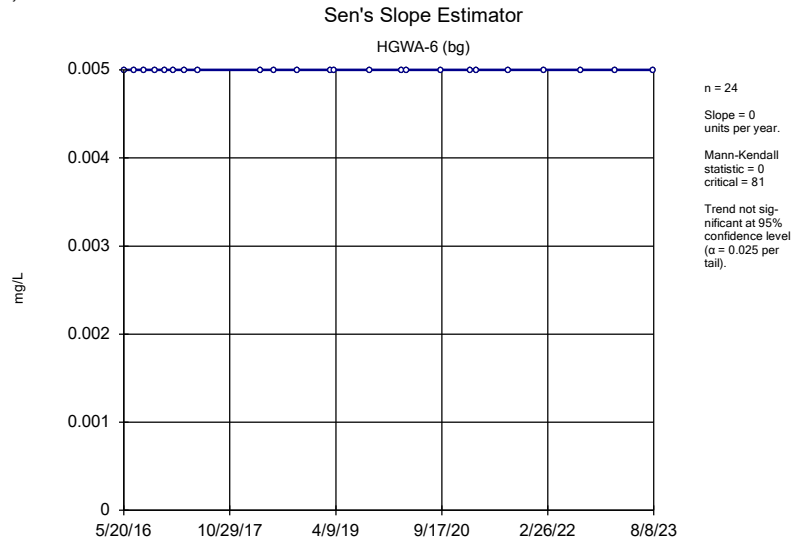
### Sen's Slope Estimator

HGWA-5 (bg)

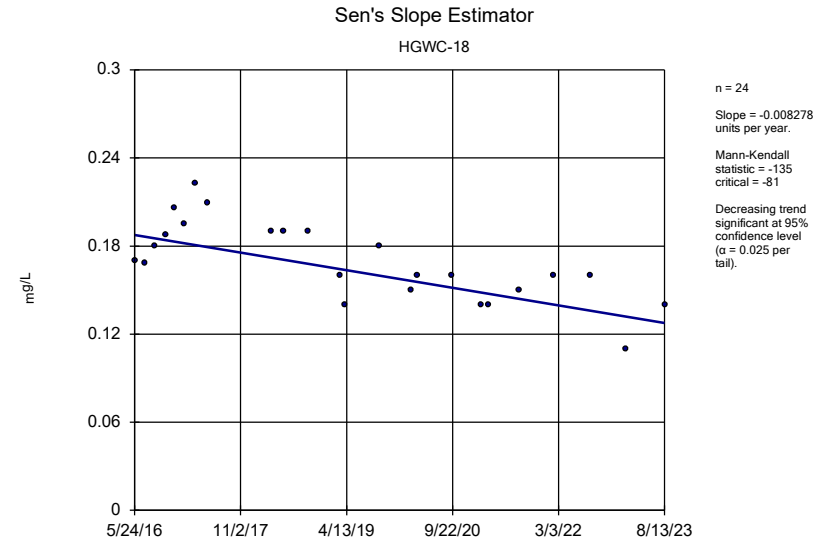


n = 24  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 8  
critical = 81  
Trend not sig-  
nificant at 95%  
confidence level  
( $\alpha = 0.025$  per  
tail).

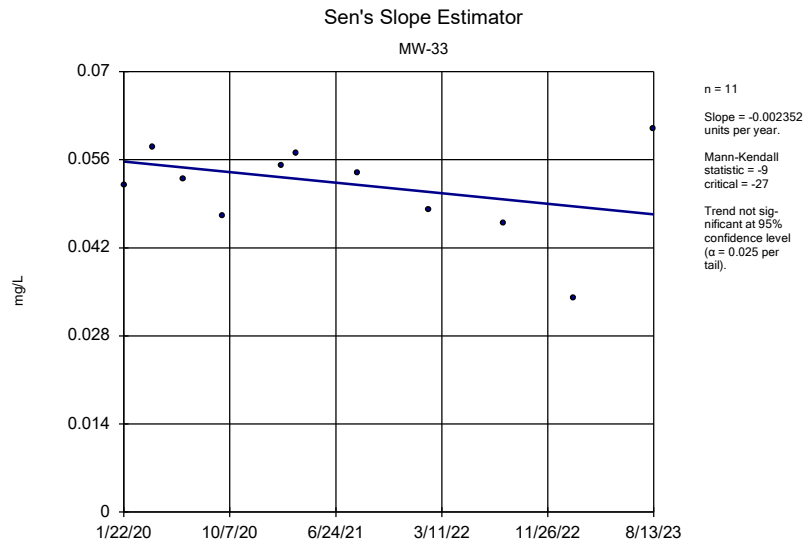
Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2



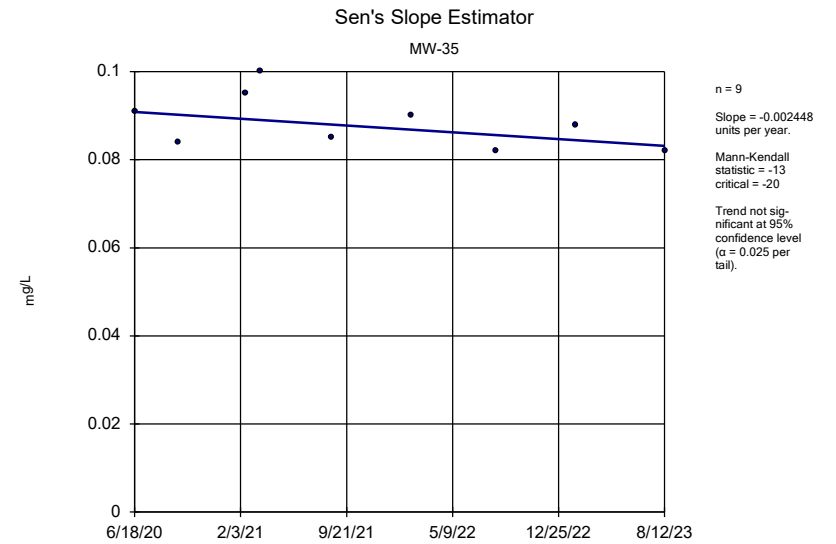
Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
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Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2



Constituent: Cobalt Analysis Run 10/25/2023 1:27 PM View: Appendix IV - CI Trend Test  
Plant Hammond Client: Southern Company Data: Hammond AP-2



# APPENDIX E

## Pilot Study Documentation

# Pilot Study Post-Injection Event Report



*Prepared for*

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

# **PILOT STUDY POST-INJECTION EVENT REPORT**

**PILOT TEST NO. UPT000063  
PLANT HAMMOND ASH POND 2 (AP-2)**

*Prepared by*

**Geosyntec**   
consultants

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200  
Kennesaw, Georgia 30144

Project Number GW6581G

October 2023

## CERTIFICATION STATEMENT

I hereby certify that this *Pilot Study Post-Injection Event Report* was prepared by, or under the direct supervision of, a Qualified Groundwater Scientist, in accordance with the Georgia Environmental Protection Division Rules of Solid Waste Management. According to 391-3-4-.01, a Qualified Groundwater Scientist is “a professional engineer or geologist registered to practice in Georgia who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields that enable individuals to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.” The design presented within this workplan was developed in compliance with the Georgia Rules of Solid Waste Management, Chapter 391-3-4.10.



\_\_\_\_\_  
Whitney B. Law  
Georgia Professional Engineer No. 36641

October 20, 2023  
Date

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## LIST OF ACRONYMS

ACM	Assessment of Corrective Measures
AP-2	Ash Pond 2
Cascade	Cascade Drilling, Inc.
CCR	coal combustion residual
CFR	Code of Federal Regulations
Co	cobalt
DO	dissolved oxygen
ft	feet
g/L	grams per liter
gal	gallons
gpd	gallons per day
gpm	gallons per minute
GA EPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
Geosyntec	Geosyntec Consultants, Inc.
GWPS	Groundwater Protection Standard
IBC	intermediate bulk container
MNA	monitored natural attenuation
NaHCO <sub>3</sub>	sodium bicarbonate
ORP	oxidation-reduction potential
psi	pounds per square inch
PVC	polyvinyl chloride
ROI	radius of influence
SSL	statistically significant level
UIC	Underground Injection Control
US EPA	United States Environmental Protection Agency

## 1. BACKGROUND AND OBJECTIVES

On behalf of Georgia Power Company (Georgia Power), this *Pilot Study Post-Injection Event Report* (Report) was developed by Geosyntec Consultants, Inc. (Geosyntec) at the request of the Georgia Environmental Protection Division (GA EPD) Wastewater Regulatory Program in their pilot test notification approval, dated August 24, 2023. In-situ geochemical injections, coupled with monitored natural attenuation (MNA), have been proposed as corrective measures to address concentrations of cobalt (Co) reported at statistically significant levels (SSLs) above Groundwater Protection Standards (GWPS) in detection monitoring well HGWC-18, and assessment monitoring wells MW-33 and MW-35 at Georgia Power Plant Hammond Ash Pond 2 (AP-2; Site).

Design of in-situ geochemical injection corrective measures includes multiple assessment and design components, including pilot studies to evaluate injection delivery and the performance of injectates prior to implementing a full scale remedy. These pilot tests will collect data that will be used to evaluate:

1. Radius of influence (ROI) of the injected amendment to evaluate future injection point spacing requirements;
2. Sustainable injection pressure and flowrate; and
3. Injectate dosing and efficacy of treating Co in groundwater to below the GWPS.

This Report summarizes the well installation activities completed in June 2023, baseline sampling activities completed in July and August 2023, and injection activities completed in September 2023. These field activities were conducted in accordance with the *HGWC-18 Pilot Study Workplan* and the *MW-33 and MW-35 Pilot Study Workplan* (collectively referred to herein as “Workplans”) associated with the Underground Injection Control (UIC) Pilot Test Notification Form. In accordance with the pilot test notification approval letter, an updated technical report should be provided to the UIC Program within 45 days of initiating the pilot test.

### 1.1 Site Background

Plant Hammond, shown on **Figure 1**, is located in Floyd County, approximately 10 miles west of Rome, Georgia. Plant Hammond was a four-unit, coal-fired electric generating facility and was retired on July 29, 2019. The physical address of the plant is 5963 Alabama Highway, Rome, Georgia, 30165.

AP-2 is one of four coal combustion residual (CCR) ponds utilized over the course of power generation at Plant Hammond. AP-2 is a 21-acre surface impoundment located near the center of Plant Hammond and was used primarily as a dewatering facility for fly ash and bottom ash. AP-2 closure activities, consisting of closure by removal, have been initiated under GA EPD's approved closure permit No. 057-024D(CCR).

As documented in the *Draft Remedy Selection Report* (Geosyntec, 2022), CCR groundwater monitoring-related activities are performed at AP-2 in accordance with the United States Environmental Protection Agency (US EPA) CCR Rule (federal CCR Rule) (40 Code of Federal Regulations [CFR] 257 Subpart D). The locations of AP-2 detection monitoring wells, assessment monitoring wells, and piezometers are shown on **Figure 2**.

Cobalt SSLs were identified at detection well HGWC-18 along the northwestern boundary of AP-2 and assessment monitoring wells MW-33 and MW-35 south of the boundary of AP-2 (**Figure 2**) as part of the assessment monitoring program. These SSLs have been horizontally and vertically delineated to levels below the GWPS (Geosyntec, 2022).

As part of implementing the Assessment of Corrective Measures (ACM) process at AP-2, a high resolution site characterization was conducted from January 17 through February 6, 2023, to characterize and refine proposed treatment areas. The results are summarized in the Workplans (GEOS Submittal ID: 778374). The information collected informed the pilot study summarized in this Report.



## 2. WELL INSTALLATION

Two injection wells (INW-01 and INW-02) and six performance monitoring wells (PT-01 through PT-06) were installed in accordance with the Workplans in June 2023. The locations are shown on **Figure 2** and the well construction details are provided in **Table 1**. Actual screen interval elevations varied by less than 4.8 feet (ft) from the originally proposed depths based on field topographic variations and lithology. A copy of the *Well Design, Installation, and Development Report – Addendum No. 6* detailing the design, installation, and development of these wells is included in **Appendix A**.

Well drilling, installation, and surface completion activities were performed by Cascade Drilling, Inc. (Cascade) of Midland, North Carolina. The boreholes were advanced using rotasonic drilling techniques with continuous core collection. Terra Sonic compact crawler size track mounted rig with a 6-inch sonic drill rod was used to install the wells. Injection well top of casings were finished without a Schedule 40 polyvinyl chloride (PVC) 2-inch female threaded connections based on recommendations from the injection contractor (Cascade) for coupling with injection wellheads during injection activities.

## 3. BASELINE CHARACTERIZATION

Two rounds of groundwater samples were collected from the injection wells (INW-01 and INW-02) and performance monitoring wells (PT-01 through PT-06) in July and August 2023 to establish pre-injection baseline conditions.

Groundwater samples and water quality field parameters (i.e., pH, conductivity, dissolved oxygen [DO], temperature, and oxidation-reduction potential [ORP]) were collected using low-flow sampling procedures in accordance with the current AP-2 *Groundwater Monitoring Plan* (Geosyntec, 2023a) and the Workplans. Groundwater samples were placed in ice-packed coolers and submitted to Pace Analytical Services, LLC (Pace Analytical) in Peachtree Corners, Georgia, following chain-of-custody protocol. Samples were analyzed for Appendix III and IV constituents, and select geochemical parameters and metals in accordance with the Workplans to support evaluation of injectate efficacy. The results for the July and August 2023 sampling events are presented in **Table 2**. The analytical laboratory results and field sampling and equipment calibration forms are provided in **Appendix B**.

#### 4. INJECTION ACTIVITIES

Injection activities were performed September 5-13, 2023, by Cascade with technical supervision conducted by Geosyntec. A staging and mixing area was established prior to injection. Three-hundred-gallon (gal) cone bottom mixing and storage tanks were set up within a secondary containment berm and spill kits were maintained on-site to manage any spills or daylighting. Injectate consisted of food grade sodium bicarbonate ( $\text{NaHCO}_3$ ) obtained from TerraSystems, Inc. mixed with potable water obtained from an on-site fire hydrant that was designated in the Workplans.

Pre-determined quantities of  $\text{NaHCO}_3$  were measured on a digital scale and combined with potable water in mix tanks. The injectate was mixed using a recirculation pump prior to injection, in accordance with the Workplan. Injectate was then transferred from the 300-gal mix tanks into 275-gal intermediate bulk container (IBC) totes which were transported to the injection wellheads. Injectate batches consisted of approximately 10 grams per liter (g/L)  $\text{NaHCO}_3$ , which is below the maximum allowable injectate concentration of 75 g/L  $\text{NaHCO}_3$  set forth in the Workplans.

Injection pressures, flowrates, and water levels in nearby performance monitoring wells were measured throughout injection activities, and the daily maximum injection volume across both pilot study areas was below the value included in the Pilot Test Notification Form (2,400 gal per day [gpd]). A summary of daily injected volumes is included in **Table 3**. Field forms are included in **Appendix C**.

##### 4.1 MW-33/35 Injection Area (South Area)

Injections at INW-01 (located west of MW-33 and MW-35 and south of AP-2, as shown on **Figure 2**) were initiated using two different methods. Initially, an IBC tote containing injectate was connected to a packer assembly installed on the injection wellhead which included a pressure gauge and flow totalizer. The tote was then raised above the injection well riser casing to initiate the injection and increase injection flowrate. Approximately 15 gal of potable water without  $\text{NaHCO}_3$  was injected to verify instrumentation was functioning and no leaks were present in the injection system, followed by the injection of approximately 205 gal of injectate. During initiation of injection less than a gallon of injectate was observed daylighting through the injection well weephole. Spilled injectate was addressed in accordance with the Workplans, and no additional daylighting was observed.

Maximum observed flowrate and injection pressure using this methodology were approximately 1 gal per minute (gpm) and 4.4 pounds per square inch (psi), which were below the maximum proposed values included in the Pilot Test Notification Form<sup>1</sup>. Approximately 120 gal was injected at INW-01 using this method.

Due to low injection flowrates observed using the previously described methodology, gravity feed siphon injections were next employed. The packer assembly and pressure gage was removed from the wellhead and 1/4-inch diameter polyethylene tubing connected to the injectate tote was lowered to the approximate mid-point of the well screen. A peristaltic pump was used to establish a siphon and start the gravity feed injection. A water level meter was used to measure water levels in the injection well in lieu of a pressure gage. Flowrates were estimated by observing changes in injectate levels in the tote over time, as flowrates were below the accurate range of the flow totalizer. Flowrates observed using this method were typically less than 0.3 gpm with less than 3 ft of mounding observed in INW-01. Approximately 960 gal of injectate was injected at INW-01 over the course of six days in this manner, for a total of 1,080 gal during the injection event.

#### **4.2 HGWC-18 Injection Area (West Area)**

Injections at INW-02 (located northeast of HGWC-18 and west of AP-2, as shown on **Figure 2**) were implemented using similar means and methods as employed at INW-01. Consistent with injections at INW-01, gravity feed injections were sufficient to deliver the necessary reagent. Therefore, water levels in the injection well were monitored in lieu of a wellhead pressure gauge. A 3/4-inch diameter hose was lowered to the midpoint of INW-02 and injection was initiated by opening the valve on the injection tote staged on the ground by the wellhead<sup>2</sup>. As such, water levels in the injection well were monitored using a water level meter rather than relying on a pressure gage. The maximum flowrate and mounding at INW-02 (6.7 gpm and 7.6 ft above pre-injection levels<sup>3</sup>, respectively) were established by raising the injection tote above the ground surface using a telehandler. Approximately 5,225 gal of injectate was injected at INW-02 over the course of five days.

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<sup>1</sup> The proposed injection flowrate and pressure included in the Pilot Test Notification Form were 5 gpm and 8 psi, respectively.

<sup>2</sup> Gravity feed injections at INW-02 did not require siphoning or raising of the tote above wellhead as INW-02 is a flush-mount well.

<sup>3</sup> The maximum mounding at INW-02 is equivalent to a groundwater level 6.9 ft below ground surface.

## 5. POST-INJECTION PERFORMANCE MONITORING AND REPORTING

In accordance with the Workplans, groundwater quality data from each performance monitoring event will be directly compared against the Co GWPS and the results of the baseline characterization to evaluate the efficacy of  $\text{NaHCO}_3$  as a method of remediation. In addition, Appendix IV monitoring parameters<sup>4</sup> will be analyzed and monitored over the duration of the pilot study to evaluate potential localized mobilization of other Appendix IV parameters following injections.

Post-injection performance monitoring was initiated on September 18, 2023, with groundwater samples collected from all performance monitoring wells. The monitoring frequency will be weekly<sup>5</sup> for four weeks, then monthly for a period of five months, and finally, quarterly for a period of one year for a maximum total duration of 1.5 years of performance monitoring.

Updates concerning the pilot study results will be reported to GA EPD Solid Waste Management Program as brief summaries included as part of semiannual groundwater monitoring and corrective action reporting. Links to these reports will be emailed to the GA EPD Wastewater Regulatory Program. A comprehensive technical memorandum will be prepared at the conclusion of the pilot study for inclusion in a semiannual groundwater monitoring report.

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<sup>4</sup> Excluding radium.

<sup>5</sup> In accordance with the Workplans, monitoring frequency in the first month was increased from biweekly to weekly based on field observations.

## 6. REFERENCES

Georgia Environmental Protection Division (GA EPD), Georgia Department of Natural Resources, 1991. *Manual for Groundwater Monitoring*. September 1991.

Geosyntec, 2022. *Draft Remedy Selection Report, Georgia Power Company, Plant Hammond Ash Pond 2 (AP-2)*. August 2022.

Geosyntec, 2023a. *Groundwater Monitoring Plan – Plant Hammond Ash Pond 2 (AP-2)*. July 2023, revision 2.

Geosyntec, 2023b. *HGWC-18 Pilot Study Workplan, Plant Hammond Ash Pond 2 (AP-2)*. August 2023.

Geosyntec, 2023c. *MW-33 and MW-35 Pilot Study Workplan, Plant Hammond Ash Pond 2 (AP-2)*. August 2023.

# TABLES

**Table 1**  
 Summary of Well Construction Details  
 Plant Hammond AP-2, Floyd County, Georgia

Pilot Study Area	Well ID	Well Completion	Installation Date	Northing <sup>(1)</sup>	Easting <sup>(1)</sup>	Ground Surface Elevation <sup>(2)</sup> (ft)	Top of Casing Elevation <sup>(2)</sup> (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Well Depth (ft bgs) <sup>(3)</sup>	Screen Interval Length (ft)
South Area	<b><i>Injection Well</i></b>										
	INW-01	Protective Riser	6/16/2023	1547921.52	1938350.62	571.04	573.90	561.04	551.04	20.30	10
	<b><i>Performance Monitoring Well</i></b>										
	PT-01	Protective Riser	6/17/2023	1547916.85	1938348.81	571.14	574.13	561.24	551.24	20.20	10
	PT-02	Protective Riser	6/16/2023	1547917.68	1938353.52	571.10	574.06	561.10	551.10	20.30	10
West Area	<b><i>Injection Well</i></b>										
	INW-02	Flush Mount	6/6/2023	1548915.00	1937643.89	580.78	580.56	555.78	545.78	35.30	10
	<b><i>Performance Monitoring Well</i></b>										
	PT-04	Flush Mount	6/6/2023	1548918.26	1937641.91	580.50	580.26	556.70	546.70	34.10	10
	PT-05	Flush Mount	6/12/2023	1548913.06	1937638.48	580.83	580.54	555.73	545.73	35.40	10
PT-06	Flush Mount	6/7/2023	1548916.95	1937634.25	580.68	580.36	555.18	545.18	35.80	10	

Notes:

ft = feet

ft bgs = feet below ground surface.

(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Survey was completed by GEL Solutions and certified July 17, 2023, and August 30, 2023.

(2) Vertical elevations are referenced to the North American Vertical Datum (NAVD) of 1988. Ground surface elevation defined at the survey nail installed within the well pad.

Survey was completed by GEL Solutions and certified July 17, 2023, and August 30, 2023.

(3) Total well depth accounts for 0.3 ft sump.

**Table 2**  
Summary of Baseline Groundwater Analytical Data  
Plant Hammond AP-2, Floyd County, Georgia

Pilot Study Area:		South Area								West Area							
Well ID:		INW-01	INW-01	PT-01	PT-01	PT-02	PT-02	PT-03	PT-03	INW-02	INW-02	PT-04	PT-04	PT-05	PT-05	PT-06	PT-06
Sample Date:		7/19/2023	8/9/2023	7/18/2023	8/9/2023	7/18/2023	8/9/2023	7/18/2023	8/9/2023	7/14/2023	8/9/2023	7/14/2023	8/9/2023	7/14/2023	8/9/2023	7/14/2023	8/9/2023
Parameter <sup>(1,2,3)</sup>																	
APPENDIX III	Boron	8.7	8.0	8.1	7.9	8.3	8.4	8.2	8.7	7.1	6.3	7.8	7.8	7.5	7.2	7.8	7.2
	Calcium	397	409	370	326	379	276	382	360	306	306	297	287	287	370	319	300
	Chloride	210	207	147	141	174	138	138	113	153	135	153	132	166	145	156	140
	Fluoride	0.34	0.19	0.70	0.56	0.47	0.67	0.84	0.77	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	pH (s.u.)	5.18	5.80	4.63	4.76	4.97	5.06	4.64	4.80	6.27	6.41	6.30	6.43	6.13	6.36	6.09	6.31
	TDS	975	763	892	762	938	767	948	778	532	457	535	458	564	479	542	473
		2000	1890	1700	1820	1830	1800	2690	1750	1460	1350	1310	1320	1520	1480	1330	1420
APPENDIX IV	Antimony	<0.0012	<0.0012	<0.0012	<0.0012	0.0013 J	<0.0012	0.0029 J	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012
	Arsenic	0.0061 J	<0.0037	0.0075 J	0.0052 J	0.0063 J	0.0051 J	0.0076 J	0.0056 J	0.0057 J	0.0054 J	0.0077 J	0.0081 J	<0.0037	<0.0037	<0.0037	<0.0037
	Barium	0.069	0.053	0.046	0.037	0.054	0.045	0.025	0.021	0.070	0.042	0.048	0.039	0.045	0.040	0.037	0.032
	Beryllium	0.0010	0.00059	0.0024	0.0021	0.0016	0.0022	0.0026	0.0024	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054	<0.000054
	Cadmium	0.00059	<0.00011	0.00099	0.0010	0.00091	0.00092	0.00062	0.00055	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	<0.00011	0.00025 J
	Chromium	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0.0011 J	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
	Cobalt	0.13	0.11	0.11	0.11	0.13	0.13	0.12	0.11	0.060	0.050	0.058	0.056	0.042	0.039	0.063	0.058
	Fluoride	0.34	0.19	0.70	0.56	0.47	0.67	0.84	0.77	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
	Lead	0.00037 J	<0.00012	0.00072 J	<0.00060	0.00043 J	0.00071 J	0.0014	0.0020 J	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012
	Lithium	0.0064 J	0.0036 J	0.0052 J	0.0039 J	0.0069 J	0.0043 J	0.0031 J	0.0023 J	0.0057 J	0.0038 J	0.005 J	0.0047 J	0.005 J	0.0049 J	0.0057 J	0.0055 J
	Mercury	<0.00013	<0.00013	0.00023	0.00014 J	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074
Selenium	0.0075	0.011	0.011	0.020	0.0075	0.021	0.011	0.021	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	
Thallium	<0.00018	<0.00018	<0.00018	<0.00090	<0.00018	<0.00090	0.00021 J	<0.00090	0.00037 J	0.00045 J	<0.00018	0.00027 J	<0.00018	<0.00018	0.00049 J	0.00064 J	
INORGANICS	Alkalinity (Bicarbonate as CaCO3)	14.9	46.5	<5.0	<5.0	5.5	<5.0	<5.0	<5.0	159	166	155	168	148	150	140	144
	Alkalinity (Carbonate as CaCO3)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Alkalinity (total) as CaCO3	14.9	46.5	<5.0	<5.0	5.5	<5.0	<5.0	<5.0	159	166	155	168	148	150	140	144
	Sodium	10.0	12.5	8.8	10.6	9.3	9.8	11.7	14.7	11.1	12.9	12.2	11.4	10.6	11.8	13.6	15.3
	Sulfide	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	0.031 J	<0.022	<0.022	<0.022	<0.022
METALS	Iron	2.9	12.3	0.078	<0.025	0.44	0.39	0.26	0.59	10.7	9.4	16.0	13.2	1.2	1.6	6.6	5.8
	Magnesium	52.3	58.4	38.2	39.0	44.0	37.2	36.9	35.1	25.8	27.0	24.1	24.3	26.7	26.5	25.6	26.1
	Manganese	14.4	20.7	9.6	10.3	12.6	11.5	8.2	7.5	16.0	13.3	17.8	17.0	11.4	10.7	18.0	17.4
	Potassium	5.4	6.2	5.2	6.5	5.2	6.5	5.4	6.6	6.0	6.6	7.2	7.6	4.5	5.0	6.6	7.3
FIELD	Dissolved Oxygen	0.51	0.21	0.46	0.26	0.99	0.22	0.11	0.23	0.08	0.06	0.08	0.06	0.09	0.07	0.10	0.02
	Oxidation-Reduction Potential (mV)	37.1	-51.9	131.8	91.2	148.3	73.6	110.2	54.5	-52.1	26.3	-70.5	16.5	7.9	82.3	-19.2	99.4
	Temperature (°C)	20.49	23.92	22.09	21.01	31.50	21.81	21.13	20.48	22.77	21.02	21.83	20.65	23.73	21.96	22.95	21.23
	Specific Conductance (µS/cm)	2297	2169	1954	1959	2156	1993	2031	1953	1711	1640	1715	1656	1727	1710	1683	1612
	pH (s.u.)	5.18	5.80	4.63	4.76	4.97	5.06	4.64	4.80	6.27	6.41	6.30	6.43	6.13	6.36	6.09	6.31
Turbidity (NTU)	3.05	0.42	3.21	0.89	3.98	0.40	3.74	0.70	1.44	0.00	2.84	0.04	4.76	4.81	2.77	2.30	

Notes:

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

°C = degrees Celsius

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

µS/cm = microsiemens per centimeter

mV = millivolts

NTU = nephelometric turbidity units

s.u. = standard units

TDS = Total dissolved solids

(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Analysis of combined radium omitted from the pilot study monitoring program. Unless otherwise indicated, parameters are reported in units of milligrams per liter (mg/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-2015, and combined radium 226/228 by EPA Methods 9315/9320.

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



**Table 3**  
 Summary of Daily Injection Volumes  
 Plant Hammond AP-2, Floyd County, Georgia

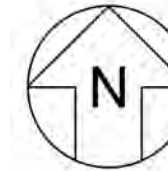
Date	Daily Injection Volume (gal)	
	INW-01 (South Area)	INW-02 (West Area)
09/06/2023	120	--
09/07/2023	93	--
09/08/2023	93	--
09/09/2023	200	175
09/10/2023	214	1,200
09/11/2023	180	825
09/12/2023	180	1,650
09/13/2023	--	1,375
<b>TOTAL:</b>	<b>1,080</b>	<b>5,225</b>

Notes:


-- = indicates no injections occurred on this date

gal = gallons

# FIGURES

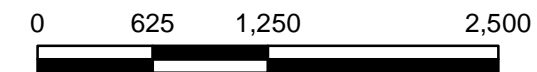


**LEGEND**

 Plant Hammond Property Boundary



Note:  
1. Aerial photograph source: Google Earth Pro, August 2019 and Georgia Power Company, February 2023.



SCALE IN FEET

**SITE LOCATION MAP**

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

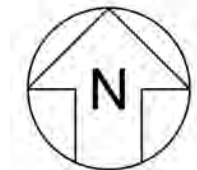
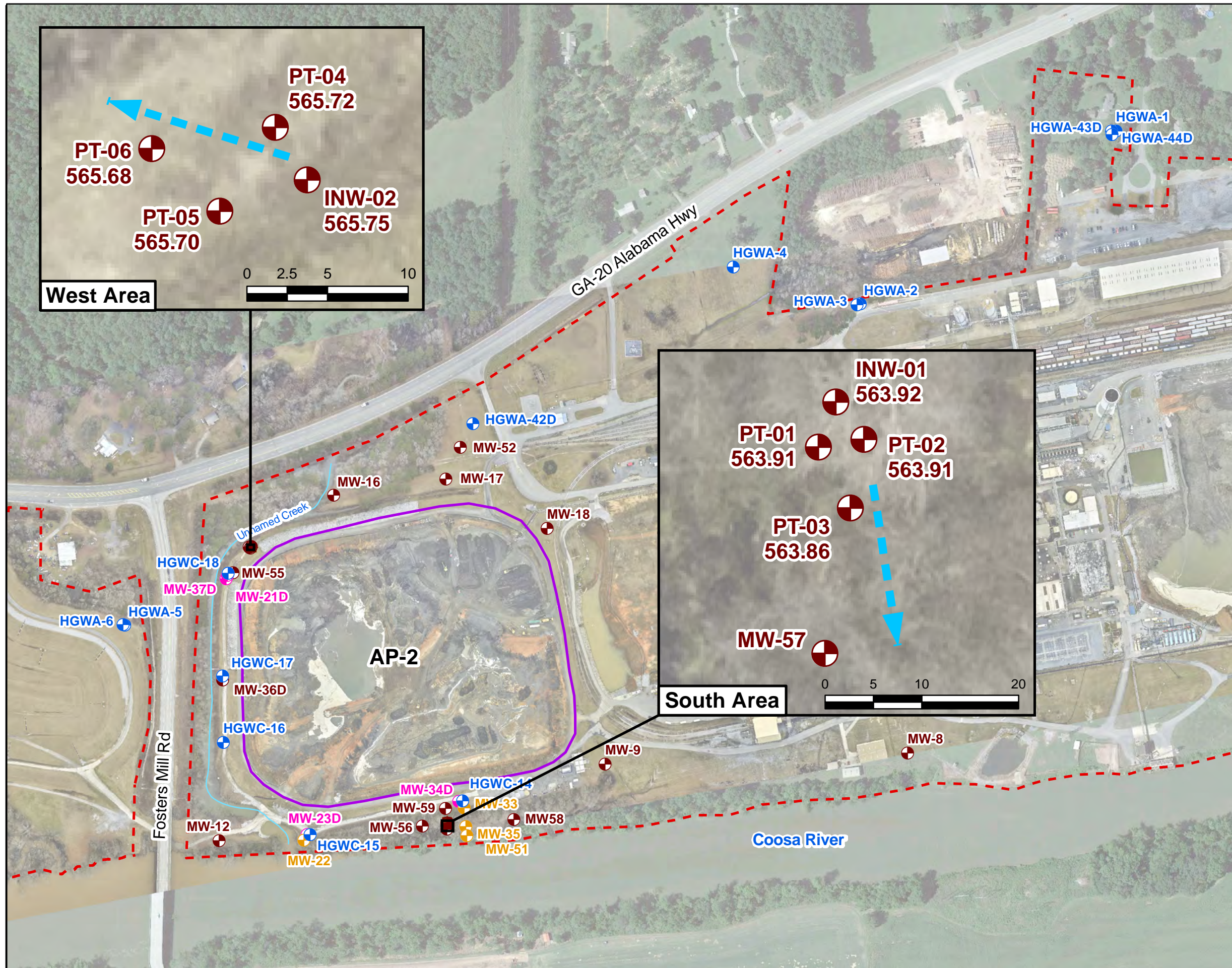
Prepared For:  Georgia Power

Prepared By:  Geosyntec  
consultants

**FIGURE**  
**1**

KENNESAW, GA

OCTOBER 2023



- LEGEND**
- Detection Monitoring Well
  - Horizontal Assessment Monitoring Well
  - Vertical Assessment Monitoring Well
  - ⊕ Piezometer (See Note 2)
  - Unnamed Creek
  - ➔ Approximate Groundwater Flow Direction
  - Approximate AP-2 Boundary
  - Plant Hammond Property Boundary

- Notes:**
1. Piezometers INW-01, INW-02, MW-55 through MW-59, and PT-01 through PT-06 were installed in support of an Assessment of Corrective Measures (ACM) geochemical injections pilot study and are not included in the routine semiannual sampling of the monitoring well network.
  2. Water level elevations presented for piezometers INW-01, INW-02, and PT-01 through PT-06 were recorded on August 9, 2023. Elevation provided in feet (ft) referenced to the North American Vertical Datum of 1988 (NAVD 88).
  3. Aerial photograph source: Google Earth Pro, August 2019 and Georgia Power Company, February 2023.



**PILOT STUDY INJECTION AND PERFORMANCE MONITORING WELL LOCATIONS**

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

Prepared For: Georgia Power

Prepared By: Geosyntec  
consultants

KENNESAW, GA    OCTOBER 2023

**FIGURE**  
**2**

# APPENDIX A

## Well Design, Installation, and Development Report – Addendum No. 6



*Prepared for*

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

# **WELL DESIGN, INSTALLATION, AND DEVELOPMENT REPORT - ADDENDUM**

**No. 6**

**PLANT HAMMOND ASH POND 2  
(AP-2)**

*Prepared by*

**Geosyntec**   
consultants

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200  
Kennesaw, Georgia 30144

Project Number GW6581E

October 2023



## CERTIFICATION PAGE

I hereby certify that this *Well Design, Installation, and Development Report – Addendum No. 6, Plant Hammond Ash Pond 2 (AP-2)* has been prepared by, or under the direct supervision of, a Qualified Groundwater Scientist with Geosyntec Consultants, Inc. and is in compliance with the United States Environmental Protection Agency Coal Combustion Residual Rule [40 Code of Federal Regulations 257 Subpart D], specifically §257.91(e)(1), and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10.

According to 391-3-4-.01, a Qualified Groundwater Scientist is “a professional engineer or geologist registered to practice in Georgia who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields that enable individuals to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.”



A handwritten signature in blue ink that reads "Christine Hug".

Christine Hug P.G.  
Georgia Professional Engineer No. 36641  
*Project Manager*  
*Geosyntec Consultants*

October 3, 2023

Date

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Appendix C	Well Development and Equipment Calibration Forms
Appendix D	Certified Well Survey Data



## LIST OF ACRONYMS

AP	Ash Pond
ASTM	American Society for Testing and Materials
CCR	coal combustion residual
CFR	Code of Federal Regulations
CFS	Civil Field Services
DO	dissolved oxygen
GA EPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
NAD	North America Datum
NAVD	North American Vertical Datum
NSF	National Sanitation Foundation
ORP	oxygen reduction potential
PVC	polyvinyl chloride
SCS	Southern Company Services
TOC	top of casing
US EPA	United States Environmental Protection Agency

## 1. INTRODUCTION

This report provides details regarding the design, installation, and development of 13 (thirteen) piezometers<sup>1</sup> (PT-01 through PT-06, MW-55 through MW-59, and INW-01 and INW-02) to supplement the current groundwater monitoring system at Georgia Power Company (Georgia Power) Plant Hammond (Site) Ash Pond 2 (AP-2). The report was prepared as an addendum to previously submitted well design, installation, development and decommissioning reports issued for the Site (ERM, 2017, Geosyntec, 2019, 2020a, 2020b, 2021, and 2022), and meets the requirements promulgated in the United States Environmental Protection Agency (US EPA) coal combustion residual (CCR) rule [40 Code of Federal Regulations (CFR) Part 257, Subpart D], specifically 40 CFR §257.91(e)(1) and Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10.

Plant Hammond is located in Floyd County, approximately 10 miles west of Rome, Georgia. The current groundwater monitoring system at AP-2 includes a network of detection monitoring wells, assessment monitoring wells, and piezometers. The locations of these wells and piezometers are shown on **Figure 1**.

MW-55 through MW-59 were installed to characterize site conditions. INW-01 and INW-02 were installed as injection points for the pilot study injections in support of the Assessment of Corrective Measures program. PT-01 through PT-06 were installed to specifically monitor the performance of the pilot study injections.

---

<sup>1</sup> For the purposes of this report, unless otherwise specified, the term “well” will be used interchangeably with “piezometer”.

## 2. DRILLING AND WELL INSTALLATION

Well installation and development activities were performed according to accepted industry standards and following guidelines within the Manual for Groundwater Monitoring (GA EPD, 1991). Well drilling, installation, and surface completion activities were performed by Cascade Drilling, Inc of Midland, North Carolina. In accordance with the Georgia Water Well Standards Act, the driller was required to have an insurance bond on file with the State of Georgia at the time of drilling. A copy of this bond is provided in **Appendix A**. A geologist under the supervision of a professional geologist (PG) registered to practice in the State of Georgia, both of whom are employed with Geosyntec Consultants (Geosyntec), documented the drilling and installation efforts to record observations, soil and rock descriptions, subsurface stratigraphy, water elevations, and other field activities. Geosyntec was also responsible for the development of the newly installed wells.

The locations of the new piezometers are shown on **Figure 1**. Well construction details are provided in **Table 1**; boring and well construction logs are included in **Appendix B**.

### 2.1 Drilling Method

The boreholes were advanced using rotosonic drilling techniques with continuous core collection. Terra Sonic compact crawler size track mounted rig with a 6-inch sonic drill rod was used to install the wells. Care was taken so that the drilling methods did not introduce contamination of the groundwater from surface activities. Drilling equipment was cleaned prior to mobilizing to the site.

### 2.2 Screened Interval

Details regarding the well screened intervals are provided in **Table 1**. The wells are screened in the uppermost water bearing unit of the Site. Screened elevations across the new wells range from approximately 566.78 to 545.18 feet (referenced to the North American Vertical Datum of 1988). All wells were constructed with a 10 foot well screen segment.

### 2.3 Well Casings and Screens

The wells were constructed of 2-inch inner diameter Schedule 40 polyvinyl chloride (PVC) casing with flush-threaded fittings. The wells were installed with a 10-foot nominal length pre-packed dual-wall well screen with 0.010-inch slots. The casing and

pre-packed screens arrived pre-cleaned and packaged by the manufacturer. The pre-packed well screens were constructed onsite by packing sand between slotted PVC and the well screen. Well construction materials are sufficiently durable to resist chemical and physical degradation and do not interfere with the quality of groundwater samples. Casing and screen are flush-threaded. Solvent or glue was not used to construct the well. A threaded bottom cap was attached to the bottom of each well screen. The PVC products used were American Society for Testing and Materials (ASTM) and National Sanitation Foundation (NSF) rated. Well screen interval details are provided in **Table 1**.

#### **2.4 Well Intake Design**

The wells were designed and constructed to: (1) allow sufficient groundwater flow to the well for sampling; (2) minimize the passage of formation materials (turbidity) into the well; and (3) ensure sufficient structural integrity to prevent collapse of the well. The annular space between the face of the formation and the screens was filled to minimize passage of formation materials into the well. A filter pack of clean, well-rounded, quartz sand was installed in each well. The 0.01-inch slot size was selected to minimize the inflow of formation material without impairing influent groundwater flow.

#### **2.5 Filter Pack**

Highly Pure Quartzite of Consolidated Aggregates Co. silica sand filter pack was used as the appropriate gradation for the wells. The filter pack material meets the ASTM D5092 uniformity coefficient specification of 2.5 or less, with a uniformity coefficient of 1.6.

Filter pack material was placed within the pre-packed dual-wall well screens and in the annular space between the outside of the pre-pack screen and borehole wall to ensure an adequate thickness of filter pack material between the wells and the formation. Placement of the filter pack between the borehole wall and PVC was placed via gravity-pouring. Filter pack material placed in the annular space outside of the well screens extended approximately 2 feet above the top of screens. No bridging occurred during filter pack placement at any of the well locations.

Upon placement of the filter pack, the wells were pumped with a submersible pump to assure settlement of the filter pack. The top of filter pack depth was measured following pumping to ensure appropriate extension of filter sand above the screens. The depth of top of filter pack was measured and recorded on the well construction logs provided in **Appendix B**.

## **2.6 Annular Seal**

A minimum of two feet of bentonite chips (PelPlug uncoated 3/8-inch bentonite pellets) were placed immediately above the filter pack by gravity-pouring into the annular space and hydrated per manufacture's specifications. A tremie pipe was used to probe the annular space to ensure that no bridging occurred. The bentonite was hydrated with potable water for a duration meeting the manufacture's specifications prior to grouting the remaining annulus.

The annulus above the bentonite seal was grouted with AquaGuard bentonite grout placed via tremie pipe and direct pour methods from the top of the bentonite seal. During grouting, care was taken to assure that the bentonite seal was not disturbed by locating the base of the tremie pipe approximately 2 feet above the bentonite seal and injecting grout at low pressure/velocity. A cement apron 4-feet by 4-feet by 4-inches was poured around the protective risers at wells MW-56 through MW-59, PT-01 through PT-03, and INW-01. A cement apron 2-feet by 2-feet by 4-inches was poured around flush mount wells MW-55, PT-04 through PT-09, and INW-02. The pads were mounded slightly outward to direct surface drainage away from the well.

## **2.7 Cap and Protective Casing**

The well risers at MW-56 through MW-59, PT-01 through PT-03, and INW-01 were fitted with a locking cap and a lockable cover. A one-quarter inch vent hole was drilled into the PVC riser pipe to provide an avenue for the escape of gas. A weep hole was drilled in the outer protective casing near the bottom above the concrete pad. Pea gravel was placed inside the protective casing between the riser pipe and the outer casing. The wells were clearly marked with the proper well identification number on the stand-up casing. The lockable cover guards the casing from damage and the locking caps serve as a security device to prevent well tampering. Bollards were installed around the four corners of the concrete pads to protect the wells at MW-56 through MW-59, and around the well cluster of PT-01 through PT-03 and INW-01.

MW-55, PT-04 through PT-09, and INW-02 were installed with flush-mounted well vaults and watertight flush-mounted well covers. The wells were clearly marked with the proper well identification number on a secured aluminum well tag on the manhole covers.

Construction details are documented on the well construction logs provided in **Appendix B**.

### 3. WELL DEVELOPMENT

The wells were developed using a combination of surging and pumping to (1) restore the natural hydraulic conductivity of the formation, and (2) to remove fine-grained sediment to ensure low-turbidity groundwater samples. The wells were alternately surged and purged until visually clear of particulates. Turbidity, pH, temperature, conductivity, oxidation-reduction potential (ORP), and dissolved oxygen (DO) measurements were recorded to ensure that each well was fully developed. The well development field forms are included in **Appendix C**.

#### 4. SURVEY

Upon completion of the well installations, select horizontal locations and vertical elevations were surveyed by a Georgia-licensed surveyor. The top of the PVC well casing [top of casing (TOC) elevation] and the survey pin installed at the well pad were surveyed to within 0.5-foot horizontal accuracy and to 0.01-foot vertical accuracy. The horizontal location (i.e., northings and eastings) was recorded in feet relative to the North America Datum of 1983 (NAD) with the vertical elevation recorded in feet relative to the North American Vertical Datum of 1988. Certified survey data are provided in the well construction table (**Table 1**). A copy of the certified well survey data for the new wells are provided in **Appendix D**.

## 5. REFERENCES

- Environmental Resources Management (ERM), 2017. *Well Design, Installation, Development, and Decommissioning Report – Plant Hammond Ash Ponds 1 and 2*. October 2017.
- Georgia Environmental Protection Division (GA EPD), Georgia Department of Natural Resources, 1991. *Manual for Groundwater Monitoring*. September 1991.
- Geosyntec Consultants, 2019. Well Design, Installation and Development Report – Addendum, Plant Hammond Ash Ponds 1 and 2 (AP-1 and AP-2). June 2019.
- Geosyntec Consultants, 2020a. Well Design, Installation and Development Report – Addendum No 2, Plant Hammond Ash Pond 2. July 2020.
- Geosyntec Consultants, 2020b. Well Design, Installation and Development Report – Addendum No 3, Plant Hammond Ash Pond 2. November 2020.
- Geosyntec Consultants, 2021. Well Design, Installation and Development Report – Addendum No 4, Plant Hammond Ash Pond 2. September 2021.
- Geosyntec Consultants, 2022. Well Design, Installation and Development Report – Addendum No 5, Plant Hammond Ash Pond 2. June 2022.
- United States Environmental Protection Agency. 2015a. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. 40 CFR Parts 257 and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule. [EPA-HQ-RCRA-2009-0640; FRL-9919-44-OSWER]. RIN-2050-AE81, April 2015



# TABLE

**Table 1**  
 Summary of Well Construction Details  
 Plant Hammond AP-2, Floyd County, Georgia

Well ID	Purpose	Well Completion	Installation Date	Northing <sup>(1)</sup>	Easting <sup>(1)</sup>	Ground Surface Elevation <sup>(2)</sup> (ft)	Top of Casing Elevation <sup>(2)</sup> (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Well Depth (ft bgs) <sup>(3)</sup>
PT-01	Piezometer	Protective Riser	6/17/2023	1547916.85	1938348.81	571.14	574.13	561.24	551.24	20.20
PT-02	Piezometer	Protective Riser	6/16/2023	1547917.68	1938353.52	571.10	574.06	561.10	551.10	20.30
PT-03	Piezometer	Protective Riser	6/17/2023	1547910.57	1938352.13	571.10	574.09	559.10	549.10	22.30
PT-04	Piezometer	Flush Mount	6/6/2023	1548918.26	1937641.91	580.50	580.26	556.70	546.70	34.10
PT-05	Piezometer	Flush Mount	6/12/2023	1548913.06	1937638.48	580.83	580.54	555.73	545.73	35.40
PT-06	Piezometer	Flush Mount	6/7/2023	1548916.95	1937634.25	580.68	580.36	555.18	545.18	35.80
MW-55	Piezometer	Flush Mount	6/13/2023	1548823.40	1937575.72	582.78	582.49	566.78	556.88	26.20
MW-56	Piezometer	Protective Riser	6/16/2023	1547906.81	1938260.81	570.60	573.47	559.60	549.60	21.30
MW-57	Piezometer	Protective Riser	6/16/2023	1547895.53	1938349.49	571.30	574.28	560.30	550.30	21.30
MW-58	Piezometer	Protective Riser	6/17/2023	1547931.46	1938592.55	572.96	575.87	559.46	549.46	23.80
MW-59	Piezometer	Protective Riser	6/14/2023	1547971.14	1938344.65	589.52	592.20	559.52	549.52	40.30
INW-01	Piezometer	Protective Riser	6/16/2023	1547921.52	1938350.62	571.04	573.90	561.04	551.04	20.30
INW-02	Piezometer	Flush Mount	6/6/2023	1548915.00	1937643.89	580.78	580.56	555.78	545.78	35.30

Notes:

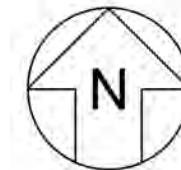
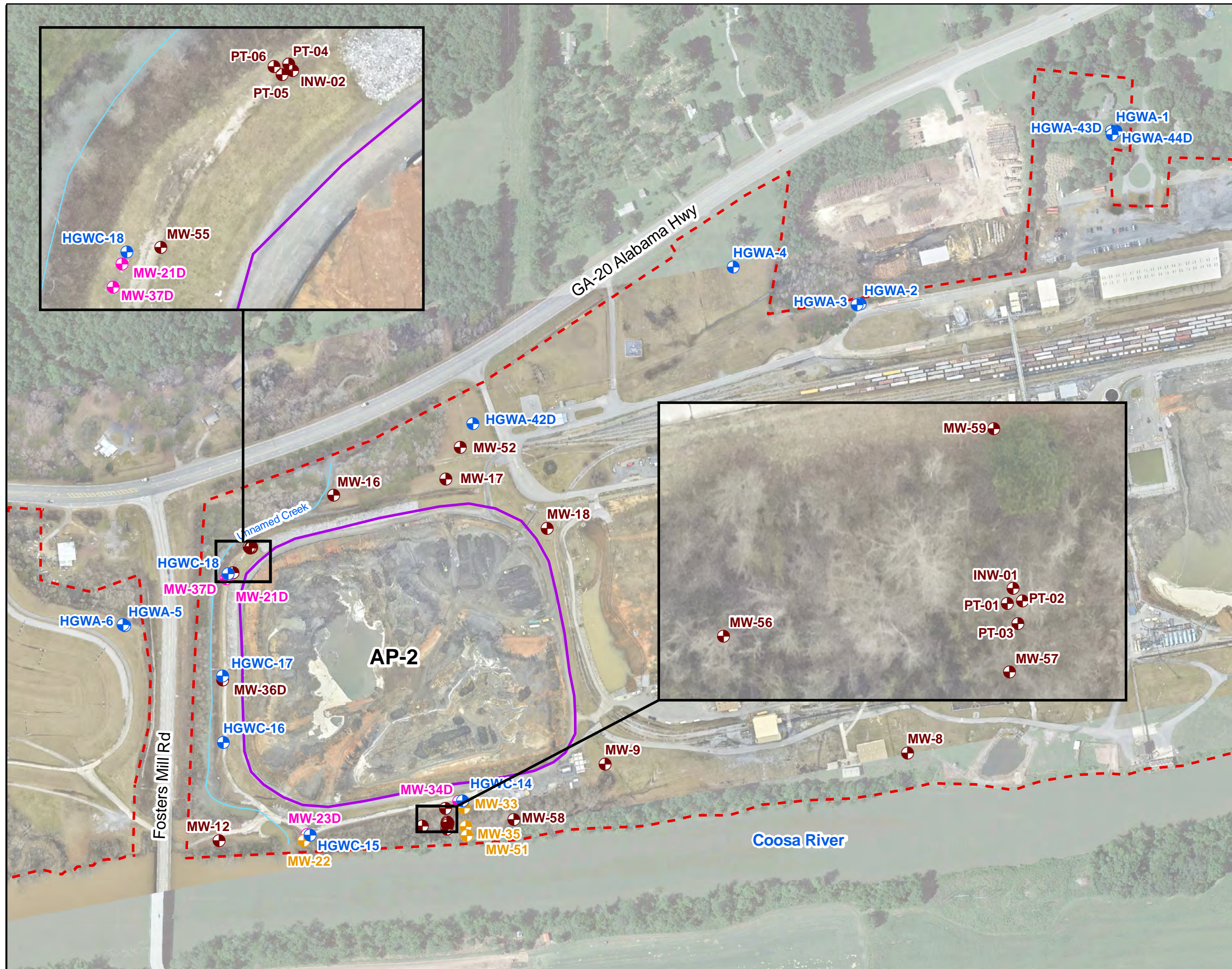
ft bgs = feet below ground surface.

(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Survey was completed by GEL Solutions and certified July 17, 2023, and August 30, 2023.

(2) Vertical elevations are referenced to the North American Vertical Datum (NAVD) of 1988. Ground surface elevation defined at the survey nail installed within the well pad. Survey was completed by GEL Solutions and certified July 17, 2023, and August 30, 2023.

(3) Total well depth accounts for 0.3 ft sump.

# FIGURE



**LEGEND**

- Detection Monitoring Well
- Horizontal Assessment Monitoring Well
- Vertical Assessment Monitoring Well
- ⊕ Piezometer
- Unnamed Creek
- Approximate AP-2 Boundary
- Plant Hammond Property Boundary

- Notes:
1. Piezometers INW-01, INW-02, MW-55 through MW-59, and PT-01 through PT-06 were installed in support of an Assessment of Corrective Measures (ACM) geochemical injections pilot study and are not included in the routine semiannual sampling of the monitoring well network.
  2. Aerial photograph source: Google Earth Pro, August 2019 and Georgia Power Company, February 2023.



**GROUNDWATER MONITORING NETWORK MAP**

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

Prepared For: Georgia Power

Prepared By: Geosyntec consultants

KENNESAW, GA    OCTOBER 2023

**FIGURE 1**

# APPENDIX A

## Well Driller Performance Bonds

CONTINUATION  
CERTIFICATE

Atlantic Specialty Insurance Company

, Surety upon

a certain Bond No. 800033976

dated effective September 27, 2017  
(MONTH-DAY-YEAR)

on behalf of Ricky Davis / Cascade Drilling, L.P.  
(PRINCIPAL)

and in favor of Department of Natural Resources, State of Georgia  
(OBLIGEE)

does hereby continue said bond in force for the further period

beginning on June 30, 2023  
(MONTH-DAY-YEAR)

and ending on June 30, 2025  
(MONTH-DAY-YEAR)

Amount of bond Thirty Thousand and 00/100 Dollars (\$30,000.00)

Description of bond Performance Bond for Water Well Contractors

Premium:

**PROVIDED:** That this continuation certificate does not create a new obligation and is executed upon the express condition and provision that the Surety's liability under said bond and this and all Continuation Certificates issued in connection therewith shall not be cumulative and that the said Surety's aggregate liability under said bond and this and all such Continuation Certificates on account of all defaults committed during the period (regardless of the number of years) said bond had been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and dated on April 13, 2023  
(MONTH-DAY-YEAR)

Atlantic Specialty Insurance Company

By   
ATTORNEY-IN-FACT Carlos A. Albelo



# Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Megan Sivley, Melissa Haddick, Sandra Parker, Orlando Aguirre, Stacy Killebrew, Carlos A. Albelo**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

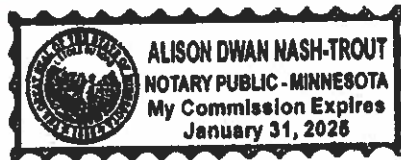
IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this first day of January, 2023.



By   
Sarah A. Kolar, General Counsel

STATE OF MINNESOTA  
HENNEPIN COUNTY

On this first day of January, 2023, before me personally came Sarah A. Kolar, General Counsel of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and she acknowledged the execution of the same, and being by me duly sworn, that she is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.



  
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 13<sup>th</sup> day of April, 2023.



This Power of Attorney expires  
January 31, 2025

  
Kara Barrow, Secretary

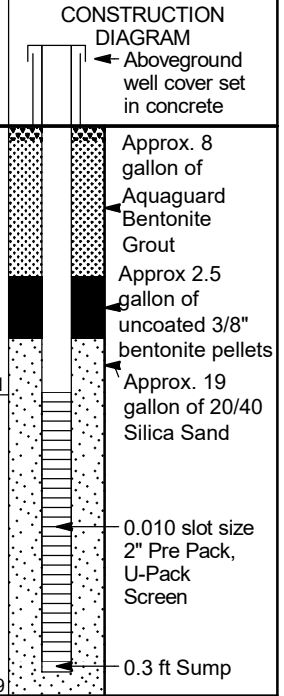
# APPENDIX B

## Boring and Well Construction Logs




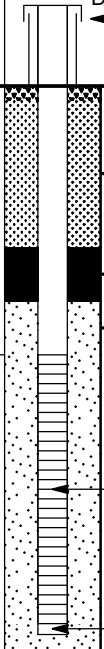

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/17/23</u> <b>COMPLETED</b> <u>06/17/23</u>	<b>NORTHING</b> <u>1547916.85 ft</u> <b>EASTING</b> <u>1938348.81 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>571.14 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>574.13 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs.		SILTY CLAY, yellowish red, trace sand, silt, and mica, medium plasticity, moist, trace coal from 0-2 feet bgs.	
				7 to 10 ft: Wet.	
10	560			SANDY CLAY, yellowish red, trace silt and mica, medium plasticity, wet, gray mottling throughout.	
				From 15 ft: Brown, gravelly (angular, fine), wet.	
20	550				


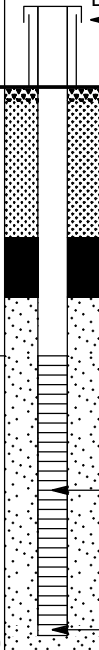



Bottom of borehole at 21.2 feet below ground surface (ft bgs).

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/16/23</u> <b>COMPLETED</b> <u>06/16/23</u>	<b>NORTHING</b> <u>1547917.68 ft</u> <b>EASTING</b> <u>1938353.52 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>571.10 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>574.06 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

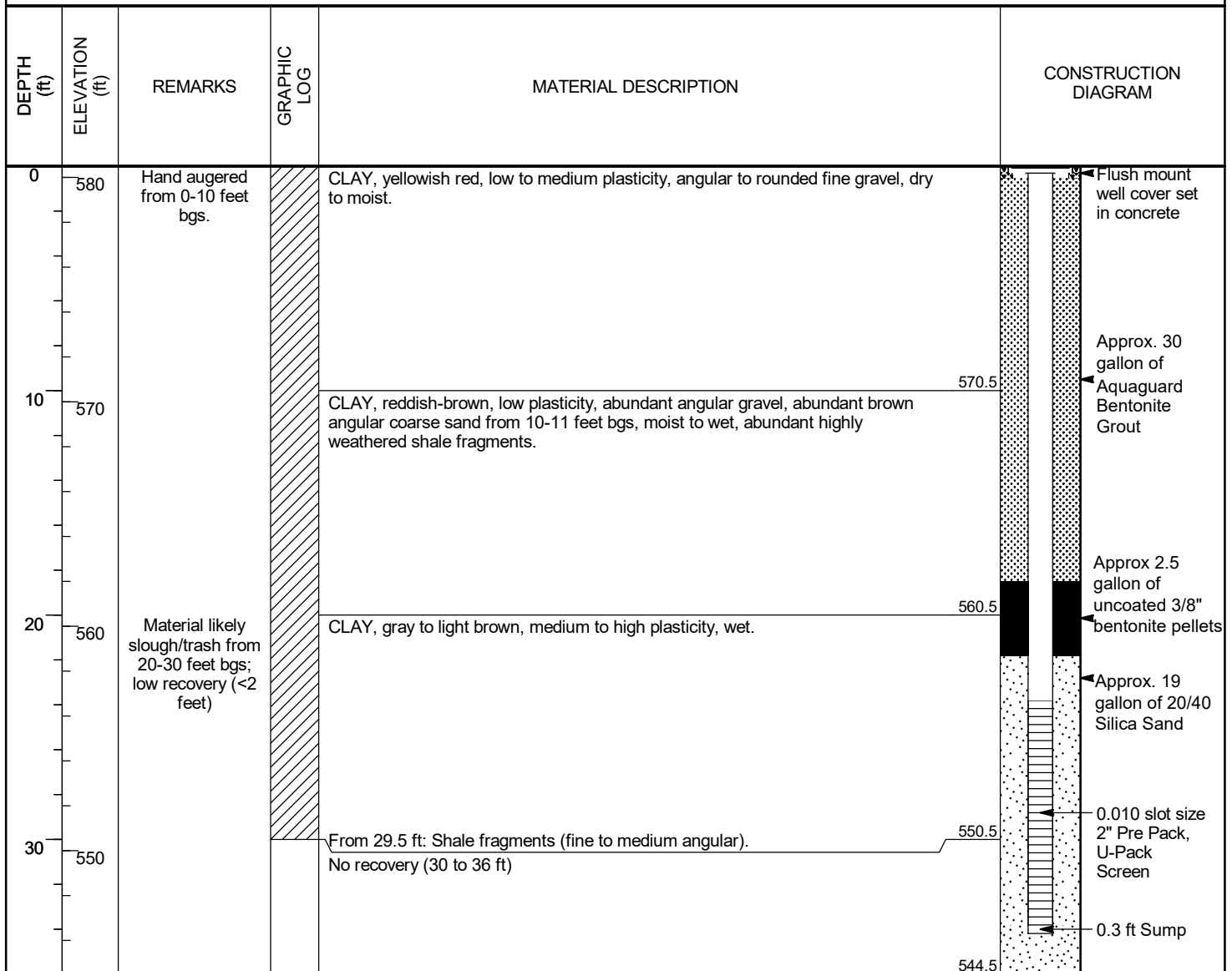
DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs.		SILTY CLAY, yellowish red, trace mica, medium plasticity, moist, trace organic material and coal from 0-1 foot bgs.	 <p>CONSTRUCTION DIAGRAM</p> <ul style="list-style-type: none"> <li>← Aboveground well cover set in concrete</li> <li>← Approx. 8 gallon of Aquaguard Bentonite Grout</li> <li>← Approx. 2.5 gallon of uncoated 3/8" bentonite pellets</li> <li>← Approx. 19 gallon of 20/40 Silica Sand</li> <li>← 0.010 slot size 2" Pre Pack, U-Pack Screen</li> <li>← 0.3 ft Sump</li> </ul>
10	560			SANDY CLAY, yellowish red, trace silt and mica, medium plasticity, wet, gray and red mottling throughout.	
20				From 20 ft: Abundant rock fragments (angular, fine to coarse) from 20-21 feet bgs.	
Bottom of borehole at 21.0 feet below ground surface (ft bgs).					

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/17/23</u> <b>COMPLETED</b> <u>06/17/23</u>	<b>NORTHING</b> <u>1547910.57 ft</u> <b>EASTING</b> <u>1938352.13 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>571.10 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>574.09 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs. Obstruction at 3.5 feet bgs. Move South 1 foot.		SILTY CLAY, yellowish red, trace sand and mica, medium plasticity, moist, trace organic material.  From 8 ft: Wet.	 <p>CONSTRUCTION DIAGRAM</p> <ul style="list-style-type: none"> <li>← Aboveground well cover set in concrete</li> <li>Approx. 8 gallon of Aquaguard Bentonite Grout</li> <li>Approx 2.5 gallon of uncoated 3/8" bentonite pellets</li> <li>Approx. 19 gallon of 20/40 Silica Sand</li> <li>0.010 slot size 2" Pre Pack, U-Pack Screen</li> <li>0.3 ft Sump</li> </ul>
10	560			SANDY CLAY, yellowish red, trace mica, medium plasticity, wet, gray and brown mottling throughout.  From 17 ft: Brown, silty.	
20	550			Bottom of borehole at 21.1 feet below ground surface (ft bgs).	

**CLIENT** Southern Company Services  
**PROJECT NUMBER** GW6581E  
**DATE STARTED** 06/06/23 **COMPLETED** 06/06/23  
**DRILLER** Cascade Drilling  
**DRILLING METHOD** Sonic  
**SAMPLING METHOD** Sonic Core  
**RIG TYPE** Terrasonic Compact Crawler

**PROJECT NAME** Plant Hammond Well Installation  
**PROJECT LOCATION** Plant Hammond  
**NORTHING** 1548918.26 ft **EASTING** 1937641.91 ft  
**GROUND ELEVATION** 580.50 **BORING DIAMETER** 6 in.  
**TOP OF CASING ELEVATION** 580.26 ft  
**GEOPHYSICAL CONTRACTOR** ---  
**LOGGED BY** T. Kessler **CHECKED BY** C. Hug



Bottom of borehole at 36.0 feet below ground surface (ft bgs).

**CLIENT** Southern Company Services

**PROJECT NUMBER** GW6581E

**DATE STARTED** 06/12/23 **COMPLETED** 06/12/23

**DRILLER** Cascade Drilling

**DRILLING METHOD** Sonic

**SAMPLING METHOD** Sonic Core

**RIG TYPE** Terrasonic Compact Crawler

**PROJECT NAME** Plant Hammond Well Installation

**PROJECT LOCATION** Plant Hammond

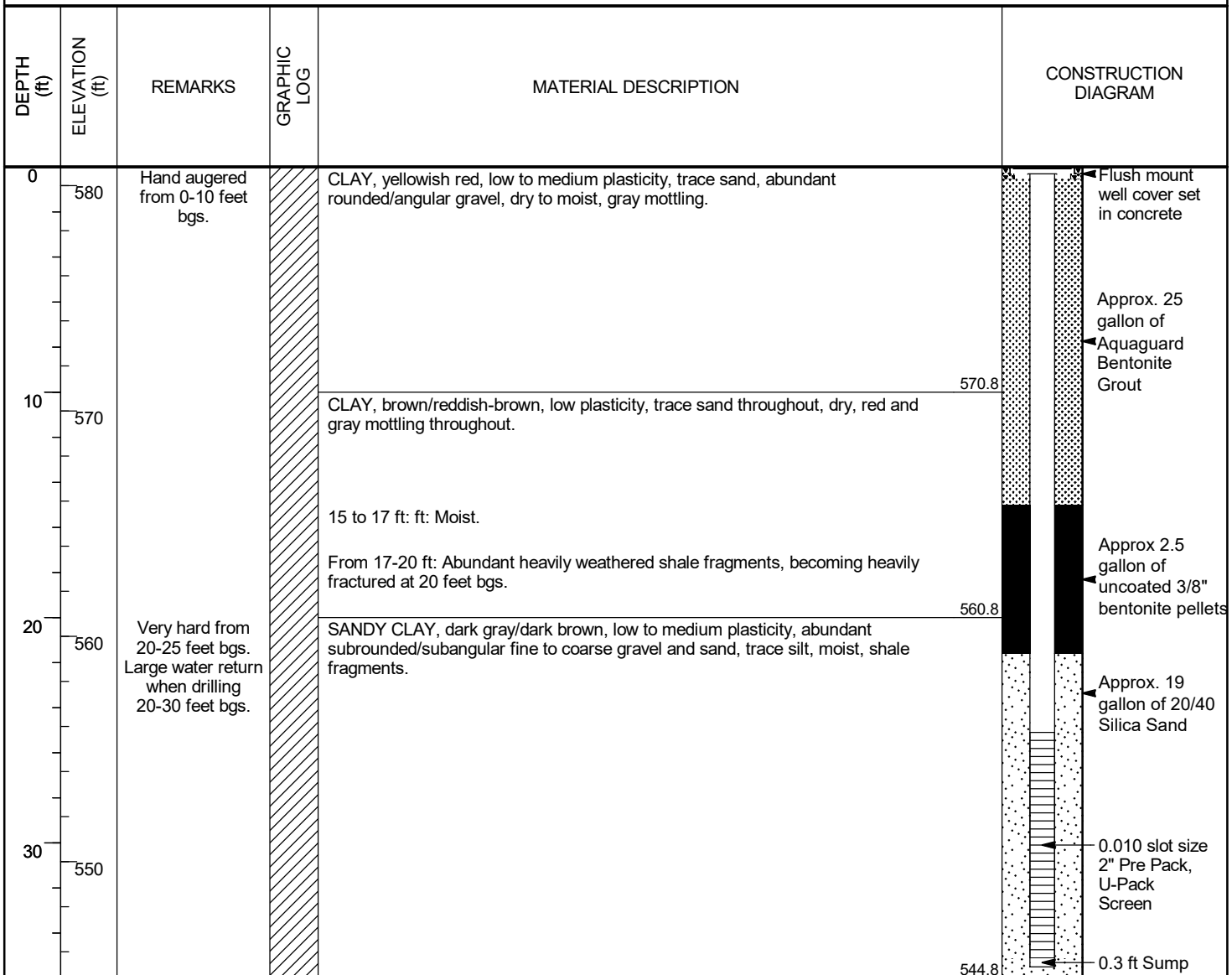
**NORTHING** 1548913.06 ft **EASTING** 4937638.48 ft

**GROUND ELEVATION** 580.83 ft **BORING DIAMETER** 6 in.

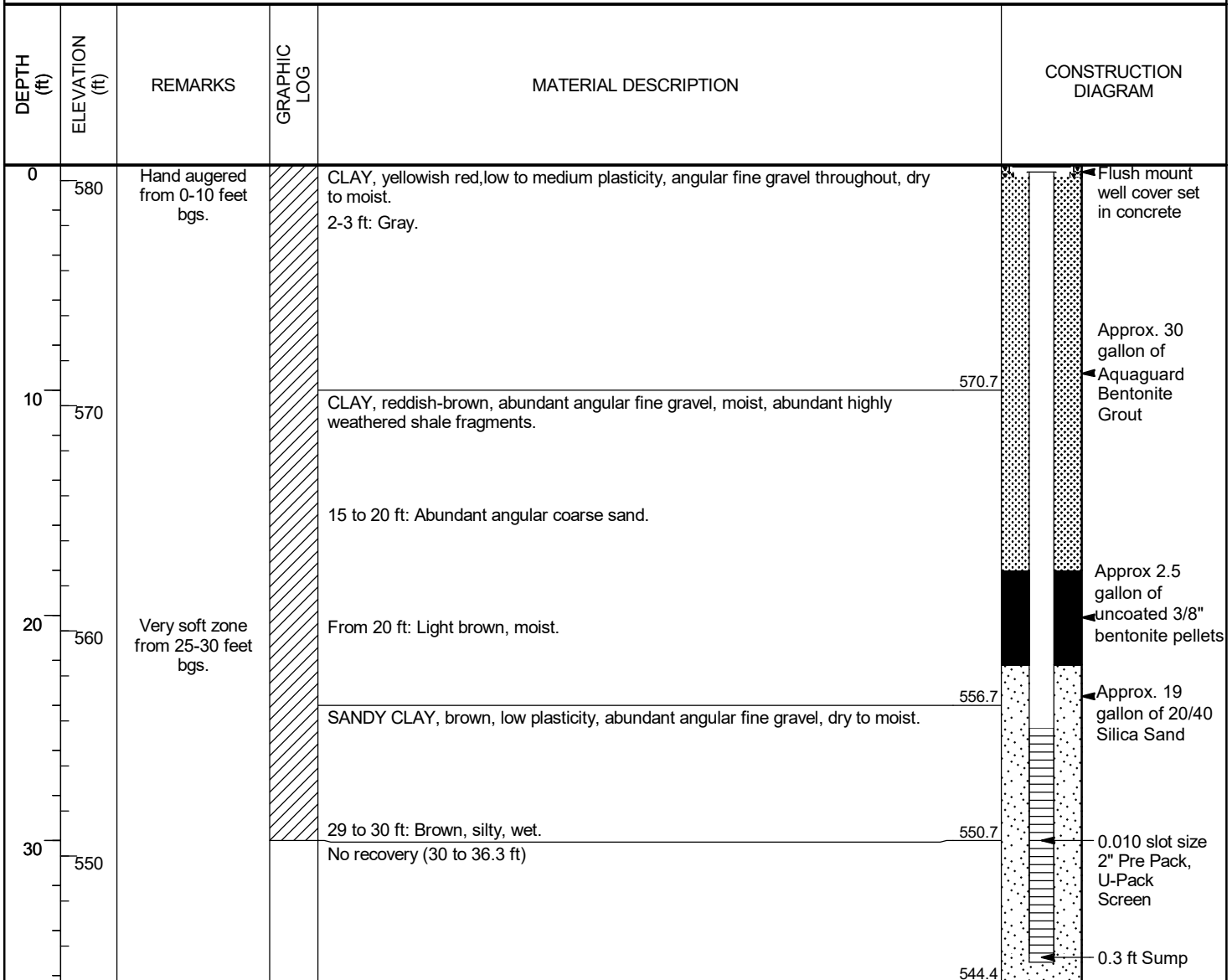
**TOP OF CASING ELEVATION** 580.54 ft

**GEOPHYSICAL CONTRACTOR** ---

**LOGGED BY** T. Kessler **CHECKED BY** C. Hug

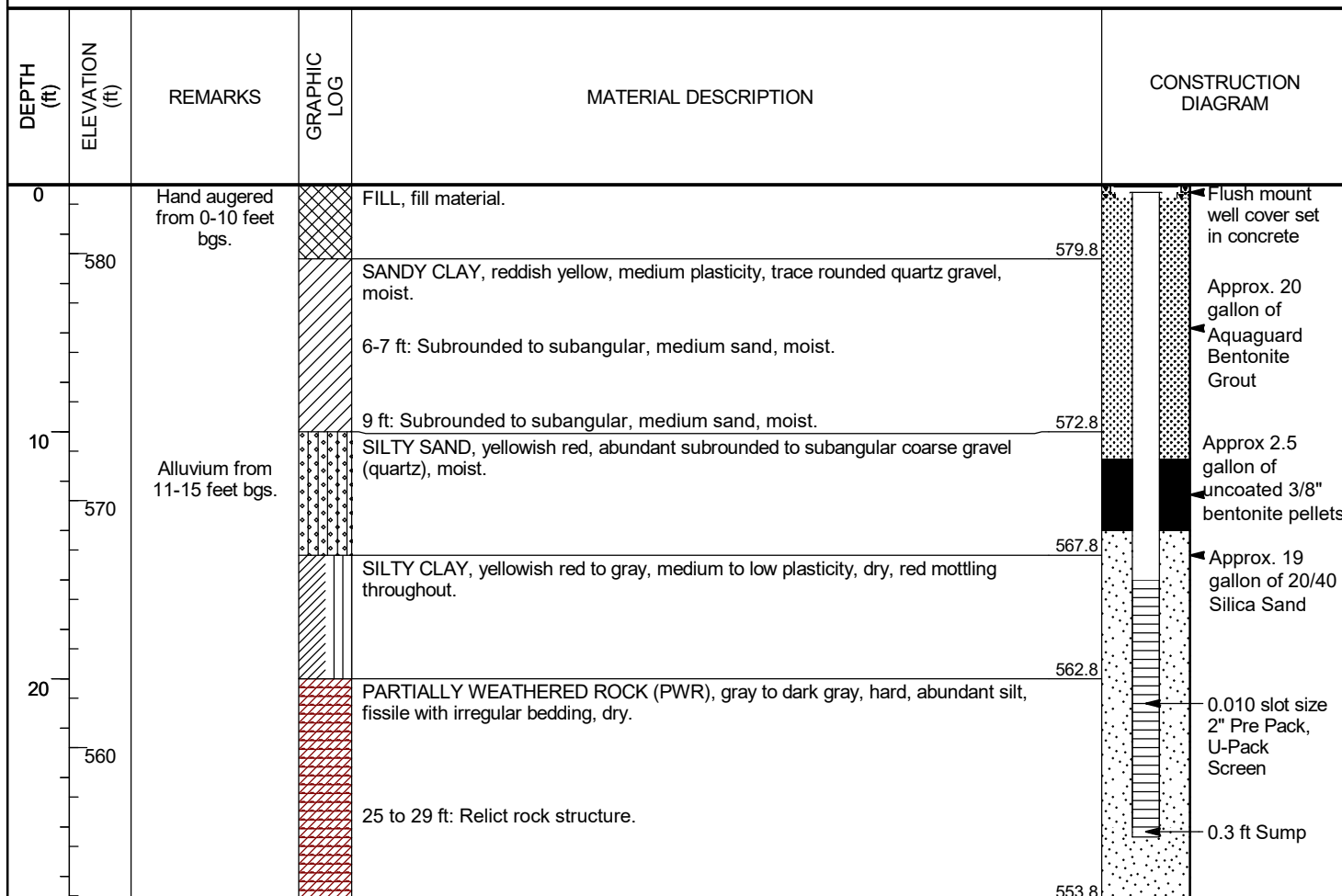


<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/07/23</u> <b>COMPLETED</b> <u>06/07/23</u>	<b>NORTHING</b> <u>1548916.95 ft</u> <b>EASTING</b> <u>1937634.25 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>580.68 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>580.36 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>



Bottom of borehole at 36.3 feet below ground surface (ft bgs).

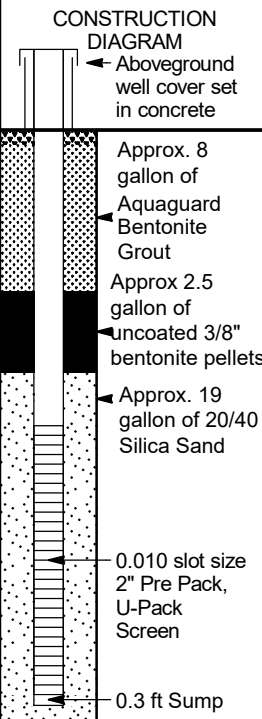
<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/13/23</u> <b>COMPLETED</b> <u>06/13/23</u>	<b>NORTHING</b> <u>1548823.40 ft</u> <b>EASTING</b> <u>1937575.72 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>582.78 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>582.49 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>



Bottom of borehole at 29.0 feet below ground surface (ft bgs).

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/15/23</u> <b>COMPLETED</b> <u>06/16/23</u>	<b>NORTHING</b> <u>1547906.81 ft</u> <b>EASTING</b> <u>1938260.81 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>570.60 ft</u> <b>BORING DIAMETER</b> <u>6</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	in. <b>TOP OF CASING ELEVATION</b> <u>573.47 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>


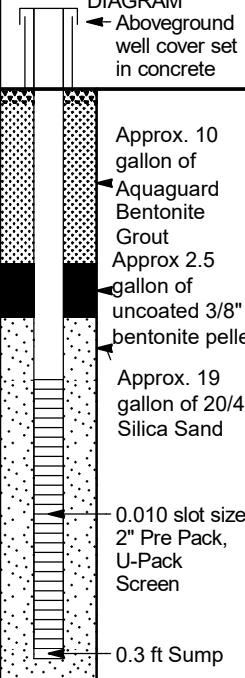

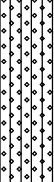
DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs.		SILTY CLAY, yellowish red, medium to high plasticity, moist, trace mica and organic material.	
				From 7.5 ft: Wet.	
10	560			CLAY, yellowish red to yellowish-brown, medium plasticity, abundant fine sand and silt, trace mica, wet.	
					560.6
				SILTY GRAVEL, brown to dark brown, fine, subrounded, wet.	
					555.6
				GRAVELLY CLAY, reddish yellow, low plasticity, abundant subrounded fine to coarse gravel, subrounded to subangular fine to medium sand, abundant silt, wet.	
					554.6
					551.6
20	550			SILTY CLAY, reddish yellow, medium plasticity, wet, red mottling throughout.	
					548.5



Bottom of borehole at 22.1 feet below ground surface (ft bgs).

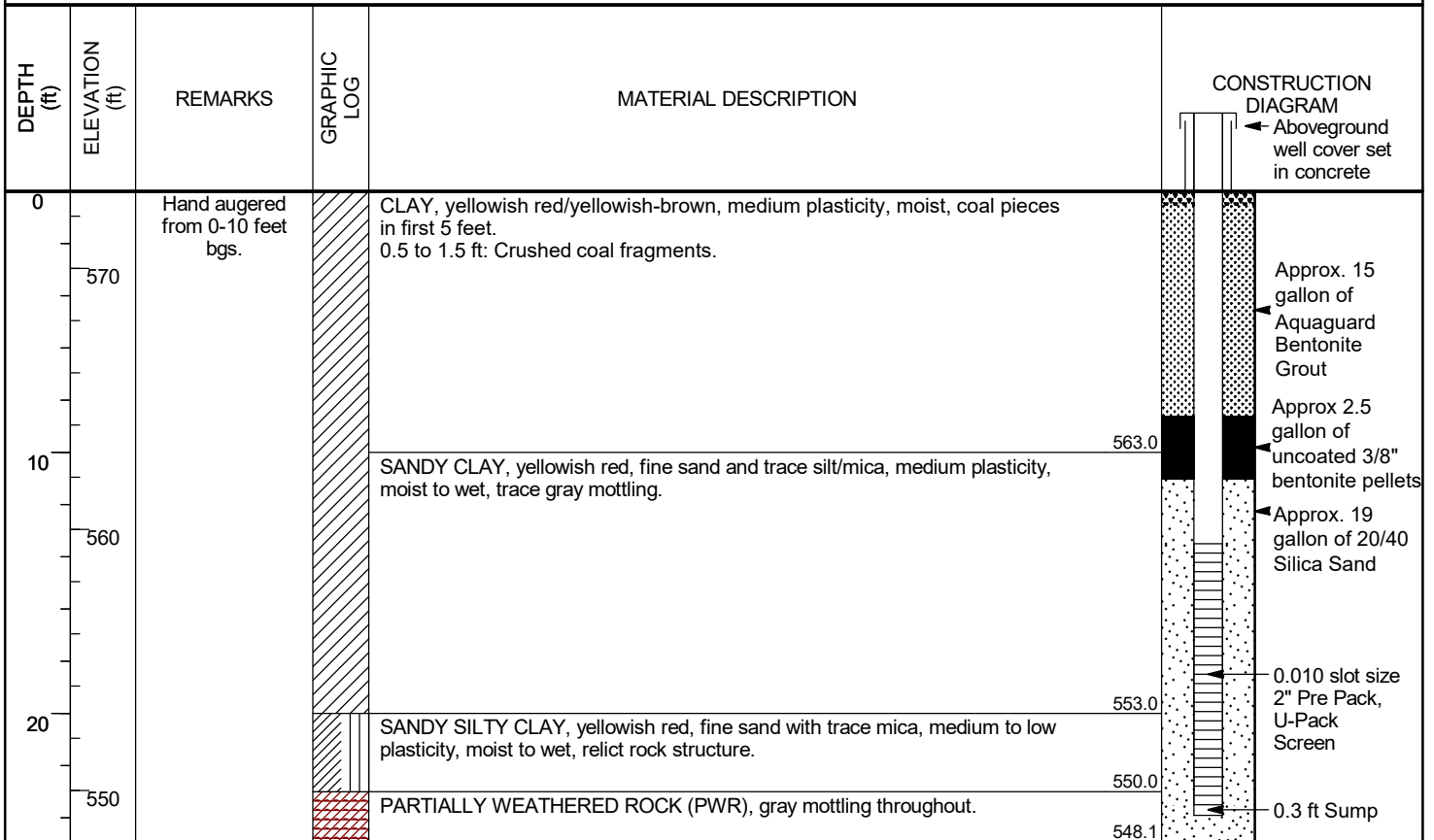


<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/16/23</u> <b>COMPLETED</b> <u>06/16/23</u>	<b>NORTHING</b> <u>1547895.53 ft</u> <b>EASTING</b> <u>1938349.49 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>571.30 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>574.28 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs.		SILTY CLAY, yellowish red, medium to high plasticity, moist, trace mica and organic matter.	 <p>CONSTRUCTION DIAGRAM</p> <ul style="list-style-type: none"> <li>← Aboveground well cover set in concrete</li> <li>Approx. 10 gallon of Aquaguard Bentonite Grout</li> <li>Approx 2.5 gallon of uncoated 3/8" bentonite pellets</li> <li>Approx. 19 gallon of 20/40 Silica Sand</li> <li>0.010 slot size 2" Pre Pack, U-Pack Screen</li> <li>0.3 ft Sump</li> </ul>
10	560			From 9 ft: Wet. 561.3	
				No recovery (10 to 12 ft) 559.3	
				SANDY CLAY, yellowish red to yellowish-brown, medium to high plasticity, wet, red/gray mottling. 556.3	
20	550			SILTY SAND, yellowish red, fine, subangular, wet.	
				From 18 ft: With highly weathered rock fragments.	
				From 21 ft: With angular rock fragments. 549.3	

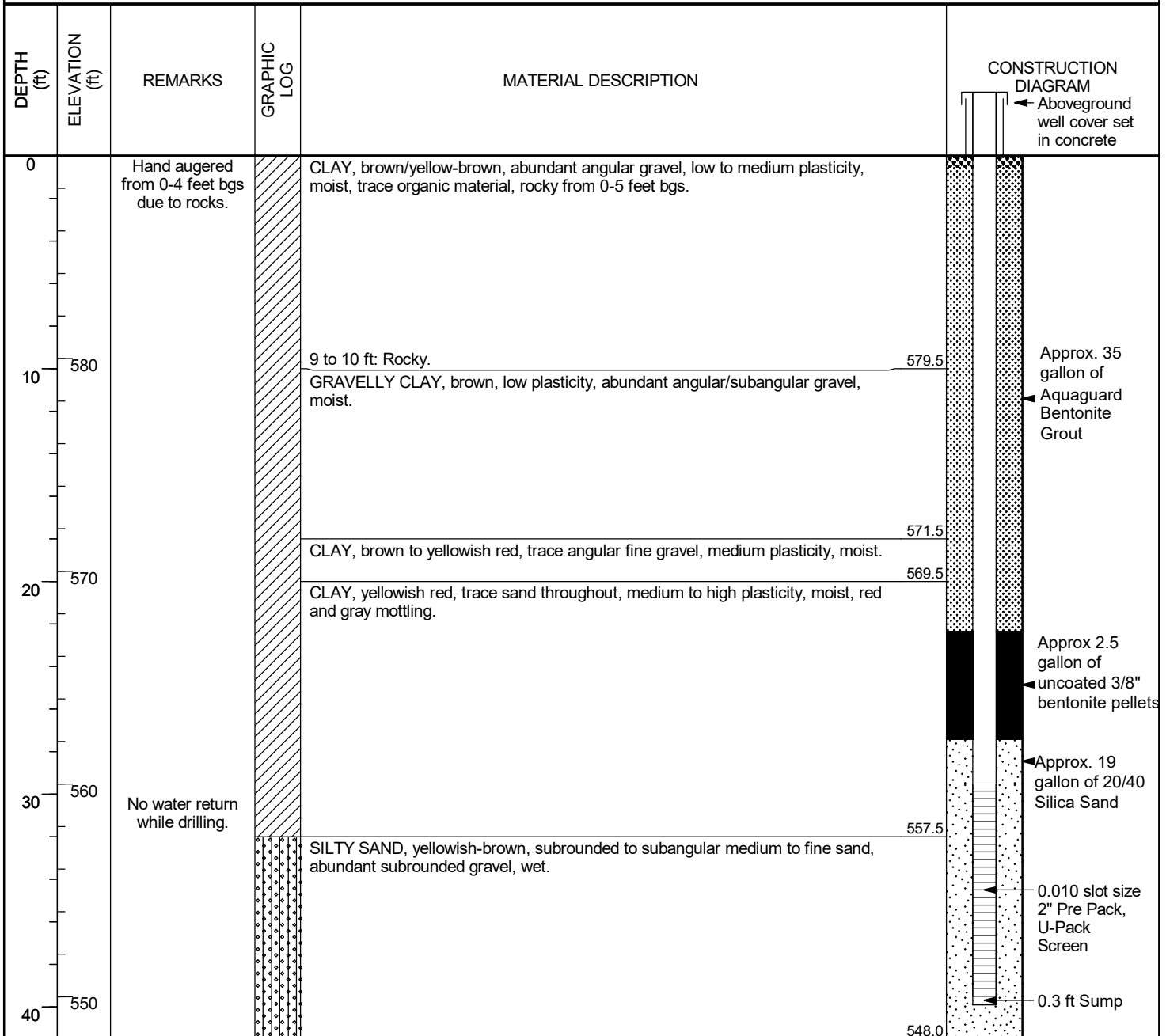
Bottom of borehole at 22.0 feet below ground surface (ft bgs).

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/17/23</u> <b>COMPLETED</b> <u>06/17/23</u>	<b>NORTHING</b> <u>1547931.46 ft</u> <b>EASTING</b> <u>1938592.55 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>572.96 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>575.87 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>




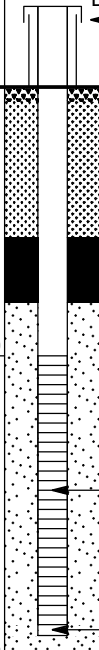

Bottom of borehole at 24.9 feet below ground surface (ft bgs).

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/13/23</u> <b>COMPLETED</b> <u>06/14/23</u>	<b>NORTHING</b> <u>1547971.14 ft</u> <b>EASTING</b> <u>1938344.65 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>589.52 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>592.2 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>



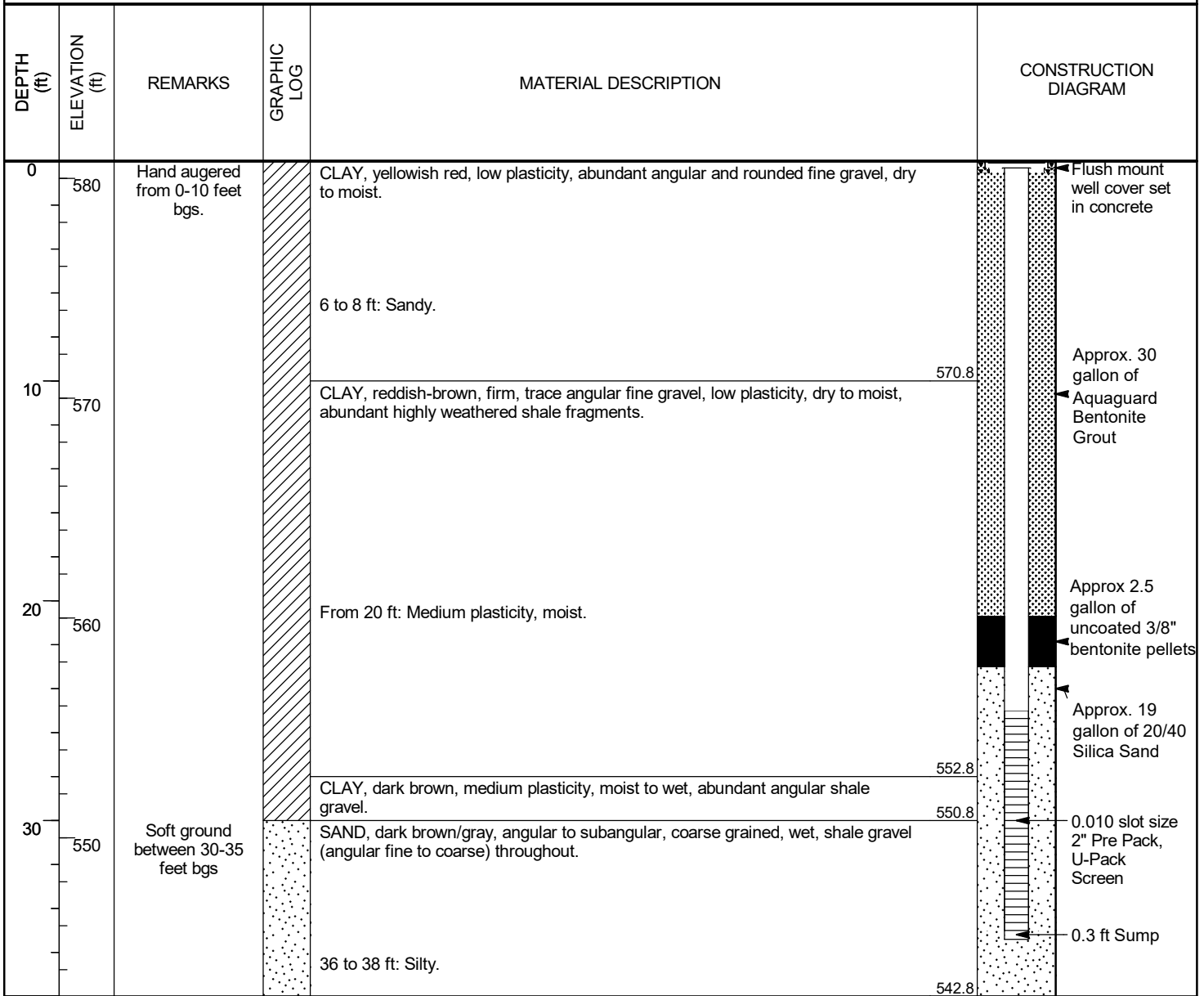
Bottom of borehole at 41.5 feet below ground surface (ft bgs).

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/16/23</u> <b>COMPLETED</b> <u>06/16/23</u>	<b>NORTHING</b> <u>1547921.52 ft</u> <b>EASTING</b> <u>1938350.62 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>571.04 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>573.90 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>

DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	CONSTRUCTION DIAGRAM
0	570	Hand augered from 0-10 feet bgs.		SILTY CLAY, yellowish red, medium plasticity, moist, trace mica and organic material.	 <p>CONSTRUCTION DIAGRAM</p> <ul style="list-style-type: none"> <li>← Aboveground well cover set in concrete</li> <li>← Approx. 10 gallon of Aquaguard Bentonite Grout</li> <li>← Approx 2.5 gallon of uncoated 3/8" bentonite pellets</li> <li>← Approx. 19 gallon of 20/40 Silica Sand</li> <li>← 0.010 slot size 2" Pre Pack, U-Pack Screen</li> <li>← 0.3 ft Sump</li> </ul>
10	560			SANDY CLAY, yellowish red, trace silt and mica, medium to low plasticity, wet, gray mottling throughout.	
20	550			From 20 ft: Abundant angular, fine to coarse rock gravel.	

Bottom of borehole at 21.2 feet below ground surface (ft bgs).

<b>CLIENT</b> <u>Southern Company Services</u>	<b>PROJECT NAME</b> <u>Plant Hammond Well Installation</u>
<b>PROJECT NUMBER</b> <u>GW6581E</u>	<b>PROJECT LOCATION</b> <u>Plant Hammond</u>
<b>DATE STARTED</b> <u>06/06/23</u> <b>COMPLETED</b> <u>06/06/23</u>	<b>NORTHING</b> <u>1548915.00 ft</u> <b>EASTING</b> <u>1937643.89 ft</u>
<b>DRILLER</b> <u>Cascade Drilling</u>	<b>GROUND ELEVATION</b> <u>580.78 ft</u> <b>BORING DIAMETER</b> <u>6 in.</u>
<b>DRILLING METHOD</b> <u>Sonic</u>	<b>TOP OF CASING ELEVATION</b> <u>580.56 ft</u>
<b>SAMPLING METHOD</b> <u>Sonic Core</u>	<b>GEOPHYSICAL CONTRACTOR</b> <u>---</u>
<b>RIG TYPE</b> <u>Terrasonic Compact Crawler</u>	<b>LOGGED BY</b> <u>T. Kessler</u> <b>CHECKED BY</b> <u>C. Hug</u>



Bottom of borehole at 38.0 feet below ground surface (ft bgs).

# APPENDIX C

## Well Development and Equipment Calibration Forms

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-01 PFO1  
 Total Depth (ft): 23.47  
 Depth to Water (ft): 9.81  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.24  
 Well Volume (L) = gal \* 3.785: 8.48

Project No.: G-65816  
 Location: AP-2  
 Pump Type/Model: Monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 23 / 18.5  
 Start/Stop Purge Time: 1240 / 1539  
 Purge Rate (mL/min): gal/min 1.0 / 0.5  
 Total Purge Volume (L): gal 48.0

Sampling Date: 6-29-2023  
 Sampler's Name: A. Szwest  
 Sample Collection Time: ✓  
 Sample Purge Rate (mL/min): ✓  
 Sample ID: ✓  
 Laboratory Analyses: ✓

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush  Stick Up  
 Well Lock:  Yes No  
 Well Cap Condition:  Good Replace  
 Well Tag Present:  Yes No

Purge Method: Low-Flow Well Volume Other: ✓  
 Sampling Method: Pump Discharge Other: ✓  
 QA/QC Collected? ✓  
 QA/QC I.D. ✓

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No N/A

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (gal/min)	Purged Volume (gal)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1240								1.0		Pre-purge 1 gal/min
1255								0	15	Purge dry. allow recharge
1310								0.5	15	Pre-purge 0.5 gal/min
1320								0	20	Purge dry. allow recharge
1335								1.0	20	Pre-purge 1 gal/min
1338								0	23	Purge dry. allow recharge
1357	4.82	1859.4	149.4	4.60	20.58	— @ 6-29-23	17.56	1.0	23	Pre-purge @ 6-29-2023. Begin purge. Not enough for subcell
1358					21.10 @ 6-29-23			0	24	Purge dry. allow recharge
1424	4.79	1862.5	150.3	3.48	18.47 @ 6-29-23	71.4	15.89	0.5	24	Begin purge
1429	4.79	2072.2	123.5	5.89	18.47	103	17.28	0.5	26.5	
1434	4.70	1932.5	114.7	4.22	19.14	156	19.63	0.5	29	
1437							20.03 @ 6-29-23	0	30.5	Purge dry. allow recharge
1454	4.73	1916.2	129.1	4.43	21.82	51.3 @ 6-29-23	17.43	0.5	30.5	DTW = 15.81
1459	4.71	2091.6	104.7	6.04	19.11	34.3 @ 6-29-23	17.93	0.5	33.0	
1500								0	35.5	Purge dry
1514	4.81	2077.5	127.1	4.35	22.04	27.6	14.89	0.5	35.5	
1519	4.62	2003.1	106.7	4.08	28.65	36.8	17.45	0.5	38.0	
1524	4.71	2131.2	105.3	5.61	19.05	24.8	17.48	0.5	40.5	
1529	4.73	2144.7	114.8	4.96	19.50	12.8	18.32	0.5	43.0	Flow intermittently decreasing, then return to full flow
Stabilizing Criteria	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCS</u>	Project No.: <u>G-265826</u>	Sampling Date: <u>6-29-2023</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>A. Szwast</u>
Well ID: <u>PT-01</u>	Pump Type/Model: <u>Monsoon</u>	Sample Collection Time: <u>—</u>
Total Depth (ft): <u>23.47</u>	Tubing Material: <u>Poly</u>	Sample Purge Rate (mL/min): <u>—</u>
Depth to Water (ft): <u>9.81</u>	Pump Intake Depth (ft): <u>23/18.5</u>	Sample ID: <u>—</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>1240/1539</u>	Laboratory Analyses: <u>—</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>2.24</u>	Purge Rate (mL/min): <u>gal/min 1.0/0.5</u>	
Well Volume (L) = gal * 3.785: <u>8.48</u>	Total Purge Volume <u>48.0</u>	
<i>d = well diameter (inches); h = length of water column (feet)</i>		
Well Type: Flush <u>Stick Up</u>	Purge Method: Low-Flow Well Volume Other: <u>—</u>	QA/QC Collected? <u>—</u>
Well Lock: <u>Yes</u> No	Sampling Method: Pump Discharge Other: <u>—</u>	QA/QC I.D. <u>—</u>
Well Cap Condition: <u>Good</u> Replace	<b>All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No MA</b>	
Well Tag Present: <u>Yes</u> No		

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1534	4.60	2036.7	111.1	4.98	19.68	13.7	17.47	0.5	45.5	
1539	4.61	2100.4	123.1	5.28	19.93	2.59	17.45	0.5	48.0	
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	



GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCS</u>	Project No.: <u>GW65816</u>	Sampling Date: <u>6-29-2023</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>A. Swast</u>
Well ID: <u>PT-01</u>	Pump Type/Model: <u>Monsoon</u>	Sample Collection Time: <u>—</u>
Total Depth (ft): <u>23.47</u>	Tubing Material: <u>Poly</u>	Sample Purge Rate (mL/min): <u>—</u>
Depth to Water (ft): <u>12.15</u>	Pump Intake Depth (ft): <u>23 18.5</u>	Sample ID: <u>—</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>1604 /</u>	Laboratory Analyses: <u>—</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>1.86</u>	Purge Rate (mL/min): <u>150</u>	
Well Volume (L) = gal * 3.785: <u>7.03</u>	Total Purge Volume (L): <u>2.3</u>	
Purge Method: <u>Low-Flow</u> Well Volume Other: <u>—</u>		QA/QC Collected? <u>—</u>
Sampling Method: <u>Pump Discharge</u> Other: <u>—</u>		QA/QC I.D. <u>—</u>

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush Stick Up

Well Lock: Yes No

Well Cap Condition: Good Replace

Well Tag Present: Yes No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No N/A

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
<u>1604</u>										<u>Pre-purge for flow at 150 mL/min</u>
<u>1609</u>	<u>4.71</u>	<u>2320.3</u>	<u>166.7</u>	<u>3.12</u>	<u>22.35</u>	<u>4.71</u>	<u>11.68</u>	<u>150</u>	<u>0.75</u>	
<u>1614</u>	<u>4.69</u>	<u>2260.3</u>	<u>178.1</u>	<u>3.28</u>	<u>23.16</u>	<u>3.23</u>	<u>11.45</u>	<u>150</u>	<u>1.5</u>	
<u>1619</u>	<u>4.63</u>	<u>2246.3</u>	<u>106.5</u>	<u>3.38</u>	<u>22.63</u>	<u>2.49</u>	<u>11.44</u>	<u>150</u>	<u>2.3</u>	
<u>29-2023</u>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or <u>10%</u> for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-02  
 Total Depth (ft): 23.4  
 Depth to Water (ft): 9.0  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.26  
 Well Volume (L) = gal \* 3.785: 8.57

Project No.: GW05516  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: poly  
 Pump Intake Depth (ft): 18  
 Start/Stop Purge Time: 1030/1050  
 Purge Rate (mL/min): 8000  
 Total Purge Volume (L): 8.57

Sampling Date: 6/28/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected?: -  
 QA/QC ID: -

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush Stick Up  
 Well Lock: Yes No  
 Well Cap Condition: Good Replace  
 Well Tag Present: Yes No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1030 1050										begin purging, motor broke had to get it fixed
										purging AN
										6/27/23
<b>Stabilizing Criteria</b>	<b>+/- 0.1 SU</b>	<b>+/- 5%</b>		<b>0.2 mg/L or 10% for DO &gt; 0.5 mg/L (whichever is greater)</b>		<b>&lt; 5 NTUs</b>	<b>&lt; 0.3 ft</b>	<b>&gt; 100 mL &lt; 250 mL</b>	<b>&gt; 3L</b>	

GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCG</u>	Project No.: <u>GWUS81G</u>	Sampling Date: <u>06/28/23</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>AN</u>
Well ID: <u>PT-02</u>	Pump Type/Model: <u>monssoon</u>	Sample Collection Time: <u>-</u>
Total Depth (ft): <u>23.4</u>	Tubing Material: <u>poly</u>	Sample Purge Rate (mL/min): <u>-</u>
Depth to Water (ft): <u>9.6</u>	Pump Intake Depth (ft): <u>18</u>	Sample ID: <u>-</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>1625/1700</u>	Laboratory Analyses: <u>-</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>2.26</u>	Purge Rate (mL/min): <u>8000</u>	
Well Volume (L) = gal * 3.785: <u>8.57</u>	Total Purge Volume (L): <u>8.57</u>	
<i>d = well diameter (inches); h = length of water column (feet)</i>		
Well Type: Flush <input type="radio"/> <u>Stick Up</u> <input checked="" type="radio"/>	Purge Method: Low-Flow <input type="checkbox"/> Well Volume <input type="checkbox"/> Other: <input type="checkbox"/>	QA/QC Collected? <input type="checkbox"/>
Well Lock: <input checked="" type="radio"/> Yes <input type="radio"/> No	Sampling Method: Pump Discharge <input type="checkbox"/> Other: <input type="checkbox"/>	QA/QC I.D. <input type="checkbox"/>
Well Cap Condition: <input checked="" type="radio"/> Good <input type="radio"/> Replace	All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No	
Well Tag Present: <input checked="" type="radio"/> Yes <input type="radio"/> No		

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1625										begin purging, pumped any, on + off pumping in between recharges stop purging
1700										
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>6/27/23 AN</p> <p>6/27/23 AN</p> </div>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCS</u>	Project No.: <u>'06W65816</u>	Sampling Date: <u>6-30-2013</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>A. Sworst</u>
Well ID: <u>PT-02</u>	Pump Type/Model: <u>Monsoon</u>	Sample Collection Time: <u>—</u>
Total Depth (ft): <u>23.4</u>	Tubing Material: <u>Pols</u>	Sample Purge Rate (mL/min): <u>—</u>
Depth to Water (ft): <u>9.86</u>	Pump Intake Depth (ft): <u>23 / 18.4</u>	Sample ID: <u>—</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>1050 / 1550</u>	Laboratory Analyses: <u>—</u>
Well Volume (gal) = 0.041 d <sup>3</sup> h: <u>2.22</u>	Purge Rate (mL/min): <u>1.0 / 0.5 / 0.25</u>	QA/QC Collected?: <u>—</u>
Well Volume (L) = gal * 3.785: <u>8.40</u>	Total Purge Volume (L): <u>21.0</u>	QA/QC I.D.: <u>—</u>
d = well diameter (inches); h = length of water column (feet)		
Well Type: Flush <input type="checkbox"/> <u>Stick Up</u>	Purge Method: Low-Flow <input type="checkbox"/> Well Volume <input type="checkbox"/> Other: <input type="checkbox"/>	
Well Lock: Yes <input type="checkbox"/> No <input type="checkbox"/>	Sampling Method: Pump Discharge <input checked="" type="checkbox"/> Other: <input type="checkbox"/>	
Well Cap Condition: Good <input checked="" type="checkbox"/> Replace <input type="checkbox"/>	All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No <u>N/A</u>	
Well Tag Present: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1050								1.0	0	Pre-purge at 1 gal/min
1058								0	8.0	Purge dry, allow recharge
1146	5.15	1932.6	91.9	6.46	19.59	707 AU	20.0	0.5	8.0	Begin development
1148								0	9.0	Purge dry
1209								0.5	9.0	Begin development
1211	5.25	1870.5	74.9	6.58	19.34	7500 NTU	21.22	0.5	10.0	>> 00 NTU = turbidity overrange
1216	5.44	2031.0	88.0	6.61	19.32	7500 NTU	20.68	0.5	12.5	
1218								0	13.5	Purge dry
1300								0	13.5	Lightning stand down
1457						99.5	10.39	0.25	13.5	Restart purge
1506	5.02	1928.7	121.5	6.94	19.61	41.2	14.70	0.25	15.8	
1516	4.86	1918.2	85.7	5.67	18.16	92.9	17.73	0.25	17.0	
1517								0	17.5	Purge dry
1526	5.03	1978.1	88.6	6.75	21.10	122	16.64	0.25	17.5	Restart purge
1531	4.91	2034.3	110.2	6.22	19.70	132	17.97	0.25	19.8	
1532								0	20.0	Purge dry
1546	4.87	1976.8	98.5	6.73	19.19	60.2	16.76	0.25	20.0	
1550									21.0	Purge dry. Development incomplete.
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L. (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-02  
 Total Depth (ft): 23.4  
 Depth to Water (ft): 9.8  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.23  
 Well Volume (L) = gal \* 3.785: 8.44

Project No.: 0W4587  
 Location: AD-2  
 Pump Type/Model: MONSOON  
 Tubing Material: POLY  
 Pump Intake Depth (ft): 18.4  
 Start/Stop Purge Time: 1350/1437  
 Purge Rate (mL/min): 8000  
 Total Purge Volume (L): 1092

Sampling Date: 7/5/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected? -  
 QA/QC I.D. -

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush Stick Up  
 Well Lock: Yes No  
 Well Cap Condition: Good Replace  
 Well Tag Present: Yes No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1427	5.00	1915.9	174.0	2.40	18.58	1829 AU	17.9	8000	18	pre purge 20 min on rate flow, well pumps dry quickly
1432	5.01	2116.8	117.5	0.03	19.17	2122 AU	18.2	8000	58	
1437	5.33	2040.0	125.7	3.39	19.80	1875 AU	18.2	8000	98	
1442	5.30	2000.0	83.8	3.02	20.00	1060 AU	18.2	8000	132	
1447	5.27	1951.1	84.9	4.02	20.19	704 AU	18.2	8000	172	
1452	5.35	1990.2	72.7	3.26	20.53	50	18.2	8000	212	
1457	2.31	1908.4	105.4	3.81	20.77	15	18.2	8000	252	
1502	5.31	45.25	45.25	7.02	22.28	17	18.2	8000	292	cell wasn't completely full
1507	5.19	1940.5	78.8	4.50	20.31	64.8	18.2	8000	332	
1512	5.14	1941.9	74.9	4.47	20.30	35.3	18.2	8000	372	
1517	5.30	2107.4	71.3	5.50	20.82	50.5	18.2	8000	412	
1522	3.30	1916.6	67.0	5.43	21.30	53.5	18.2	8000	452	
1527	3.21	1958.8	66.8	4.37	20.97	47.2	18.2	8000	492	
1615	4.98	1837.0	112.8	8.85	21.43	22.2	18.2	8000	532	battery died, had to turn cell
1622	4.93	1915.9	100.7	5.71	19.55	28	18.2	8000	572	
1627	4.91	2050.8	136.7	4.70	19.81	21.1	18.2	8000	612	
1632	5.02	2020.0	83.4	4.07	20.45	11.16	18.2	8000	652	
1637	5.02	2057.3	69.4	4.68	20.95	8.12	18.2	8000	692	7/5/23 AN

Stabilizing Criteria	+/- 0.1 SU	+/- 5%	0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)	< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L
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GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-02  
 Total Depth (ft): 23.4  
 Depth to Water (ft): 9.8  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.23  
 Well Volume (L) = gal \* 3.785: 8.44

Project No.: GW0581  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: PVDF  
 Pump Intake Depth (ft): 18.4  
 Start/Stop Purge Time: 11040/11057  
 Purge Rate (mL/min): 2.00  
 Total Purge Volume (L): 3.4  
 Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

Sampling Date: 7/5/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected?: -  
 QA/QC ID: -

*d = well diameter (inches); h = length of water column (feet)*  
 Well Type: Flush  Stick Up  
 Well Lock:  Yes No  
 Well Cap Condition:  Good Replace  
 Well Tag Present:  Yes No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
11042	5.00	2048.7	86.1	4.85	21.84	7.88	18.0	2.00	0.4	pre purge for flow
11047	4.98	2020.3	71.8	5.02	22.60	6.81	18.0	2.00	1.4	
11052	5.02	1991.5	93.4	4.91	22.09	7.77	18.0	2.00	2.4	
11057	4.96	2017.0	101.8	5.32	20.89	4.55	18.0	2.00	3.4	
<del>7/5/23 AN</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-03  
 Total Depth (ft): 25.6  
 Depth to Water (ft): 9.60  
 Well Diameter (in): 25.0<sup>mm</sup> 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.62  
 Well Volume (L) = gal \* 3.785: 9.92

Project No.: GW0581G  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: poly  
 Pump Intake Depth (ft): 20  
 Start/Stop Purge Time: 0850/0943  
 Purge Rate (mL/min): 8000  
 Total Purge Volume (L): 424

Sampling Date: 6/28/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected? -  
 QA/QC I.D. -

*d = well diameter (inches); h = length of water column (feet)*

Well Type: Flush Stick Up  
 Well Lock: Yes No  
 Well Cap Condition: Good Replace  
 Well Tag Present: Yes No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0913	5.18	2118.0	171.5	4.13	17.45	02.6 AN	19.3	8000	184	
0918	5.40	2205.9	243.7	3.59	17.45	00.5	19.5	8000	224	
0923	5.30	2199.2	248.9	3.69	17.40	0.8	18.8	8000	264	
0928	5.22	2091.2	229.3	3.42	17.41	0.47	19.4	8000	304	
0933	5.17	2061.8	242.6	3.43	17.41	0.37	19.3	8000	344	
0938	5.35	2207.3	227.3	3.75	17.44	0.76	19.4	8000	384	
0943	5.33	2187.9	323.4	3.07	17.36	3.26	19.4	8000	424	
AN 6/28/23										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-03  
 Total Depth (ft): 25.6  
 Depth to Water (ft): 9.60  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.62  
 Well Volume (L) – gal \* 3.785: 9.92

Project No.: GW65816  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 20.5  
 Start/Stop Purge Time: 092848/1005  
 Purge Rate (mL/min): 300  
 Total Purge Volume (L): 6

Sampling Date: 6/28/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected? -  
 QA/QC LD: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method:  Low-Flow  Well Volume  Other: -  
 Sampling Method:  Pump Discharge  Other: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0953	5.52	2176.1	219.5	2.04	17.66	15.6	12.6	300	1.5	
0958	5.38	2142.5	132.6	0.91	17.55	3.43	12.3	300	3	
1003	5.41	2163.0	158.4	1.04	17.57	3.09	12.3	300	4.5	
1008	5.39	2160.2	162.0	0.97	17.54	2.62	12.3	300	6	
<p>AN GW65816</p>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	



GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-04  
 Total Depth (ft): 34.07  
 Depth to Water (ft): 14.62  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.19  
 Well Volume (L) = gal \* 3.785: 12.1

Project No.: GW65816  
 Location: AP-2  
 Pump Type/Model: Monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 33.5/29  
 Start/Stop Purge Time: 1230/1452  
 Purge Rate (mL/min): 2.5 gal/min  
 Total Purge Volume (L): 155 gal

Sampling Date: 6-27-2023  
 Sampler's Name: A. Swarst  
 Sample Collection Time: —  
 Sample Purge Rate (mL/min): —  
 Sample ID: —  
 Laboratory Analyses: —

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: —  
 Sampling Method: Pump Discharge Other: —

QA/QC Collected? —  
 QA/QC I.D. —

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No NA

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (gal/min) (mL/min)	Purged Volume (gal) (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1230										Pre-purge at 2.5 gal/min
1248									45	well purging dry. stop purge
1408									45	Start purge at 2.5 gal/min (pre-purge)
1412	6.26	1710.4	-8.2	0.28	18.88	2776 AU	24.78	2.5	55	turbidity units: AU
1417	6.25	1744.8	-23.3	0.56	18.42	2819 AU	25.15	2.5	68	
1422	6.23	1745.7	-16.5	0.27	18.34	191 NTU	25.48	2.5	80	Pump clogged, Clean pump. Position at 29 ft
1427	6.86	5.23	-5.1	6.65	20.84	765 AU	20.01	2.5	93	
1432	6.23	1747.4	0.6	0.34	18.65	775 NTU	20.58	2.5	105	turbidity units: NTU
1437	6.21	1759.2	5.1	0.23	18.74	2777 45.4	21.07	2.5	118	
1442	6.21	1762.6	5.1	0.17	18.73	27.7	21.25	2.5	130	
1447	6.20	1761.2	16.1	0.14	18.34	13.9	21.30	2.5	143	
1452	6.20	1763.4	5.6	0.12	18.30	9.36	21.41	2.5	155	
Stabilizing Criteria	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-04  
 Total Depth (ft): 34.07  
 Depth to Water (ft): 19.65  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.02  
 Well Volume (L) = gal \* 3.785: 11.4

Project No.: G-065816  
 Location: AP-2  
 Pump Type/Model: Mohrsoern  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 29  
 Start/Stop Purge Time: 1454/1519  
 Purge Rate (mL/min): 300/150  
 Total Purge Volume (L): 6.0  
 Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

Sampling Date: 6-27-2023  
 Sampler's Name: A. Szewast  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected? -  
 QA/QC I.D. -

d = well diameter (inches); h = length of water column (feet)

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No N/A

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1504	6.27	1781.7	-15.4	0.04	23.03	8.18	15.65	300	3.0	Pre-purge 10 min at 300 ml/min for flow Reduce flow to 150 ml/min
1509	6.24	1798.4	-30.7	0.02	25.01	6.25	15.44	150	4.5	
1514	6.23	1765.9	-33.0	0.03	26.83	5.42	15.39	150	5.3	
1519	6.22	1778.3	-36.1	0.05	27.86	4.65	15.35	150	6.0	
AS 6-27-2023										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: PT-05  
 Total Depth (ft): 35.39  
 Depth to Water (ft): 14.81  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.38  
 Well Volume (L) = gal \* 3.785: 12.8

Project No.: GW65816  
 Location: AP-2  
 Pump Type/Model: Monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 34.9 / 30.4  
 Start/Stop Purge Time: 1348 / 1447  
 Purge Rate (mL/min): 1.5 gal/min  
 Total Purge Volume (L): 88.5 gal

Sampling Date: 6-28-2023  
 Sampler's Name: A. Scriver  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*  
 Well Type:  Flush  Stick Up  
 Well Lock: Yes  No   
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

QA/QC Collected? -  
 QA/QC ID: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No N/A

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (gal)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)	
1348											
1412	6.23	1655.9	19.5	0	19.45	2497 AU	18.35	1.5	30	Pre-purge at 1.5 gal/min	
1417	6.22	1666.4	23.3	0	18.61	85.8 NTU	18.43	1.5	44		
1422	6.21	1677.4	23.8	0	18.55	69.1	18.44	1.5	51		
1427	6.21	1683.8	25.8	0	18.56	37.9	18.60	1.5	59		
1432	6.20	1694.6	25.6	0	18.53	11.6	18.63	1.5	66		
1437	6.20	1701.7	26.1	0	18.54	51.8	18.64	1.5	73.5		
1442	6.20	1713.8	15.2	0	18.52	13.8	18.76	1.5	81		
1447	6.20	1715.6	14.3	0	18.50	3.59	18.82	1.5	88.5		
					<u>6-28-2023</u>						
					<u>6-18-2023</u>						
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L		

GROUNDWATER SAMPLING LOG SHEET

Client: <u>SC9</u>	Project No.: <u>G-W6581G</u>	Sampling Date: <u>6-28-2023</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>A. Sewast</u>
Well ID: <u>PT-05</u>	Pump Type/Model: <u>Monsoon</u>	Sample Collection Time: <u>—</u>
Total Depth (ft): <u>35.39</u>	Tubing Material: <u>Poly</u>	Sample Purge Rate (mL/min): <u>—</u>
Depth to Water (ft): <u>15.49</u>	Pump Intake Depth (ft): <u>30.4</u>	Sample ID: <u>—</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>1455/1516</u>	Laboratory Analyses: <u>—</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>8.26 3.38 <sup>Ⓢ</sup> 6-29-2023</u>	Purge Rate (mL/min): <u>120</u>	
Well Volume (L) = gal * 3.785: <u>12.4</u>	Total Purge Volume (L): <u>2.5</u>	
<i>d = well diameter (inches); h = length of water column (feet)</i>		
Well Type: <input checked="" type="radio"/> Flush Stick Up	Purge Method: <input checked="" type="radio"/> Low-Flow Well Volume Other: <u>—</u>	QA/QC Collected? <u>—</u>
Well Lock: Yes <input type="radio"/> No <input checked="" type="radio"/>	Sampling Method: <u>Pump Discharge</u> Other: <u>—</u>	QA/QC I.D. <u>—</u>

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No N/A

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
<del>1455</del>	<del>—</del>	<del>—</del>	<del>—</del>	<del>—</del>	<del>—</del>	<del>—</del>	<del>—</del>	<del>—</del>	<del>—</del>	<del>—</del>
1506	6.21	1728.1	13.5	0.03	26.11	1.15	15.42	120	1.3	Pre-purge at 120 mL/min
1511	6.21	1719.9	6.8	0.03	26.10	1.05	15.46	120	1.4	
1516	6.21	1733.6	10.7	0.04	26.15	2.06	15.32	120	2.5	
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: Southern Company  
 Site: Plant Hammond  
 Well ID: PT-06  
 Total Depth (ft): 30  
 Depth to Water (ft): 13.25  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: AN 5.90 3.73  
 Well Volume (L) = gal \* 3.785: AN 22.35 14.12

d = well diameter (inches); h = length of water column (feet)

Well Type:  Flush  Stick Up  
 Well Lock: Yes  No   
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Project No.: 6W6581  
 Location: Plant Hammond  
 Pump Type/Model: Megamonsan PH  
 Tubing Material: PVC  
 Pump Intake Depth (ft): 30  
 Start/Stop Purge Time: 1058/1515  
 Purge Rate (mL/min): ~~2000~~ 1000, 5000, 1500  
 Total Purge Volume (L): 892.5  
 Purge Method:  Low-Flow  Well Volume  Other: —  
 Sampling Method:  Pump Discharge  AN  Other: —

Sampling Date: 6/26/23  
 Sampler's Name: AN  
 Sample Collection Time: N/A  
 Sample Purge Rate (mL/min): N/A  
 Sample ID: N/A  
 Laboratory Analyses: N/A  
 QA/QC Collected?: —  
 QA/QC I.D.: —

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1118	6.10	1805.1	-68.5	0.01	18.20	92.1	18.45	4000	100	pre purged for 20 min
1123	6.15	1792.9	-50.9	0.03	18.11	overrange	18.90	4000	120	pump motor breakdown repaired
1128	6.14	1808.9	-48.5	0.02	18.08	overrange	18.95	4000	140	
1133	6.14	1807.0	-85.8	0.02	18.12	overrange	19.00	4000	160	
1138	6.15	1804.3	-44.4	0.01	18.17	1953 AV	18.95	4000	180	
1143	6.14	1805.7	-68.20.0	2.34	18.59	1355 AV	18.95	4000	200	tubing fell off briefly
1149	6.14	1809.4	-40.9	0.01	18.17	81	18.75	4000	220	
1154	6.10	1792.9	-17.7	0.08	18.92	4088 AV	18.75	4000	240	
1159	6.12	1820.4	-40.2	0.01	18.0	1069 AV	19.00	4000	260	
1209	6.13	1870.9	-76.7	0.01	18.26	8410 AV	18.60	4000	280	reattached tubing
1214	6.25	1881.5	-30.5	1.52	18.50	overrange	18.75	4000	300	
1219	6.11	1830.9	-34.1	0.01	18.13	925 AV	18.95	4000	320	
1224	6.10	1830.1	-75.0	0.01	18.08	764 AV	18.95	4000	340	
1229	6.10	1832.9	-75.6	0.01	18.16	770 AV	19.13	4000	360	
1234	6.10	1830.4	-70.1	0.01	18.12	740 AV	19.05	4000	380	
1239	6.11	1836.9	-35.7	0.01	18.12	59	19.20	4000	400	
1245	6.09	1836.9	-48.0	0.01	18.17	77	19.21	4000	420	
1250	6.09	1839.7	-43.5	0.01	18.18	1310 AV	19.50	4000	440	
1255						1018 AV	19.25	4000	460	ipad overheated
Stabilizing Criteria	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: Southern Company  
 Site: Plant Hammond  
 Well ID: PT-06  
 Total Depth (ft): 36  
 Depth to Water (ft): 13.25  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 15.90 3.73  
 Well Volume (L) = gal \* 3.785: 22.35 14.12

Project No.: GW0581  
 Location: Plant Hammond  
 Pump Type/Model: Mega Monsoon Pro  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 30  
 Start/Stop Purge Time: 1058/1515  
 Purge Rate (mL/min): 4000, 5000, 1500  
 Total Purge Volume (L): 897.5  
 Purge Method: Low Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

Sampling Date: 6/26/23  
 Sampler's Name: AN  
 Sample Collection Time: N/A  
 Sample Purge Rate (mL/min): N/A  
 Sample ID: N/A  
 Laboratory Analyses: N/A

d = well diameter (inches); h = length of water column (feet)

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1300	6.08	1852.7	-55.9	0.00	18.14	11	19.05	4000	500	
1305	6.09	1842.0	-77.2	0.01	18.17	743 AV	19.25	4000	520	
1310	6.09	1839.8	-76.7	0.00	18.17	93	19.65	4000	540	
1315	6.08	1836.3	-36.7	0.01	18.12	71	19.45	4000	560	
1320	6.08	1834.9	-71.9	0.00	18.17	71	19.70	4000	580	
1325	6.09	1835.9	-77.1	0.00	18.19	93	19.45	4000	600	
1330	6.08	1843.3	-73.1	0.00	18.17	1051 AV	19.68	4000	620	
1335	6.08	1839.9	-37.4	0.00	18.17	82	19.04	4000	640	
1340	6.10	1820.6	-72.5	0.02	18.20	1445 AV	19.90	4000	680	
1345	6.09	1833.1	-72.4	0.01	18.10	059 AV	19.75	4000	700	
1350	6.09	1832.2	-71.1	0.00	18.17	61	19.75	4000	720	
1355	6.09	1834.4	-68.3	0.00	18.21	62	19.40	4000	740	
1400	6.09	1837.4	-35.1	0.00	18.22	56	19.50	4000	760	
1405	6.10	1832.2	-65.9	0.01	18.21	115	19.45	4000	780	
1410	6.09	1819.4	-67.9	0.00	18.17	73	20.8	5000	805	
1415	6.09	1817.5	-20.8	0.01	18.20	101.5	20.18	5000	830	
1420	6.08	1816.0	-66.3	0.00	18.14	82.7	21.8	5000	855	
1455	6.15	1800.2	-11.3	0.02	20.46	600 AV	17.55	1500	817.5	pump motor broke, had to replace
1500	6.15	1847.0	-34.5	0.01	19.31	1193 AV	18.55	1500	870	
Stabilizing Criteria	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: southern company  
 Site: Plant Hammond  
 Well ID: PT-06  
 Total Depth (ft): 30  
 Depth to Water (ft): 13.25  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.73  
 Well Volume (L) = gal \* 3.785: 14.12

Project No.: 6WU581  
 Location: Plant Hammond  
 Pump Type/Model: Mega monsoon pro  
 Tubing Material: poly  
 Pump Intake Depth (ft): 30  
 Start/Stop Purge Time: 1058/1515  
 Purge Rate (mL/min): 400, 500, 1500  
 Total Purge Volume (L): 892.5  
 Purge Method: Low Flow Well Volume Other: ---  
 Sampling Method: Pump Discharge Other: ---

Sampling Date: 6/26/23  
 Sampler's Name: AV  
 Sample Collection Time: N/A  
 Sample Purge Rate (mL/min): N/A  
 Sample ID: N/A  
 Laboratory Analyses: N/A  
 QA/QC Collected?: ---  
 QA/QC I.D.: ---

d = well diameter (inches); h = length of water column (feet)

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
<del>1505</del>	<del>6.15</del>	<del>1853.6</del>	<del>-49.1</del>	<del>0.01</del>	<del>19.05</del>	<del>1213 AU</del>	<del>19.97</del>	<del>1500</del>	<del>877.5</del>	
<del>1510</del>	<del>6.13</del>	<del>1840.6</del>	<del>-62.6</del>	<del>0.06</del>	<del>18.97</del>	<del>798 AU</del>	<del>20.35</del>	<del>1500</del>	<del>883</del>	
1515	6.13	1847.2	-50.4	8.06	19.82	1769 AU	19.05	1500	892.5	pump motor broke, had to terminate purging well development incomplete
<del>6/26/23 AN</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: Southern Company  
 Site: Plant Hammond  
 Well ID: PT-06  
 Total Depth (ft): 36  
 Depth to Water (ft): 14.70  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.49  
 Well Volume (L) = gal \* 3.785: 13.21

Project No.: GW0581  
 Location: Plant Hammond  
 Pump Type/Model: Megamons con pro  
 Tubing Material: poly  
 Pump Intake Depth (ft): 31  
 Start/Stop Purge Time: 1200/1248  
 Purge Rate (mL/min): 15000  
 Total Purge Volume (L): 690

Sampling Date: 10/27/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

QA/QC Collected? -  
 QA/QC I.D. -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
12:22	0.13	1770.2	31.7	0.02	19.17	3052 AU	19.5	15000	330	Pre-purge for 20 min -
12:27	0.12	1784.8	30.1	0.07	18.48	2123 AU	19.8	15000	405	PVC filaments got caught
12:32	0.12	1792.8	27.1	0.01	18.16	64	18.8	15000	480	in motor & had to remove
12:38	0.12	1795.7	26.4	0.01	18.12	18.7	20.0	15000	540	
12:42	0.11	1801.4	30.9	0.01	18.11	17.4	20.5	15000	615	
12:48	0.11	1797.2	28.0	0.00	18.09	7.50	20.5	15000	690	
<del>AN 10/27/23</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	



GROUNDWATER SAMPLING LOG SHEET

Client: SCS Project No.: GW05816 Sampling Date: 6-27-2023  
 Site: Plant Hammond Location: AP-2 Sampler's Name: AN  
 Well ID: PT-06 Pump Type/Model: Monsoon Sample Collection Time: -  
 Total Depth (ft): 36 Tubing Material: Poly Sample Purge Rate (mL/min): -  
 Depth to Water (ft): 14.70 Pump Intake Depth (ft): 31 Sample ID: -  
 Well Diameter (in): 2 Start/Stop Purge Time: 1250 / 1358 Laboratory Analyses: -  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.49 Purge Rate (mL/min): 300  
 Well Volume (L) = gal \* 3.785: 13.21 Total Purge Volume (L): 21  
 Well Type:  Flush  Stick Up Purge Method:  Low-Flow  Well Volume  Other: - QA/QC Collected? -  
 Well Lock: Yes  No  Sampling Method:  Pump Discharge  Other: - QA/QC I.D. -  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1250										
1316	6.09	1814.2	47.1	0.85	21.77	5.53	15.5	300	9	Pre purge for flow
1321	6.08	1837.1	42.2	0.93	22.39	4.43	15.1	300	10.5	
1326	6.08	1830.8	41.8	0.79	22.38	4.68	15.2	300	12	
1333	6.09	1810.8	43.8	0.60	22.94	6.39	15.2	300	13.5	ipad overrated
1338	6.10	1789.0	36.7	0.48	22.10	7.33	15.2	300	15	
1343	6.11	1710.6	33.3	0.40	20.20	5.89	15.2	300	16.5	
1348	6.12	1701.3	32.3	0.34	19.77	4.40	15.2	300	18	
1353	6.12	1762.0	34.5	0.28	19.74	3.01	15.2	300	19.5	
1658	6.12	1763.0	32.2	0.24	19.88	2.08	15.2	300	21	
AN 012712 <sup>5</sup>										
Stabilizing Criteria	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: MW-55  
 Total Depth (ft): 46.1  
 Depth to Water (ft): 17.3  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 1.44  
 Well Volume (L) = gal \* 3.785: 5.45

Project No.: GUL0581  
 Location: AP-2  
 Pump Type/Model: MONSOON  
 Tubing Material: P014  
 Pump Intake Depth (ft): 21.1  
 Start/Stop Purge Time: 1105/1229  
 Purge Rate (mL/min): 8000  
 Total Purge Volume (L): 672

Sampling Date: 7/15/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

QA/QC Collected? -  
 QA/QC ID: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1129	6.41	1871.2	-18.1	1.43	22.29	25.6	19.8	8000	192	Pre-purge 20 min
1134	6.44	1921.9	-16.3	1.43	22.30	38.2	19.8	8000	232	
1139	6.44	1944.9	-36.8	1.49	22.37	21.3	19.8	8000	272	
1144	6.43	1952.9	-35.1	1.68	22.37	18.6	19.8	8000	312	
1149	6.42	1993.9	-34.1	1.72	22.45	22.0	19.8	8000	352	
1154	6.42	1987.0	-33.9	1.74	22.52	25.1	19.8	8000	392	
1159	6.52	2127.8	-25.0	1.54	21.26	59	19.8	8000	432	
1204	6.49	2037.9	-17.1	1.86	21.63	73.8	19.8	8000	472	
1209	6.39	1958.6	-13.0	0.52	22.22	49.4	19.8	8000	512	
1214	6.48	2048.3	-23.1	0.63	21.69	40.0	19.8	8000	552	
1219	6.48	2056.3	-46.3	0.81	21.73	17.8	19.8	8000	592	
1224	6.49	2063.9	-21.2	1.04	21.69	11.0	19.8	8000	632	
1229	6.50	2070.5	-45.1	1.00	21.63	9.97	19.8	8000	672	
									AN	7/15/23
<p>Stabilizing Criteria +/- 0.1 SU +/- 5% 0.2 mg/L or 10% for DO &gt; 0.5 mg/L (whichever is greater) &lt; 5 NTUs &lt; 0.3 ft &gt; 100 mL &lt; 250 mL &gt; 3L</p>										

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: mw-55  
 Total Depth (ft): 26.1  
 Depth to Water (ft): 17.3  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 1.44  
 Well Volume (L) = gal \* 3.785: 5.49

Project No.: GW0581  
 Location: MP-2  
 Pump Type/Model: monsoon  
 Tubing Material: poly  
 Pump Intake Depth (ft): 21.1  
 Start/Stop Purge Time: 1230/1250  
 Purge Rate (mL/min): 200  
 Total Purge Volume (L): 4

Sampling Date: 7/5/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock: Yes  No   
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method:  Low-Flow  Well Volume  Other: -  
 Sampling Method:  Pump Discharge  Other: -

QA/QC Collected? -  
 QA/QC ID: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1235	6.51	2115.1	-79.8	0.77	22.2	16.0	19.0	200	1	prepurge for flow
1240	6.65	2181.6	-88.0	0.15	23.43	14.8	19.0	200	2	
1245	6.70	2175.1	-56.1	0.08	23.41	5.32	19.0	200	3	
1250	6.71	2171.6	-92.9	0.08	23.76	4.48	19.0	200	4	
<del>7/5/23 AN</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Piant + Hammond  
 Well ID: MW-56  
 Total Depth (ft): 24.1  
 Depth to Water (ft): 9.3  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.43  
 Well Volume (L) = gal \* 3.785: 9.198

Project No.: GW-0581  
 Location: AD-2  
 Pump Type/Model: monsoon  
 Tubing Material: 0014  
 Pump Intake Depth (ft): 19.7  
 Start/Stop Purge Time: ~~1030~~ 1025/1137  
 Purge Rate (mL/min): 9000  
 Total Purge Volume (L): 648

Sampling Date: 6/30/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 Purge Method: Low-Flow Well Volume Other: -  
 QA/QC Collected? -  
 Sampling Method: Pump Discharge Other: -  
 QA/QC ID: -

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush   Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1047	5.11	2380.10	3510.8	0.04	17.54	914 AN	9.7	9000	198	
1052	5.05	2398.0	514.7	0.07	17.53	749 AN	9.7	9000	243	
1057	5.01	2407.4	521.2	0.02	17.49	30 AN	9.7	9000	288	
1102	5.00	2403.0	428.0	0.02	17.47	25	9.7	9000	333	
1107	5.00	2401.3	428.9	0.01	17.49	67.4	9.7	9000	378	
1112	4.98	2401.3	437.4	0.01	17.49	48.2	9.7	9000	423	
1117	4.90	2405.6	529.5	0.00	17.48	35.2	9.7	9000	468	
1122	4.90	2409.2	450.0	0.00	17.48	22.8	9.7	9000	513	
1127	4.98	2406.8	454.0	0.00	17.47	15.8	9.7	9000	558	
1132	4.94	2407.7	451.0	0.00	17.50	11.8	9.7	9000	603	
1137	4.93	2413.9	456.4	0.00	17.50	9.55	9.7	9000	648	
AN 6/30/23										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 1.0% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Diane Hammond  
 Well ID: MW-54  
 Total Depth (ft): 24.1  
 Depth to Water (ft): 9.3  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.43  
 Well Volume (L) = gal \* 3.785: 9.198

Project No.: GW06581  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: pvc  
 Pump Intake Depth (ft): 19.1  
 Start/Stop Purge Time: 1139/1244  
 Purge Rate (mL/min): 250  
 Total Purge Volume (L): 10.25

Sampling Date: 6/30/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected?: -  
 QA/QC I.D.: -

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method:  Low-Flow  Well Volume  Other: -  
 Sampling Method:  Pump Discharge  Other: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1144	4.92	2481.6	310.1	0.02	19.00	36.4	9.4	250	1.25	pre purge for flow
1149	4.95	2408.1	269.6	0.03	20.93	23.5	9.4	250	2.5	
1154	4.91	2404.8	407.0	0.01	19.32	13.6	9.4	250	3.75	
1159	4.92	2412.1	301.2	0.01	18.81	11.9	9.4	250	5	
1204	4.93	2413.5	283.5	0.01	18.96	9.4	9.4	250	6.25	
1209	4.93	2408.8	270.3	0.01	19.00	8.12	9.4	250	7.5	
1214	4.94	2407.8	255.8	0.01	19.17	7.19	9.4	250	8.75	
1219	4.94	2408.8	247.9	0.02	19.15	7.02	9.4	150	10	
1224	4.96	2397.0	255.1	0.01	18.61	7.85	9.4	250	11.25	
1229	4.96	2406.5	400.1	0.01	18.87	20.0	9.4	250	12.5	
1234	4.95	2436.9	302.8	0.01	18.38	9.66	9.4	250	13.75	
1239	4.96	2420.9	281.4	0.02	19.24	6.12	9.4	250	15	
1244	4.96	2400.4	331.4	0.02	19.30	4.67	9.4	250	16.25	
<del>AN</del>										
<del>6/30/23</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%	0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)			< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: MW-57  
 Total Depth (ft): 24.4  
 Depth to Water (ft): 10.1  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.35  
 Well Volume (L) = gal \* 3.785: 8.89

Project No.: GWU581  
 Location: AP-2  
 Pump Type/Model: MONSOON  
 Tubing Material: POLY  
 Pump Intake Depth (ft): 19.4  
 Start/Stop Purge Time: 1510/1540  
 Purge Rate (ml/min): 8000  
 Total Purge Volume (L): 240

Sampling Date: 7/16/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type: Flush  Stick Up  
 Well Lock:  Yes No  
 Well Cap Condition:  Good Replace  
 Well Tag Present:  Yes No

Purge Method: Low-Flow  Well Volume  Other:   
 Sampling Method: Pump Discharge  Other:   
 QA/QC Collected?   
 QA/QC I.D.

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1530	6.24	2246.6	18.9	0.49	19.17	62.8	17.3	8000	160	pre purge 20min
1535	6.29	2278.5	18.0	0.40	17.75	16.3	8000	200		
1540	6.25	2224.2	6.5	0.81	17.68	8.58	8000	240		
<del>AN 7/16/23</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: MN-57  
 Total Depth (ft): 24.4  
 Depth to Water (ft): 10.1  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.35  
 Well Volume (L) = gal \* 3.785: 8.89

Project No.: GW4581  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 19.4  
 Start/Stop Purge Time: 1540/1559  
 Purge Rate (mL/min): 200  
 Total Purge Volume (L): 3.8

Sampling Date: 7/16/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method:  Low-Flow Well Volume Other: -  
 Sampling Method:  Pump Discharge Other: -

QA/QC Collected?   
 QA/QC ID: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1544	6.20	2328.0	16.3	0.58	18.20	6.85	16.3	200	0.8	pre purge for flow
1549	6.41	2486.8	12.4	0.05	18.30	3.08	16.3	200	1.8	
1554	6.47	2489.0	20.2	0.04	18.72	2.67	16.3	200	2.8	
1559	6.39	2481.0	2.8	0.04	18.39	2.39	16.3	200	3.8	
<del>7/16/23 AN</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: MW-58  
 Total Depth (ft): 27.0  
 Depth to Water (ft): 11.7  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.51  
 Well Volume (L) = gal \* 3.785: 9.50

Project No: GW0581  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: poly  
 Pump Intake Depth (ft): 22  
 Start/Stop Purge Time: 0835/0930  
 Purge Rate (mL/min): 8000  
 Total Purge Volume (L): 540

Sampling Date: 6/30/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type: Flush  **Stick Up**   
 Well Lock: **Yes**  No   
 Well Cap Condition: **Good**  Replace   
 Well Tag Present: **Yes**  No

Purge Method: Low-Flow  Well Volume  Other: -  
 Sampling Method: Pump Discharge  Other: -  
 QA/QC Collected?   
 QA/QC ID: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0855	5.58	1292.3	179.1	0.61	17.32	1389 AU	14.1	8000	160	pre purge 20 min
0900	5.61	1292.9	149.5	0.61	17.14	919 AU	14.1	8000	200	
0905	5.64	1256.0	135.4	0.81	17.09	623 AU	14.6	8000	240	
0910	5.65	1270.2	85.3	0.71	17.05	67.2	14.7	8000	380	
0915	5.67	1259.9	111.1	0.72	17.04	37.3	14.7	8000	420	
0920	5.69	1262.7	107.2	0.71	17.05	16.4	14.7	8000	460	
0925	5.69	1266.8	72.6	0.71	17.05	12.53	14.7	8000	500	
0930	5.70	1265.7	95.0	0.68	17.04	7.46	14.7	8000	540	

AN  
6/30/23

<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	
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GROUNDWATER SAMPLING LOG SHEET

Client: <u>SCS</u>	Project No.: <u>GWU581</u>	Sampling Date: <u>6/30/23</u>
Site: <u>Plant Hammond</u>	Location: <u>AP-2</u>	Sampler's Name: <u>AN</u>
Well ID: <u>MW-58</u>	Pump Type/Model: <u>monsoon</u>	Sample Collection Time: <u>-</u>
Total Depth (ft): <u>27.0</u>	Tubing Material: <u>poly</u>	Sample Purge Rate (mL/min): <u>-</u>
Depth to Water (ft): <u>11.7</u>	Pump Intake Depth (ft): <u>22.35</u>	Sample ID: <u>-</u>
Well Diameter (in): <u>2</u>	Start/Stop Purge Time: <u>0947 0951</u>	Laboratory Analyses: <u>-</u>
Well Volume (gal) = 0.041d <sup>2</sup> h: <u>2.91</u>	Purge Rate (mL/min): <u>250</u>	
Well Volume (L) = gal * 3.785: <u>9.50</u>	Total Purge Volume (L): <u>4</u>	
<i>d = well diameter (inches); h = length of water column (feet)</i>		
Well Type: Flush <input type="radio"/> <input checked="" type="radio"/> Stick Up	Purge Method: <input checked="" type="radio"/> Low-Flow <input type="radio"/> Well Volume <input type="radio"/> Other: <u>-</u>	QA/QC Collected? <input type="radio"/> Yes <input checked="" type="radio"/> No
Well Lock: <input checked="" type="radio"/> Yes <input type="radio"/> No	Sampling Method: <input type="radio"/> Pump Discharge <input type="radio"/> Other: <u>-</u>	QA/QC LD: <input type="radio"/> Yes <input checked="" type="radio"/> No
Well Cap Condition: <input checked="" type="radio"/> Good <input type="radio"/> Replace	<b>All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No</b>	
Well Tag Present: <input checked="" type="radio"/> Yes <input type="radio"/> No		

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0941	5.59	1371.1	109.7	0.38	17.74	3.17	12.1	250	1.5	Pre purge for 11 DW
0946	5.62	1352.3	73.6	0.31	18.03	1.67	12.2	250	2.75	
0951	5.63	1341.6	64.9	0.31	17.95	1.28	12.2	250	4	
AN										
6/30/23										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: AND SCS  
 Site: Plant Hammond  
 Well ID: MW-59  
 Total Depth (ft): 44.8  
 Depth to Water (ft): 27.5  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.84  
 Well Volume (L) = gal \* 3.785: 10.75

Project No: GW05816  
 Location: AP-2  
 Pump Type/Model: MORSEON  
 Tubing Material: POLY  
 Pump Intake Depth (ft): 39.8  
 Start/Stop Purge Time: 1335/1435  
 Purge Rate (mL/min): 8000  
 Total Purge Volume (L): 360

Sampling Date: 6/29/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected?: -  
 QA/QC I.D.: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type: Flush   Stick Up  
 Well Lock:  Yes  No  
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1415	5.97	1840.0	45.4	3.47	21.28	991 AU	37.5	8000	200	pre purge 20 min, PVC filament stuck multiple times, had to remove
1420	5.90	1859.3	45.3	4.11	20.45	over range	38.5	8000	240	
1425	5.90	1851.5	40.6	3.54	20.47	32.2	38.8	8000	280	
1430	5.78	1822.8	50.4	2.18	20.11	110.0	38.8	8000	320	
1435	5.69	1850.2	59.7	1.92	20.84	10.85	38.8	8000	360	
6/29/23 AN										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: MW-59  
 Total Depth (ft): 44.8  
 Depth to Water (ft): 27.5  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.84  
 Well Volume (L) = gal \* 3.785: 10.75  
*d = well diameter (inches); h = length of water column (feet)*  
 Well Type: Flush  Stick Up   
 Well Lock: Yes  No   
 Well Cap Condition: Good  Replace   
 Well Tag Present: Yes  No

Project No.: GW05816  
 Location: AP-2  
 Pump Type/Model: Monsoon  
 Tubing Material: P014  
 Pump Intake Depth (ft): 39.8  
 Start/Stop Purge Time: 800 AM 1335 / 1440/1512  
 Purge Rate (mL/min): 300  
 Total Purge Volume (L): 8.1 <sup>9.6</sup>  
 Purge Method: Low-Flow Well Volume Other: \_\_\_\_\_  
 Sampling Method: Pump Discharge Other: \_\_\_\_\_

Sampling Date: 6/29/23  
 Sampler's Name: AN  
 Sample Collection Time: \_\_\_\_\_  
 Sample Purge Rate (mL/min): \_\_\_\_\_  
 Sample ID: \_\_\_\_\_  
 Laboratory Analyses: \_\_\_\_\_  
 QA/QC Collected? -  
 QA/QC I.D. -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1442	5.65	1880.0	61.4	1.35	21.75	4.80	37.5	300	0.6	
1447	5.62	1810.0	55.9	0.61	21.50	2.55	37.1	300	2.1	
1452	5.63	1933.6	59.2	1.55	21.33	2.00	37.0	300	3.0	
1457	5.62	1992.0	53.0	1.70	21.28	1.23	37.0	300	5.1	
1502	5.62	2052.2	89.4	2.23	21.24	1.42	37.0	300	6.6	
1507	5.60	2088.8	93.0	2.43	21.11	1.20	37.0	300	8.1	
1512	5.59	2101.2	95.2	2.41	21.21	1.12	37.0	300	9.6	
AN 6/29/23										
<b>Stabilizing Criteria</b> +/- 0.1 SU +/- 5% 0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater) < 5 NTUs < 0.3 ft > 100 mL < 250 mL > 3L										

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: TW-01  
 Total Depth (ft): 23.4  
 Depth to Water (ft): 9.7  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.25  
 Well Volume (L) = gal \* 3.785: 8.50

Project No.: GW6557  
 Location: AP-2  
 Pump Type/Model: MONSOON  
 Tubing Material: PDIY  
 Pump Intake Depth (ft): 18.4  
 Start/Stop Purge Time: 0915/1025  
 Purge Rate (mL/min): 8000  
 Total Purge Volume (L): 540

Sampling Date: 7/6/23  
 Sampler's Name: AW  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -  
 QA/QC Collected?: -  
 QA/QC I.D.: -

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush   Stick Up  
 Well Lock: Yes  No   
 Well Cap Condition: Good  Replace   
 Well Tag Present: Yes  No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0935	5.65	1852.9	2.2	2.56	19.90	1879 AU	18.0	8000	160	pre purge 20 min
0940	5.56	1865.7	-6.0	2.91	20.26	824 AU	18.0	8000	200	
0945	5.82	2048	85.8	6.10	21.28	1933 AU	18.0	8000	240	not fun due to purging only
0950	5.50	1964.0	6.2	3.70	19.90	79	18.0	8000	280	
0955	5.52	2052.1	-32.0	1.97	21.20	70	18.0	8000	320	
1000	5.47	2089.2	-28.9	2.14	21.62	28	18.0	8000	360	
1005	5.46	2115.9	-31.8	2.17	22.51	46	18.0	8000	400	
4:00 AM 1010	5.51	2145.5	-43.9	1.24	22.80	77	18.0	8000	440	
1015	5.42	2092.8	0.4	2.69	20.38	1662 AU	18.0	8000	480	
1020	5.37	2150.9	14.2	4.78	19.79	36	18.0	8000	520	
1025	5.33	2188.9	-3.8	3.97	20.63	9.0	18.0	8000	540	
<del>7/6/23 AW</del>										
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: 1W-01  
 Total Depth (ft): 23.4  
 Depth to Water (ft): 9.7  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.25  
 Well Volume (L) = gal \* 3.785: 8.50

Project No.: GW0581  
 Location: AP-2  
 Pump Type/Model: monsoon  
 Tubing Material: poly  
 Pump Intake Depth (ft): 18.4  
 Start/Stop Purge Time: 1025/1225  
 Purge Rate (mL/min): 200  
 Total Purge Volume (L): 2

Sampling Date: 7/6/23  
 Sampler's Name: AN  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

d = well diameter (inches); h = length of water column (feet)

Well Type: Flush  Stick Up  
 Well Lock: Yes No  
 Well Cap Condition: Good Replace  
 Well Tag Present: Yes No

Purge Method: Low-Flow Well Volume Other: -  
 Sampling Method: Pump Discharge Other: -

QA/QC Collected? -  
 QA/QC I.D. -

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1030	5.35	2229.4	2.7	2.08	21.44	80.0	18.0	200	1	
1035	5.31	2151.1	14.1	3.06	19.88	73.4	18.0	200	2	prep work for flow
1040	5.22	2228.5	2.1	3.38	23.01	25.9	18.0	200	3	
1045	5.29	2279.7	15.4	2.16	23.34	75.9	18.0	200	4	
1050	5.32	2260.8	20.4	1.05	23.50	58.1	18.0	200	5	
1055	5.09	2233.7	28.6	4.72	19.77	48.1	18.0	200	6	pumped dry, wait + recovery
1100	5.12	2273.8	28.4	2.99	20.83	98	18.0	200	7	
1105	5.01	2277.9	32.8	4.78	19.5	77.1	18.0	200	8	
1110	5.02	2322.9	28.1	4.30	20.22	65.1	18.0	200	9	
1115	5.02	2347.4	22.7	3.19	20.66	31.5	18.0	200	10	
1120	5.01	2325.5	21.4	3.19	20.70	16.7	18.0	200	11	
1125	5.00	2394.2	21.9	3.03	20.84	11.0	18.0	200	12	
1130	4.99	2255.0	21.3	2.15	20.93	7.21	18.0	200	13	
1135	4.99	2300.8	24.2	3.28	20.21	11.8	18.0	200	14	
1140	4.97	2316.1	25.5	2.80	20.60	9.7	18.0	200	15	
1145	4.94	2306.8	25.2	2.81	20.46	8.3	18.0	200	16	
1150	4.93	2399.5	27.1	2.49	20.83	5.8	18.0	200	17	
1155	4.93	2366.5	24.1	2.57	20.54	7.76	18.0	200	18	
1200	4.89	2385.0	26.2	2.80	21.64	6.44	18.0	200	19	

Stabilizing Criteria +/- 0.1 SU +/- 5%  
 0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater) < 5 NTUs < 0.3 ft > 100 mL < 250 mL > 3L

GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: 1W-01  
 Total Depth (ft): 23.4  
 Depth to Water (ft): 9.7  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 2.25  
 Well Volume (L) = gal \* 3.785: 8.50

Project No.: GW16581  
 Location: APD-2  
 Pump Type/Model: monsoon  
 Tubing Material: poly  
 Pump Intake Depth (ft): 18.4  
 Start/Stop Purge Time: 1025/1225  
 Purge Rate (mL/min): 200  
 Total Purge Volume (L): 20

Sampling Date: 7/14/23  
 Sampler's Name: AW  
 Sample Collection Time: -  
 Sample Purge Rate (mL/min): -  
 Sample ID: -  
 Laboratory Analyses: -

*d = well diameter (inches); h = length of water column (feet)*

Well Type: Flush  Stick Up  
 Well Lock: Yes  No   
 Well Cap Condition: Good Replace   
 Well Tag Present: Yes  No

Purge Method: Low-Flow Well Volume Other: - QA/QC Collected?   
 Sampling Method: Pump Discharge Other: - QA/QC I.D.

All sample containers requiring chemical preservation properly preserved prior to demob from well? Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1225	4.91	2355.6	23.9	2.62	20.70	4.91	18.0	200	20	
AW										
7/16/23										

<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	
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GROUNDWATER SAMPLING LOG SHEET

<p>Client: <u>SCS</u></p> <p>Site: <u>Plant Hammond</u></p> <p>Well ID: <u>1Nw-02</u></p> <p>Total Depth (ft): <u>30</u> <u>35.16</u></p> <p>Depth to Water (ft): <u>14.49</u></p> <p>Well Diameter (in): <u>2</u></p> <p>Well Volume (gal) = 0.041d<sup>2</sup>h: <u>3.39</u></p> <p>Well Volume (L) = gal * 3.785: <u>12.8</u></p> <p><i>d = well diameter (inches); h = length of water column (feet)</i></p> <p>Well Type: <input checked="" type="radio"/> Flush <input type="radio"/> Stick Up</p> <p>Well Lock: <input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p>Well Cap Condition: <input checked="" type="radio"/> Good <input type="radio"/> Replace</p> <p>Well Tag Present: <input checked="" type="radio"/> Yes <input type="radio"/> No</p>	<p>Project No.: <u>GW65816</u></p> <p>Location: <u>AP-2</u></p> <p>Pump Type/Model: <u>Monsoon</u></p> <p>Tubing Material: <u>Poly</u></p> <p>Pump Intake Depth (ft): <u>34.5</u></p> <p>Start/Stop Purge Time: <u>1024/1537</u></p> <p>Purge Rate (mL/min): <u>4 gal/min</u></p> <p>Total Purge Volume (L): <u>1146 gal</u></p> <p>Purge Method: <input type="radio"/> Low-Flow <input type="radio"/> Well Volume <input type="radio"/> Other: <u>---</u></p> <p>Sampling Method: <input checked="" type="radio"/> Pump Discharge <input type="radio"/> Other: <u>---</u></p>	<p>Sampling Date: <u>6-26-2023</u></p> <p>Sampler's Name: <u>A. Sewast</u></p> <p>Sample Collection Time: <u>---</u></p> <p>Sample Purge Rate (mL/min): <u>---</u></p> <p>Sample ID: <u>---</u></p> <p>Laboratory Analyses: <u>---</u></p> <p>QA/QC Collected? <input type="radio"/> <input checked="" type="radio"/></p> <p>QA/QC I.D. <u>---</u></p>
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All sample containers requiring chemical preservation properly preserved prior to demob from well?  Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (gal/min)	Purged Volume (gal)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1024	6.2									
1117	6.30	1670.5	-18.6	0	18.21	7500	17.80	4.0	106	Pic-purge 2 gal/min
1127	6.29	1666.6	-16.6	0	18.21	>5000	17.88	4	126	increase purge rate to 4 gal/min
1127	6.30	1692.6	-33.1	0	18.18	7500	17.88	4	146	Turbidity Over range (>500 NTU)
1132	6.30	1665.1	-17.8	0	18.18	7500	17.88	4	166	
1137	6.30	1661.7	-18.3	0	18.18	7500	17.97	4	186	
1142	6.31	1730.8	-38.7	0	18.22	7500	17.74	4	206	
1147	6.30	1668.2	-16.9	0	18.20	7500	18.05	4	226	
1152	6.30	1679.0	-36.8	0	18.19	7500	17.45	4	246	
1157	6.30	1670.2	-16.2	0	18.24	7500	18.12	4	266	
1202	6.31	1678.6	-37.4	0	18.21	7500	18.12	4	286	
1202	6.30	1662.5	-16.5	0	18.21	7500	18.15	4	306	
1212	6.30	1682.6	-35.6	0	18.21	7500	18.04	4	326	
1217	6.31	1711.4	-19.0	0	18.23	4090 AU	18.26	4	346	
1222	6.30	1680.0	-35.9	0	18.21	3775 AU	18.26	4	366	Free Chlorine units: AU
1227	6.30	1680.7	-36.5	0	18.20	3457 AU	18.30	4	386	
1232	6.29	1742.1	-38.4	0	18.18	1909 AU	18.45	4	406	
1237	6.30	1725.7	-18.6	0	18.21	2670 AU	18.53	4	426	
1242	6.30	1683.0	-35.8	0	18.21	2586 AU	18.50	4	446	
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	

GROUNDWATER SAMPLING LOG SHEET

Client:	<u>SCS</u>	Project No.:	<u>GW65816</u>	Sampling Date:	<u>6-26-2023</u>
Site:	<u>Plant Hammond</u>	Location:	<u>AP-2</u>	Sampler's Name:	<u>A. Swast</u>
Well ID:	<u>1NW-02</u>	Pump Type/Model:	<u>Monsoon</u>	Sample Collection Time:	<u>—</u>
Total Depth (ft):	<u>35.16</u>	Tubing Material:	<u>Poly</u>	Sample Purge Rate (mL/min):	<u>—</u>
Depth to Water (ft):	<u>14.49</u>	Pump Intake Depth (ft):	<u>34.5</u>	Sample ID:	<u>—</u>
Well Diameter (in):	<u>2</u>	Start/Stop Purge Time:	<u>1024/1537</u>	Laboratory Analyses:	<u>—</u>
Well Volume (gal) = 0.041d <sup>2</sup> h:	<u>3.39</u>	Purge Rate (mL/min):	<u>4 gal/min</u>		
Well Volume (L) = gal * 3.785:	<u>12.8</u>	Total Purge Volume (L):	<u>1146 gal</u>		
<i>d = well diameter (inches); h = length of water column (feet)</i>					
Well Type:	<input checked="" type="radio"/> Flush	Stick Up		QA/QC Collected?	<input type="checkbox"/>
Well Lock:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		QA/QC I.D.	<input type="checkbox"/>
Well Cap Condition:	<input checked="" type="radio"/> Good	Replace			
Well Tag Present:	<input checked="" type="radio"/> Yes	No			

All sample containers requiring chemical preservation properly preserved prior to demob from well?  Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (gal/min) (mL/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1247	6.31	1687.8	-36.2	0	18.21	2495 AU	18.64	4	466	
1252	6.31	1683.1	-36.6	0	18.21	631 AU	18.61	4	486	
1257	6.31	1711.1	-37.5	0	18.25	1144 AU	18.67	4	506	
1302	6.30	1686.1	-36.2	0	18.21	616 AU	18.71	4	526	
1307	6.31	1681.7	-16.4	0	18.21	693 AU	18.77	4	546	
1312	6.31	1686.3	-35.5	0	18.22	729 AU	18.78	4	566	
1317	6.30	1690.8	-35.4	0	18.22	717 AU	18.85	4	586	
1322	6.31	1692.9	-35.9	0	18.22	788 AU	18.89	4	606	
1327	6.30	1693.4	-15.4	0	18.24	662 AU	18.93	4	626	
1332	6.30	1696.2	-34.4	0	18.25	666 AU	18.96	4	646	
1337	6.30	1696.5	-15.4	0	18.24	71 NTU	18.08	4	666	
1342	6.30	1698.0	-34.9	0	18.24	36.2 NTU	19.09	4	686	Used 2nd turbidity meter. (checked calibration on 1st meter, calibration off) Use 2nd meter
1347	6.30	1695.7	-35.1	0	18.25	79.6 NTU	19.14	4	706	
1352	6.31	1694.7	-15.5	0	18.25	123 NTU	19.16	4	726	
1357	6.30	1697.8	-34.8	0	18.25	65.3 NTU	19.22	4	746	
1402	6.30	1702.8	-33.2	0	18.26	30 NTU	19.21	4	766	
1407	6.30	1703.8	-33.5	0	18.26	10.4 NTU	19.30	4	786	
1412	6.30	1705.3	-13.8	0	18.26	43.1 NTU	19.95	4	806	Adjust flow, Turbidity = 36 NTU
1417	6.31	1706.5	-34.5	0	18.31	108 NTU	20.05	4	826	
<b>Stabilizing Criteria</b>	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	



GROUNDWATER SAMPLING LOG SHEET

Client: SCS  
 Site: Plant Hammond  
 Well ID: 1NW-02  
 Total Depth (ft): 35.16  
 Depth to Water (ft): 14.49  
 Well Diameter (in): 2  
 Well Volume (gal) = 0.041d<sup>2</sup>h: 3.39  
 Well Volume (L) = gal \* 3.785: 12.8

Project No.: GW 65816  
 Location: AP-2  
 Pump Type/Model: Monsoon  
 Tubing Material: Poly  
 Pump Intake Depth (ft): 34.5  
 Start/Stop Purge Time: 1024/1537  
 Purge Rate (mL/min): 4 gal/min  
 Total Purge Volume (L): 1146 gal

Sampling Date: 6-26-2023  
 Sampler's Name: A. Szewast  
 Sample Collection Time: —  
 Sample Purge Rate (mL/min): —  
 Sample ID: —  
 Laboratory Analyses: —

*d = well diameter (inches); h = length of water column (feet)*

Well Type:  Flush  Stick Up  
 Well Lock: Yes  No   
 Well Cap Condition:  Good  Replace  
 Well Tag Present:  Yes  No

Purge Method: Low-Flow Well Volume Other: —  
 Sampling Method: Pump Discharge Other: —

QA/QC Collected? —  
 QA/QC I.D. —

All sample containers requiring chemical preservation properly preserved prior to demob from well?  Yes  No

Time	pH (SU)	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Temp. (°C)	Turbidity (NTUs)	DTW (ft btoc)	Purge Rate (gal/min)	Purged Volume (L)	Notes (Purge method, water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1422	6.30	1710.7	-34.8	0	18.30	104	19.55	4	846	
1427	6.31	1715.2	-15.6	0	18.31	—	—	4	866	
1432	6.31	1718.4	-35.2	0	18.30	—	—	4	886	Assist AN with pump issues
1437	6.30	1712.7	-35.3	0	18.30	—	—	4	906	
1442	6.30	1716.4	-15.5	0	18.30	—	—	4	926	
1447	6.30	1717.6	-14.8	0	18.30	6.27	19.49	4	946	
1452	6.30	1712.7	-34.0	0	18.30	1344 AU	19.62	4	966	Permeability well
1457	6.31	1709.9	-15.4	0	18.34	65.0	19.71	4	986	
1502	6.30	1716.0	-33.1	0	18.32	94.2	19.88	4	1006	
1507	6.30	1719.1	-33.5	0	18.31	28.5	20.04	4	1026	
1512	6.30	1709.5	-13.2	0	18.33	77.4	19.98	4	1046	
1517	6.30	1711.9	-30.6	0	18.34	68.3	19.99	4	1066	
1522	6.30	1722.1	-31.5	0	18.34	67.3	19.84	4	1086	
1527	6.30	1722.5	-11.9	0	18.34	11.28	19.73	4	1106	
1532	6.30	1723.6	-30.9	0	18.34	7.72	19.71	4	1126	
1537	6.30	1714.6	-12.0	0	18.34	4.17	19.73	4	1146	
1542										
<del>6-26-2023</del>										
Stabilizing Criteria	+/- 0.1 SU	+/- 5%		0.2 mg/L or 10% for DO > 0.5 mg/L (whichever is greater)		< 5 NTUs	< 0.3 ft	> 100 mL < 250 mL	> 3L	



EQUIPMENT CALIBRATION LOG

Field Technician: A. Swart

Date: 6-26-2023

Time (start): 855

Time (finish): 915

SmartTroll SN: 989630

Turbidity Meter Type: LaMotte 2020we

SN: 1603-4411

Weather Conditions: Sunny, 70°F

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot# / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	24000044	24.15	4490	4094	4490.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	05/2024	24.42	4.00	4.04	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check			4.00			+/- 0.1 SU	Yes No	
pH (7)	22290139 04/2024	24.72	7.00	7.05	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	Yes No	
pH (10)	22110130 04/2024	24.98	10.00	9.95	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	25.05	228	291	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	101.56	100.0	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.00	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.50	0.60	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.94	10.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Neely

Date: 6/26/23

Time (start): 0845

Time (finish): 0915

smarTroll SN: 883553

Turbidity Meter Type: LaMotte 2020we

SN: 7007-1410

Weather Conditions: 70-91°, sunny

Facility and Unit: Pian+Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	<del>4</del> 22250153 11/23	25.05	4490	4020.7	4489.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)			4.00	4.03	4.00	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	—	—	4.00	—	—	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	24.92	7.00	7.14	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	—	—	7.00	—	—	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	24.96	10.00	10.39	10.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	—	—	10.00	—	—	+/- 0.1 SU	Yes No	
ORP (mV)	24390144 11/23	25.51	228	228.1	228	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	99.29	100.18	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.01	0.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	<del>0.88</del> 0.88	1.02	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	11.38	<del>10.01</del> 10.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: A. Swast Date: 6-27-2023 Time (start): 1145 Time (finish): 1200  
 smarTroll SN: 989630 Turbidity Meter Type: LaMote 2020we SN: 7009-1416  
 Weather Conditions: Sunny, 85°F Facility and Unit: Plant Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	2400 0044	30.19	4490	4318.3	4490	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	05/2024	29.92	4.00	4.07	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	<del>22290139 04/</del>		4.00			+/- 0.1 SU	Yes No	
pH (7)	22290139 04/2024	29.68	7.00	7.01	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check			7.00			+/- 0.1 SU	Yes No	
pH (10)	22110136 04/2024	29.53	10.00	10.02	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check			10.00			+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	29.73	228	217.4	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	96.99	100	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.41	0.0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	See AN's cal report New turbidity meter 1315
Turbidity 1 NTU			1.00	0.92	0.98	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	9.95	10.08	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

↑ readings  
OK

EQUIPMENT CALIBRATION LOG

Field Technician: Amana Meely

Date: 0127123

Time (start): 0735

Time (finish): 0755

smarTroll SN: 883553

Turbidity Meter Type: LaMotte 2020we

SN: 7007-1416

Weather Conditions: 66-89°, sunny

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	27.06	4490	4561.1	4486.0	+/- 5%	<input checked="" type="radio"/> Yes No	
pH (4)	11/23		4.00	4.18	3.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	—	—	4.00	—	—	+/- 0.1 SU	Yes No	
pH (7)	2210893 11/23	26.72	7.00	6.97	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	—	—	7.00	—	—	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	26.92	10.00	9.89	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	—	—	10.00	—	—	+/- 0.1 SU	Yes No	
ORP (mV)	2390144 11/23	25.06	228	217.0	228.2	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	98.78%	99.78%	+/- 6% saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.00	-0.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.37	0.99	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	12.42	9.87	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: A. Stewart Date: 6-28-2023 Time (start): 1310 Time (finish): 1348  
 smarTroll SN: 989630 Turbidity Meter Type: LaMotte 2020we SN: 7009-1416  
 Weather Conditions: Sunny, 85°F Facility and Unit: Plant Hammond Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	24000044	36.12	4490	4578.5	4490.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	05/2024	38.12	4.00	4.01	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	<del>_____</del>		<del>4.00</del>	<del>_____</del>	<del>_____</del>	+/- 0.1 SU	Yes No	
pH (7)	22290739 04/2024	33.87	7.00	6.96	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	<del>_____</del>		<del>7.00</del>	<del>_____</del>	<del>_____</del>	+/- 0.1 SU	Yes No	
pH (10)	22110130 04/2024	32.48	10.00	9.88	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	<del>_____</del>		<del>10.00</del>	<del>_____</del>	<del>_____</del>	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	32.18	228	225.2	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	100.85	100.0	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.45	0.0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.91	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.78	10.07	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alan Anweely

Date: 6/17/23

Time (start): 0730

Time (finish): 0800

smarTroll SN: 883553

Turbidity Meter Type: LaMotte 2020we

SN: 7007-1416

Weather Conditions: 62-92° sunny

Facility and Unit: Plant Hammond

Project No: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	24.51	4490	4435.3	4490.8	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	11/23		4.00	4.21	3.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2210893 11/23	23.80	7.00	7.00	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	-	-	7.00	-	-	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	24.24	10.00	9.85	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	-	-	10.00	-	-	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	22.83	228	231	228.4	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	98.60	100.52	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	-0.02	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.62	0.75	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	12.35	9.96	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	



EQUIPMENT CALIBRATION LOG

Field Technician: A. Smart

Date: 6-29-2023

Time (start): 1140

Time (finish): 1200

smarTroll SN: 989630

Turbidity Meter Type: LaMote 2020we

SN: 7009-416

Weather Conditions: Summer, 80°F

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	24000044	30.55	4490	4551.8	4490.0	+/- 5 %	<input checked="" type="checkbox"/> Yes No	
pH (4)	05/2024	30.71	4.00	4.04	4.00	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (4) check			<del>4.00</del>			+/- 0.1 SU	Yes No	
pH (7)	22290139 04/2024	29.73	7.00	7.01	7.00	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (7) check			<del>7.00</del>			+/- 0.1 SU	Yes No	
pH (10)	22110136 04/2024	29.43	10.00	10.02	10.00	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (10) check			<del>10.00</del>			+/- 0.1 SU	Yes No	
ORP (mV)	21398144 11/2023	29.13	228	231.5	228.0	+/- 20mV	<input checked="" type="checkbox"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	105.57	100.0	+/- 6 % saturation	<input checked="" type="checkbox"/> Yes No	
Turbidity 0 NTU			0	0.31	0	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 1 NTU			1.00	0.70	0.80	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 10 NTU			10.00	11.08	9.87	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Anana Neely

Date: 6/29/23

Time (start): 0735

Time (finish): 0755

smarTroll SN: 883553

Turbidity Meter Type: LaMotte 2020we

SN: 7007-1416

Weather Conditions: 65-94° sunny

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	25.95	4490	4478.9	4494.5	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)	11/23		4.00	4.24	3.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No	
pH (7)	2216893 11/23	25.14	7.00	6.91	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check	-		-	7.00	-	-	+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No
pH (10)	21320202 12/23	25.92	10.00	9.86	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check	-		-	10.00	-	-	+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No
ORP (mV)	21390144 11/23	23.50	228	226.2	228.0	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	99.65	100.48	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.27	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	0.42	0.95	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	9.82	10.04	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

**EQUIPMENT CALIBRATION LOG**

Field Technician: A. Swartz

Date: 6-30-2023

Time (start): 905

Time (finish): 920

smarTroll SN: 989630

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: Sunny, 70°F

Facility and Unit: Plant Hammond

Project No.: GW6581

**Calibration log**

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	24000044	23.92	4490	4493.8	4490.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	05/2024	23.81	4.00	4.03	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check			<del>4.00</del>			+/- 0.1 SU	Yes No	
pH (7)	22290139 04/2024	24.00	7.00	7.03	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check			<del>7.00</del>			+/- 0.1 SU	Yes No	
pH (10)	22110130 4/2024	24.08	10.00	9.98	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check			<del>10.00</del>			+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	24.08	228	234.5	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	96.19	100.0	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.35	0.05	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	1.06	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.17	9.90	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Murray

Date: 6/30/23

Time (start): 0735

Time (finish): 0750

smarTroll SN: 883553

Turbidity Meter Type: LaMote 2020we

SN: 7007-1414

Weather Conditions: 66-95°

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	23.79	4490	4458.8	4487.4	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	-	-	4.00	4.24	3.98	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	23.12	7.00	6.93	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	-	-	7.00	-	-	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	23.72	10.00	9.82	10.01	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	-	-	10.00	-	-	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	22.3	228	230.3	228	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	100.521	100.611	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.52	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.68	0.94	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.23	9.88	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Neely

Date: 7/5/23

Time (start): 1000

Time (finish): 1030

smarTroll SN: 883853

Turbidity Meter Type: LaMotte 2020we

SN: 7007-1416

Weather Conditions: 70-86°, cloudy/rainy

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	24.69	4490	4731.8	4413.1	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)			4.00	4.01	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	24.96	7.00	7.26	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	-	-	7.00	-	-	+/- 0.1 SU	Yes No	
pH (10)	21320202 11/23	24.80	10.00	9.63	10.01	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	-	-	10.00	-	-	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	24.90	228	227.5	227.8	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	97.89%	100.56%	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.62	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.79	0.89	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.93	9.98	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Neely

Date: 7/16/23

Time (start): 0725

Time (finish): \_\_\_\_\_

smarTroll SN: 883553

Turbidity Meter Type: LaMotte 2020we

SN: 7007-14110

Weather Conditions: 70-90, sunny

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	2225053	26.21	4490	4310.7	4488.3	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)	11/23		4.00	4.30	3.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes <input type="radio"/> No <input type="radio"/>	
pH (7)	2216893 11/23	26.14	7.00	7.01	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check	-	-	7.00	-	-	+/- 0.1 SU	Yes <input type="radio"/> No <input type="radio"/>	
pH (10)	21320202 12/23	25.95	10.00	9.83	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check	-	-	10.00	-	-	+/- 0.1 SU	Yes <input type="radio"/> No <input type="radio"/>	
ORP (mV)	21390144 11/23	25.19	228	223	228	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	99.331		+/- 6 % saturation	Yes <input type="radio"/> No <input type="radio"/>	
Turbidity 0 NTU			0	0.43	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	0.77	0.84	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	11.26	9.84	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

# APPENDIX D

## Certified Well Survey Data

Well ID	Casing Northing	Casing Easting	Top of Casing Elevation	Nail or Pad Northing	Nail or Pad Easting	Nail or Pad Elevation	Description
INW01	1547921.52	1938350.62	573.90	1547920.66	1938350.81	571.04	NAIL ON PAD
PT-01	1547916.85	1938348.81	574.13	1547916.04	1938348.97	571.14	NAIL ON PAD
PT-02	1547917.68	1938353.52	574.06	1547917.08	1938353.43	571.10	NAIL ON PAD
PT-03	1547910.57	1938352.13	574.09	1547909.42	1938351.78	571.10	NAIL ON PAD
MW-56	1547906.81	1938260.81	573.47	1547907.03	1938261.87	570.60	NAIL ON PAD
MW-57	1547895.53	1938349.49	574.28	1547896.78	1938349.21	571.30	NAIL ON PAD
MW58	1547931.46	1938592.55	575.87	1547932.08	1938592.44	572.96	NAIL ON PAD
MW-59	1547971.14	1938344.65	592.20	1547972.39	1938344.39	589.52	NAIL ON PAD
<b>Benchmark</b>	<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>				
BM-H2	1548149.4490	1938960.2220	590.68				

SURVEY DATA CERTIFICATION FOR SOUTHERN COMPANY TO DETERMINE NORTHING, EASTING, AND VERTICAL ELEVATION OF THE NAIL IN THE CONCRETE PAD & THE PVC WELL CASING. DATE OF FIELD SURVEY & INSPECTION: 07/11/2023. FIELD SURVEY POSITIONAL TOLERANCE=0.5 FEET HORIZONTAL-NAD'83, 0.01 VERTICAL-NAVD '88. EQUIPMENT USED FOR HORIZONTAL LOCATION: TRIMBLE R12 RTK GPS & TRIMBLE S5 ROBOTIC TOTAL STATION. THE VERTICAL LOCATION OF EACH SURVEYED POINT WAS ESTABLISHED BASED UPON LEVEL RUNS WITH A DIGITAL LEVEL LOOP FROM VERTICAL CONTROL ESTABLISHED BY ON-SITE BENCHMARK BM-H2 SET BY GEL SOLUTIONS USING A TRIMBLE DINI LEVEL

*David Baker*

7/17/2023



COA - LS003119  
Exp. 12/31/2023



Well ID	Casing Northing	Casing Easting	Top of Casing	Nail or Pad Northing	Nail or Pad Easting	Nail or Pad Elevation	Description
INW02	1548915.001	1937643.885	580.56	1548914.667	1937643.335	580.78	NAIL ON PAD
PT-04	1548918.264	1937641.905	580.26	1548917.858	1937641.396	580.495	NAIL ON PAD
PT-05	1548913.064	1937638.478	580.54	1548912.735	1937637.953	580.826	NAIL ON PAD
PT-06	1548916.945	1937634.248	580.36	1548916.496	1937633.777	580.681	NAIL ON PAD
MW-55	1548823.4	1937575.715	582.49	1548822.243	1937575.258	582.783	NAIL ON PAD
<b>Benchmark</b>	<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>				
BM-H2	1548149.4490	1938960.2220	590.68				

SURVEY DATA CERTIFICATION FOR SOUTHERN COMPANY TO DETERMINE NORTHING, EASTING, AND VERTICAL ELEVATION OF THE NAIL IN THE CONCRETE PAD & THE PVC WELL CASING. DATE OF FIELD SURVEY & INSPECTION: 08/29/2023. FIELD SURVEY POSITIONAL TOLERANCE=0.5 FEET HORIZONTAL-NAD'83, 0.01 VERTICAL-NAVD '88. EQUIPMENT USED FOR HORIZONTAL LOCATION: TRIMBLE R12 RTK GPS & TRIMBLE S5 ROBOTIC TOTAL STATION. THE VERTICAL LOCATION OF EACH SURVEYED POINT WAS ESTABLISHED BASED UPON LEVEL RUNS WITH A DIGITAL LEVEL LOOP FROM VERTICAL CONTROL ESTABLISHED BY ON-SITE BENCHMARK BM-H2 SET BY GEL SOLUTIONS USING A TRIMBLE DINI LEVEL

*David Baker*

8/30/2023



COA - LS003119  
Exp. 12/31/2023

# APPENDIX B

## Baseline Analytical Laboratory Results and Field Sampling Forms

# Laboratory Analytical Reports



August 10, 2023

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

RE: Project: Hammond AP-2  
Pace Project No.: 92677696

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between July 17, 2023 and July 19, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

A revised report is being submitted on 8/10/23 to revise the sample ID for 92677696-010. It was entered incorrectly at log in.

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

Sincerely,

*Angela M. Baioni*

Angela Baioni for  
Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: Hammond AP-2

Pace Project No.: 92677696

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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  
Virginia Certification #: 460204

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### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92677696001	HAM-HGWC-18	Water	07/14/23 09:57	07/17/23 12:30
92677696002	HAM-PT-06	Water	07/14/23 11:05	07/17/23 12:30
92677696003	HAM-PT-05	Water	07/14/23 13:00	07/17/23 12:30
92677696004	HAM-PT-04	Water	07/14/23 14:03	07/17/23 12:30
92677696005	HAM-INW-02	Water	07/14/23 14:57	07/17/23 12:30
92677696006	HAM-AP2-FD-01	Water	07/14/23 00:00	07/17/23 12:30
92677696007	HAM-AP2-FB-01	Water	07/17/23 08:45	07/17/23 12:30
92677696008	HAM-MW-59	Water	07/17/23 16:24	07/19/23 13:53
92677696009	HAM-MW-33	Water	07/18/23 09:47	07/19/23 13:53
92677696010	HAM-MW-35	Water	07/18/23 11:29	07/19/23 13:53
92677696011	HAM-PT-03	Water	07/18/23 12:33	07/19/23 13:53
92677696012	HAM-PT-01	Water	07/18/23 13:24	07/19/23 13:53
92677696013	HAM-PT-02	Water	07/18/23 16:20	07/19/23 13:53
92677696014	HAM-INW-01	Water	07/19/23 09:31	07/19/23 13:53
92677696015	HAM-MW-57	Water	07/19/23 10:40	07/19/23 13:53

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92677696001	HAM-HGWC-18	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696002	HAM-PT-06	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696003	HAM-PT-05	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696004	HAM-PT-04	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696005	HAM-INW-02	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696006	HAM-AP2-FD-01	EPA 6010D	MS	6
		EPA 6020B	CW1	13

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696007	HAM-AP2-FB-01	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696008	HAM-MW-59	EPA 6010D	DRB	1
		EPA 6020B	CW1	1
92677696009	HAM-MW-33	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696010	HAM-MW-35	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696011	HAM-PT-03	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696012	HAM-PT-01	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13

### REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: Hammond AP-2  
 Pace Project No.: 92677696

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
<b>92677696013</b>	<b>HAM-PT-02</b>	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
<b>92677696014</b>	<b>HAM-INW-01</b>	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
<b>92677696015</b>	<b>HAM-MW-57</b>	EPA 6010D	MS	1
		EPA 6020B	CW1	1

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 AP-2

Pace Project No.: 92677696

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92677696001</b>	<b>HAM-HGWC-18</b>					
	Performed by	CUSTOME			07/17/23 17:10	
		R				
	pH	4.59	Std. Units		07/17/23 17:10	
EPA 6010D	Manganese	3.6	mg/L	0.040	07/20/23 16:44	
EPA 6010D	Potassium	10.7	mg/L	0.50	07/20/23 16:44	
EPA 6010D	Sodium	11.9	mg/L	1.0	07/20/23 16:44	
EPA 6010D	Magnesium	39.1	mg/L	0.050	07/20/23 16:44	
EPA 6010D	Iron	0.34	mg/L	0.040	07/25/23 16:58	
EPA 6010D	Calcium	394	mg/L	5.0	07/25/23 17:03	
EPA 6020B	Barium	0.023	mg/L	0.0050	07/19/23 19:12	
EPA 6020B	Beryllium	0.0027	mg/L	0.00050	07/19/23 19:12	
EPA 6020B	Boron	7.7	mg/L	0.20	07/21/23 17:49	
EPA 6020B	Cadmium	0.0014	mg/L	0.00050	07/19/23 19:12	
EPA 6020B	Cobalt	0.13	mg/L	0.0050	07/19/23 19:12	
EPA 6020B	Lead	0.0015	mg/L	0.0010	07/19/23 19:12	
EPA 6020B	Lithium	0.010J	mg/L	0.030	07/19/23 19:12	
EPA 6020B	Selenium	0.0063	mg/L	0.0050	07/19/23 19:12	
EPA 7470A	Mercury	0.00020J	mg/L	0.00020	08/01/23 11:29	
SM 2540C-2015	Total Dissolved Solids	1760	mg/L	25.0	07/18/23 15:26	
EPA 300.0 Rev 2.1 1993	Chloride	104	mg/L	12.0	07/19/23 13:52	
EPA 300.0 Rev 2.1 1993	Fluoride	0.28	mg/L	0.10	07/19/23 07:01	
EPA 300.0 Rev 2.1 1993	Sulfate	927	mg/L	12.0	07/19/23 13:52	
<b>92677696002</b>	<b>HAM-PT-06</b>					
	Performed by	CUSTOME			07/17/23 17:10	
		R				
	pH	6.09	Std. Units		07/17/23 17:10	
EPA 6010D	Calcium	319	mg/L	5.0	07/25/23 17:13	
EPA 6010D	Manganese	18.0	mg/L	0.040	07/20/23 16:49	
EPA 6010D	Potassium	6.6	mg/L	0.50	07/20/23 16:49	
EPA 6010D	Sodium	13.6	mg/L	1.0	07/20/23 16:49	
EPA 6010D	Magnesium	25.6	mg/L	0.050	07/20/23 16:49	
EPA 6010D	Iron	6.6	mg/L	0.040	07/25/23 17:08	
EPA 6020B	Barium	0.037	mg/L	0.0050	07/19/23 19:18	
EPA 6020B	Boron	7.8	mg/L	0.20	07/21/23 17:55	
EPA 6020B	Cobalt	0.063	mg/L	0.0050	07/19/23 19:18	
EPA 6020B	Lithium	0.0057J	mg/L	0.030	07/19/23 19:18	
EPA 6020B	Thallium	0.00049J	mg/L	0.0010	07/19/23 19:18	
SM 2540C-2015	Total Dissolved Solids	1330	mg/L	25.0	07/18/23 15:26	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	140	mg/L	5.0	07/20/23 17:51	
SM 2320B-2011	Alkalinity, Total as CaCO3	140	mg/L	5.0	07/20/23 17:51	
EPA 300.0 Rev 2.1 1993	Chloride	156	mg/L	10.0	07/19/23 14:07	
EPA 300.0 Rev 2.1 1993	Sulfate	542	mg/L	10.0	07/19/23 14:07	
<b>92677696003</b>	<b>HAM-PT-05</b>					
	Performed by	CUSTOME			07/17/23 17:11	
		R				
	pH	6.13	Std. Units		07/17/23 17:11	
EPA 6010D	Manganese	11.4	mg/L	0.040	07/20/23 16:54	

**REPORT OF LABORATORY ANALYSIS**

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92677696

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92677696003</b>	<b>HAM-PT-05</b>					
EPA 6010D	Potassium	4.5	mg/L	0.50	07/20/23 16:54	
EPA 6010D	Sodium	10.6	mg/L	1.0	07/20/23 16:54	
EPA 6010D	Magnesium	26.7	mg/L	0.050	07/20/23 16:54	
EPA 6010D	Iron	1.2	mg/L	0.040	07/25/23 17:18	
EPA 6010D	Calcium	287	mg/L	1.0	07/25/23 17:18	
EPA 6020B	Barium	0.045	mg/L	0.0050	07/19/23 19:24	
EPA 6020B	Boron	7.5	mg/L	0.20	07/21/23 18:00	
EPA 6020B	Cobalt	0.042	mg/L	0.0050	07/19/23 19:24	
EPA 6020B	Lithium	0.0050J	mg/L	0.030	07/19/23 19:24	
SM 2540C-2015	Total Dissolved Solids	1520	mg/L	25.0	07/18/23 15:26	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	148	mg/L	5.0	07/20/23 18:03	
SM 2320B-2011	Alkalinity, Total as CaCO3	148	mg/L	5.0	07/20/23 18:03	
EPA 300.0 Rev 2.1 1993	Chloride	166	mg/L	10.0	07/19/23 14:21	
EPA 300.0 Rev 2.1 1993	Sulfate	564	mg/L	10.0	07/19/23 14:21	
<b>92677696004</b>	<b>HAM-PT-04</b>					
	Performed by	CUSTOME			07/17/23 17:11	
		R				
	pH	6.30	Std. Units		07/17/23 17:11	
EPA 6010D	Iron	16.0	mg/L	0.040	07/25/23 17:38	
EPA 6010D	Calcium	297	mg/L	1.0	07/25/23 17:38	
EPA 6010D	Manganese	17.8	mg/L	0.040	07/20/23 16:59	
EPA 6010D	Potassium	7.2	mg/L	0.50	07/20/23 16:59	
EPA 6010D	Sodium	12.2	mg/L	1.0	07/20/23 16:59	
EPA 6010D	Magnesium	24.1	mg/L	0.050	07/20/23 16:59	
EPA 6020B	Arsenic	0.0077J	mg/L	0.010	07/19/23 19:30	
EPA 6020B	Barium	0.048	mg/L	0.0050	07/19/23 19:30	
EPA 6020B	Boron	7.8	mg/L	0.20	07/21/23 18:06	
EPA 6020B	Cobalt	0.058	mg/L	0.0050	07/19/23 19:30	
EPA 6020B	Lithium	0.0050J	mg/L	0.030	07/19/23 19:30	
SM 2540C-2015	Total Dissolved Solids	1310	mg/L	25.0	07/18/23 15:26	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	155	mg/L	5.0	07/20/23 18:14	
SM 2320B-2011	Alkalinity, Total as CaCO3	155	mg/L	5.0	07/20/23 18:14	
EPA 300.0 Rev 2.1 1993	Chloride	153	mg/L	10.0	07/19/23 14:35	
EPA 300.0 Rev 2.1 1993	Sulfate	535	mg/L	10.0	07/19/23 14:35	
<b>92677696005</b>	<b>HAM-INW-02</b>					
	Performed by	CUSTOME			07/17/23 17:11	
		R				
	pH	6.27	Std. Units		07/17/23 17:11	
EPA 6010D	Calcium	306	mg/L	5.0	07/25/23 17:53	
EPA 6010D	Iron	10.7	mg/L	0.040	07/25/23 17:48	
EPA 6010D	Manganese	16.0	mg/L	0.040	07/20/23 17:14	
EPA 6010D	Potassium	6.0	mg/L	0.50	07/20/23 17:14	
EPA 6010D	Sodium	11.1	mg/L	1.0	07/20/23 17:14	
EPA 6010D	Magnesium	25.8	mg/L	0.050	07/20/23 17:14	
EPA 6020B	Arsenic	0.0057J	mg/L	0.010	07/19/23 19:36	
EPA 6020B	Barium	0.070	mg/L	0.0050	07/19/23 19:36	
EPA 6020B	Boron	7.1	mg/L	0.20	07/21/23 18:12	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92677696

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92677696005</b>	<b>HAM-INW-02</b>					
EPA 6020B	Cobalt	0.060	mg/L	0.0050	07/19/23 19:36	
EPA 6020B	Lithium	0.0057J	mg/L	0.030	07/19/23 19:36	
EPA 6020B	Thallium	0.00037J	mg/L	0.0010	07/19/23 19:36	
SM 2540C-2015	Total Dissolved Solids	1460	mg/L	25.0	07/18/23 15:29	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	159	mg/L	5.0	07/20/23 18:27	
SM 2320B-2011	Alkalinity, Total as CaCO3	159	mg/L	5.0	07/20/23 18:27	
EPA 300.0 Rev 2.1 1993	Chloride	153	mg/L	10.0	07/19/23 14:49	
EPA 300.0 Rev 2.1 1993	Sulfate	532	mg/L	10.0	07/19/23 14:49	
<b>92677696006</b>	<b>HAM-AP2-FD-01</b>					
EPA 6010D	Iron	10.1	mg/L	0.040	07/25/23 17:58	
EPA 6010D	Manganese	15.5	mg/L	0.040	07/20/23 17:19	
EPA 6010D	Potassium	5.8	mg/L	0.50	07/20/23 17:19	
EPA 6010D	Sodium	10.8	mg/L	1.0	07/20/23 17:19	
EPA 6010D	Calcium	299	mg/L	1.0	07/20/23 17:19	
EPA 6010D	Magnesium	25.0	mg/L	0.050	07/20/23 17:19	
EPA 6020B	Arsenic	0.0054J	mg/L	0.010	07/19/23 19:48	
EPA 6020B	Barium	0.069	mg/L	0.0050	07/19/23 19:48	
EPA 6020B	Boron	7.1	mg/L	0.20	07/21/23 18:18	
EPA 6020B	Cobalt	0.059	mg/L	0.0050	07/19/23 19:48	
EPA 6020B	Lithium	0.0056J	mg/L	0.030	07/19/23 19:48	
EPA 6020B	Thallium	0.00037J	mg/L	0.0010	07/19/23 19:48	
SM 2540C-2015	Total Dissolved Solids	1520	mg/L	25.0	07/18/23 15:29	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	159	mg/L	5.0	07/20/23 18:38	
SM 2320B-2011	Alkalinity, Total as CaCO3	159	mg/L	5.0	07/20/23 18:38	
EPA 300.0 Rev 2.1 1993	Chloride	152	mg/L	10.0	07/19/23 15:03	
EPA 300.0 Rev 2.1 1993	Sulfate	531	mg/L	10.0	07/19/23 15:03	
<b>92677696008</b>	<b>HAM-MW-59</b>					
	Performed by	CUSTOMER			07/19/23 15:54	
	pH	4.59	Std. Units		07/19/23 15:54	
EPA 6010D	Boron	9.7	mg/L	0.040	08/01/23 14:52	M1
EPA 6020B	Cobalt	0.16	mg/L	0.0050	07/27/23 15:24	
<b>92677696009</b>	<b>HAM-MW-33</b>					
	Performed by	CUSTOMER			07/19/23 15:54	
	pH	4.48	Std. Units		07/19/23 15:54	
EPA 6010D	Iron	0.22	mg/L	0.040	08/01/23 15:12	
EPA 6010D	Manganese	4.1	mg/L	0.040	08/01/23 15:12	
EPA 6010D	Potassium	9.6	mg/L	0.50	08/01/23 15:12	
EPA 6010D	Sodium	9.3	mg/L	1.0	08/01/23 15:12	
EPA 6010D	Magnesium	38.9	mg/L	0.050	08/01/23 15:12	
EPA 6010D	Calcium	397	mg/L	5.0	08/02/23 12:39	
EPA 6020B	Arsenic	0.0050J	mg/L	0.010	07/27/23 15:30	
EPA 6020B	Barium	0.022	mg/L	0.0050	07/27/23 15:30	
EPA 6020B	Beryllium	0.00096	mg/L	0.00050	07/27/23 15:30	
EPA 6020B	Boron	6.9	mg/L	0.040	07/27/23 15:30	

### REPORT OF LABORATORY ANALYSIS

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**SUMMARY OF DETECTION**

Project: Hammond AP-2

Pace Project No.: 92677696

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92677696009</b>	<b>HAM-MW-33</b>					
EPA 6020B	Cadmium	0.00017J	mg/L	0.00050	07/27/23 15:30	
EPA 6020B	Cobalt	0.060	mg/L	0.0050	07/27/23 15:30	
EPA 6020B	Lead	0.0012	mg/L	0.0010	07/27/23 15:30	
EPA 6020B	Selenium	0.0051	mg/L	0.0050	07/27/23 15:30	
EPA 6020B	Thallium	0.00022J	mg/L	0.0010	07/27/23 15:30	
SM 2540C-2015	Total Dissolved Solids	1850	mg/L	25.0	07/21/23 12:01	
EPA 300.0 Rev 2.1 1993	Chloride	102	mg/L	21.0	07/21/23 13:39	
EPA 300.0 Rev 2.1 1993	Fluoride	0.22	mg/L	0.10	07/20/23 18:59	
EPA 300.0 Rev 2.1 1993	Sulfate	1090	mg/L	21.0	07/21/23 13:39	
<b>92677696010</b>	<b>HAM-MW-35</b>					
	Performed by	CUSTOME			07/19/23 15:55	
		R				
	pH	4.93	Std. Units		07/19/23 15:55	
EPA 6010D	Iron	0.76	mg/L	0.040	08/01/23 15:17	
EPA 6010D	Manganese	9.7	mg/L	0.040	08/01/23 15:17	
EPA 6010D	Potassium	7.1	mg/L	0.50	08/01/23 15:17	
EPA 6010D	Sodium	12.1	mg/L	1.0	08/01/23 15:17	
EPA 6010D	Magnesium	74.1	mg/L	0.050	08/01/23 15:17	
EPA 6010D	Calcium	492	mg/L	5.0	08/02/23 12:44	
EPA 6020B	Arsenic	0.0056J	mg/L	0.010	07/27/23 15:36	
EPA 6020B	Barium	0.022	mg/L	0.0050	07/27/23 15:36	
EPA 6020B	Beryllium	0.00053	mg/L	0.00050	07/27/23 15:36	
EPA 6020B	Boron	9.5	mg/L	0.040	07/27/23 15:36	
EPA 6020B	Cadmium	0.0012	mg/L	0.00050	07/27/23 15:36	
EPA 6020B	Chromium	0.0014J	mg/L	0.0050	07/27/23 15:36	
EPA 6020B	Cobalt	0.087	mg/L	0.0050	07/27/23 15:36	
EPA 6020B	Lead	0.00090J	mg/L	0.0010	07/27/23 15:36	
EPA 6020B	Lithium	0.0035J	mg/L	0.030	07/27/23 15:36	
EPA 6020B	Selenium	0.0052	mg/L	0.0050	07/27/23 15:36	
SM 2540C-2015	Total Dissolved Solids	2340	mg/L	25.0	07/21/23 12:02	1g
EPA 300.0 Rev 2.1 1993	Chloride	191	mg/L	24.0	07/21/23 07:01	
EPA 300.0 Rev 2.1 1993	Fluoride	0.077J	mg/L	0.10	07/20/23 19:15	
EPA 300.0 Rev 2.1 1993	Sulfate	1200	mg/L	24.0	07/21/23 07:01	
<b>92677696011</b>	<b>HAM-PT-03</b>					
	Performed by	CUSTOME			07/19/23 15:55	
		R				
	pH	4.64	Std. Units		07/19/23 15:55	
EPA 6010D	Iron	0.26	mg/L	0.040	08/01/23 15:22	
EPA 6010D	Manganese	8.2	mg/L	0.040	08/01/23 15:22	
EPA 6010D	Potassium	5.4	mg/L	0.50	08/01/23 15:22	
EPA 6010D	Sodium	11.7	mg/L	1.0	08/01/23 15:22	
EPA 6010D	Magnesium	36.9	mg/L	0.050	08/01/23 15:22	
EPA 6010D	Calcium	382	mg/L	5.0	08/03/23 17:02	
EPA 6020B	Antimony	0.0029J	mg/L	0.0030	07/27/23 16:00	
EPA 6020B	Arsenic	0.0076J	mg/L	0.010	07/27/23 16:00	
EPA 6020B	Barium	0.025	mg/L	0.0050	07/27/23 16:00	
EPA 6020B	Beryllium	0.0026	mg/L	0.00050	07/27/23 16:00	

**REPORT OF LABORATORY ANALYSIS**

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92677696

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92677696011</b>	<b>HAM-PT-03</b>					
EPA 6020B	Boron	8.2	mg/L	0.040	07/27/23 16:00	
EPA 6020B	Cadmium	0.00062	mg/L	0.00050	07/27/23 16:00	
EPA 6020B	Chromium	0.0011J	mg/L	0.0050	07/27/23 16:00	
EPA 6020B	Cobalt	0.12	mg/L	0.0050	07/27/23 16:00	
EPA 6020B	Lead	0.0014	mg/L	0.0010	07/27/23 16:00	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	07/27/23 16:00	
EPA 6020B	Selenium	0.011	mg/L	0.0050	07/27/23 16:00	
EPA 6020B	Thallium	0.00021J	mg/L	0.0010	07/27/23 16:00	
SM 2540C-2015	Total Dissolved Solids	2690	mg/L	25.0	07/21/23 12:02	1g
EPA 300.0 Rev 2.1 1993	Chloride	138	mg/L	19.0	07/21/23 07:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.84	mg/L	0.10	07/21/23 01:51	
EPA 300.0 Rev 2.1 1993	Sulfate	948	mg/L	19.0	07/21/23 07:47	M1
<b>92677696012</b>	<b>HAM-PT-01</b>					
	Performed by	CUSTOMER			07/19/23 15:56	
	pH	4.63	Std. Units		07/19/23 15:56	
EPA 6010D	Iron	0.078	mg/L	0.040	08/01/23 15:27	
EPA 6010D	Manganese	9.6	mg/L	0.040	08/01/23 15:27	
EPA 6010D	Potassium	5.2	mg/L	0.50	08/01/23 15:27	
EPA 6010D	Sodium	8.8	mg/L	1.0	08/01/23 15:27	
EPA 6010D	Magnesium	38.2	mg/L	0.050	08/01/23 15:27	
EPA 6010D	Calcium	370	mg/L	5.0	08/02/23 12:54	
EPA 6020B	Arsenic	0.0075J	mg/L	0.010	07/27/23 16:06	
EPA 6020B	Barium	0.046	mg/L	0.0050	07/27/23 16:06	
EPA 6020B	Beryllium	0.0024	mg/L	0.00050	07/27/23 16:06	
EPA 6020B	Boron	8.1	mg/L	0.040	07/27/23 16:06	
EPA 6020B	Cadmium	0.00099	mg/L	0.00050	07/27/23 16:06	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	07/27/23 16:06	
EPA 6020B	Lead	0.00072J	mg/L	0.0010	07/27/23 16:06	
EPA 6020B	Lithium	0.0052J	mg/L	0.030	07/27/23 16:06	
EPA 6020B	Selenium	0.011	mg/L	0.0050	07/27/23 16:06	
EPA 7470A	Mercury	0.00023	mg/L	0.00020	08/01/23 12:09	
SM 2540C-2015	Total Dissolved Solids	1700	mg/L	25.0	07/21/23 12:02	
EPA 300.0 Rev 2.1 1993	Chloride	147	mg/L	11.0	07/21/23 08:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.70	mg/L	0.10	07/21/23 02:38	
EPA 300.0 Rev 2.1 1993	Sulfate	892	mg/L	11.0	07/21/23 08:32	
<b>92677696013</b>	<b>HAM-PT-02</b>					
	Performed by	CUSTOMER			07/19/23 15:56	
	pH	4.97	Std. Units		07/19/23 15:56	
EPA 6010D	Iron	0.44	mg/L	0.040	08/01/23 15:47	
EPA 6010D	Manganese	12.6	mg/L	0.040	08/01/23 15:47	
EPA 6010D	Potassium	5.2	mg/L	0.50	08/01/23 15:47	
EPA 6010D	Sodium	9.3	mg/L	1.0	08/01/23 15:47	
EPA 6010D	Magnesium	44.0	mg/L	0.050	08/01/23 15:47	
EPA 6010D	Calcium	379	mg/L	5.0	08/02/23 12:59	
EPA 6020B	Antimony	0.0013J	mg/L	0.0030	07/27/23 16:58	

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**SUMMARY OF DETECTION**

Project: Hammond AP-2

Pace Project No.: 92677696

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92677696013</b>	<b>HAM-PT-02</b>					
EPA 6020B	Arsenic	0.0063J	mg/L	0.010	07/27/23 16:58	
EPA 6020B	Barium	0.054	mg/L	0.0050	07/27/23 16:58	
EPA 6020B	Beryllium	0.0016	mg/L	0.00050	07/27/23 16:58	
EPA 6020B	Boron	8.3	mg/L	0.040	07/27/23 16:58	
EPA 6020B	Cadmium	0.00091	mg/L	0.00050	07/27/23 16:58	
EPA 6020B	Cobalt	0.13	mg/L	0.0050	07/27/23 16:58	
EPA 6020B	Lead	0.00043J	mg/L	0.0010	07/27/23 16:58	
EPA 6020B	Lithium	0.0069J	mg/L	0.030	07/27/23 16:58	
EPA 6020B	Selenium	0.0075	mg/L	0.0050	07/27/23 16:58	
SM 2540C-2015	Total Dissolved Solids	1830	mg/L	25.0	07/21/23 12:03	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	5.5	mg/L	5.0	07/24/23 13:11	
SM 2320B-2011	Alkalinity, Total as CaCO3	5.5	mg/L	5.0	07/24/23 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	174	mg/L	11.0	07/21/23 08:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.47	mg/L	0.10	07/21/23 02:54	
EPA 300.0 Rev 2.1 1993	Sulfate	938	mg/L	11.0	07/21/23 08:47	
<b>92677696014</b>	<b>HAM-INW-01</b>					
	Performed by	CUSTOME			07/19/23 15:56	
		R				
	pH	5.18	Std. Units		07/19/23 15:56	
EPA 6010D	Iron	2.9	mg/L	0.040	08/01/23 15:53	
EPA 6010D	Manganese	14.4	mg/L	0.040	08/01/23 15:53	
EPA 6010D	Potassium	5.4	mg/L	0.50	08/01/23 15:53	
EPA 6010D	Sodium	10	mg/L	1.0	08/01/23 15:53	
EPA 6010D	Magnesium	52.3	mg/L	0.050	08/01/23 15:53	
EPA 6010D	Calcium	397	mg/L	5.0	08/02/23 13:04	
EPA 6020B	Arsenic	0.0061J	mg/L	0.010	07/27/23 17:04	
EPA 6020B	Barium	0.069	mg/L	0.0050	07/27/23 17:04	
EPA 6020B	Beryllium	0.0010	mg/L	0.00050	07/27/23 17:04	
EPA 6020B	Boron	8.7	mg/L	0.040	07/27/23 17:04	
EPA 6020B	Cadmium	0.00059	mg/L	0.00050	07/27/23 17:04	
EPA 6020B	Cobalt	0.13	mg/L	0.0050	07/27/23 17:04	
EPA 6020B	Lead	0.00037J	mg/L	0.0010	07/27/23 17:04	
EPA 6020B	Lithium	0.0064J	mg/L	0.030	07/27/23 17:04	
EPA 6020B	Selenium	0.0075	mg/L	0.0050	07/27/23 17:04	
SM 2540C-2015	Total Dissolved Solids	2000	mg/L	25.0	07/21/23 12:03	1g
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	14.9	mg/L	5.0	07/24/23 13:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	14.9	mg/L	5.0	07/24/23 13:16	
EPA 300.0 Rev 2.1 1993	Chloride	210	mg/L	19.0	07/21/23 09:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.34	mg/L	0.10	07/21/23 03:56	
EPA 300.0 Rev 2.1 1993	Sulfate	975	mg/L	19.0	07/21/23 09:18	
<b>92677696015</b>	<b>HAM-MW-57</b>					
	Performed by	CUSTOME			07/19/23 15:57	
		R				
	pH	6.45	Std. Units		07/19/23 15:57	
EPA 6010D	Boron	8.5	mg/L	0.040	08/01/23 15:58	
EPA 6020B	Cobalt	0.049	mg/L	0.0050	07/27/23 17:10	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-HGWC-18 Lab ID: 92677696001 Collected: 07/14/23 09:57 Received: 07/17/23 12:30 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		07/17/23 17:10		
pH	<b>4.59</b>	Std. Units			1		07/17/23 17:10		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Manganese	<b>3.6</b>	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:44	7439-96-5	
Potassium	<b>10.7</b>	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:44	7440-09-7	
Sodium	<b>11.9</b>	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:44	7440-23-5	
Magnesium	<b>39.1</b>	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:44	7439-95-4	
Iron	<b>0.34</b>	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:58	7439-89-6	
Calcium	<b>394</b>	mg/L	5.0	0.61	5	07/20/23 09:50	07/25/23 17:03	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	0.0012	1	07/18/23 13:46	07/19/23 19:12	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:12	7440-38-2	
Barium	<b>0.023</b>	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:12	7440-39-3	
Beryllium	<b>0.0027</b>	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:12	7440-41-7	
Boron	<b>7.7</b>	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:49	7440-42-8	
Cadmium	<b>0.0014</b>	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:12	7440-47-3	
Cobalt	<b>0.13</b>	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:12	7440-48-4	
Lead	<b>0.0015</b>	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:12	7439-92-1	
Lithium	<b>0.010J</b>	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:12	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:12	7439-98-7	
Selenium	<b>0.0063</b>	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:12	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	<b>0.00020J</b>	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 11:29	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1760</b>	mg/L	25.0	25.0	1		07/18/23 15:26		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:47		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:47		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/20/23 17:47		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-HGWC-18		Lab ID: 92677696001		Collected: 07/14/23 09:57		Received: 07/17/23 12:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:43	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>104</b>	mg/L	12.0	7.2	12		07/19/23 13:52	16887-00-6	
Fluoride	<b>0.28</b>	mg/L	0.10	0.050	1		07/19/23 07:01	16984-48-8	
Sulfate	<b>927</b>	mg/L	12.0	6.0	12		07/19/23 13:52	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-PT-06**      **Lab ID: 92677696002**      Collected: 07/14/23 11:05      Received: 07/17/23 12:30      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		07/17/23 17:10		
pH	<b>6.09</b>	Std. Units			1		07/17/23 17:10		

**6010D ATL ICP**

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

Calcium	<b>319</b>	mg/L	5.0	0.61	5	07/20/23 09:50	07/25/23 17:13	7440-70-2	
Manganese	<b>18.0</b>	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:49	7439-96-5	
Potassium	<b>6.6</b>	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:49	7440-09-7	
Sodium	<b>13.6</b>	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:49	7440-23-5	
Magnesium	<b>25.6</b>	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:49	7439-95-4	
Iron	<b>6.6</b>	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 17:08	7439-89-6	

**6020 MET ICPMS**

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

Antimony	ND	mg/L	0.0030	0.0012	1	07/18/23 13:46	07/19/23 19:18	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:18	7440-38-2	
Barium	<b>0.037</b>	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:18	7440-41-7	
Boron	<b>7.8</b>	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:18	7440-47-3	
Cobalt	<b>0.063</b>	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:18	7439-92-1	
Lithium	<b>0.0057J</b>	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:18	7782-49-2	
Thallium	<b>0.00049J</b>	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:18	7440-28-0	

**7470 Mercury**

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

Mercury	ND	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 11:40	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>1330</b>	mg/L	25.0	25.0	1		07/18/23 15:26		
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**2320B Alkalinity**

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	<b>140</b>	mg/L	5.0	5.0	1		07/20/23 17:51		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:51		
Alkalinity, Total as CaCO3	<b>140</b>	mg/L	5.0	5.0	1		07/20/23 17:51		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-06		Lab ID: 92677696002		Collected: 07/14/23 11:05		Received: 07/17/23 12:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:44	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>156</b>	mg/L	10.0	6.0	10		07/19/23 14:07	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 07:16	16984-48-8	
Sulfate	<b>542</b>	mg/L	10.0	5.0	10		07/19/23 14:07	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-PT-05**      **Lab ID: 92677696003**      Collected: 07/14/23 13:00      Received: 07/17/23 12:30      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		07/17/23 17:11		
pH	<b>6.13</b>	Std. Units			1		07/17/23 17:11		

**6010D ATL ICP**

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

Manganese	<b>11.4</b>	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:54	7439-96-5
Potassium	<b>4.5</b>	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:54	7440-09-7
Sodium	<b>10.6</b>	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:54	7440-23-5
Magnesium	<b>26.7</b>	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:54	7439-95-4
Iron	<b>1.2</b>	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 17:18	7439-89-6
Calcium	<b>287</b>	mg/L	1.0	0.12	1	07/20/23 09:50	07/25/23 17:18	7440-70-2

**6020 MET ICPMS**

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

Antimony	ND	mg/L	0.0030	0.0012	1	07/18/23 13:46	07/19/23 19:24	7440-36-0
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:24	7440-38-2
Barium	<b>0.045</b>	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:24	7440-39-3
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:24	7440-41-7
Boron	<b>7.5</b>	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 18:00	7440-42-8
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:24	7440-43-9
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:24	7440-47-3
Cobalt	<b>0.042</b>	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:24	7440-48-4
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:24	7439-92-1
Lithium	<b>0.0050J</b>	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:24	7439-93-2
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:24	7439-98-7
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:24	7782-49-2
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:24	7440-28-0

**7470 Mercury**

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

Mercury	ND	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 11:43	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>1520</b>	mg/L	25.0	25.0	1		07/18/23 15:26	
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**2320B Alkalinity**

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	<b>148</b>	mg/L	5.0	5.0	1		07/20/23 18:03	
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:03	
Alkalinity, Total as CaCO3	<b>148</b>	mg/L	5.0	5.0	1		07/20/23 18:03	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-05		Lab ID: 92677696003		Collected: 07/14/23 13:00		Received: 07/17/23 12:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:44	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>166</b>	mg/L	10.0	6.0	10		07/19/23 14:21	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 07:30	16984-48-8	
Sulfate	<b>564</b>	mg/L	10.0	5.0	10		07/19/23 14:21	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: HAM-PT-04</b>									
<b>Lab ID: 92677696004</b>									
Collected: 07/14/23 14:03									
Received: 07/17/23 12:30									
Matrix: Water									
<b>Field Data</b>									
Analytical Method:									
Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		07/17/23 17:11		
pH	<b>6.30</b>	Std. Units			1		07/17/23 17:11		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>16.0</b>	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 17:38	7439-89-6	
Calcium	<b>297</b>	mg/L	1.0	0.12	1	07/20/23 09:50	07/25/23 17:38	7440-70-2	
Manganese	<b>17.8</b>	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:59	7439-96-5	
Potassium	<b>7.2</b>	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:59	7440-09-7	
Sodium	<b>12.2</b>	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:59	7440-23-5	
Magnesium	<b>24.1</b>	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:59	7439-95-4	
<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	0.0012	1	07/18/23 13:46	07/19/23 19:30	7440-36-0	
Arsenic	<b>0.0077J</b>	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:30	7440-38-2	
Barium	<b>0.048</b>	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:30	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:30	7440-41-7	
Boron	<b>7.8</b>	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 18:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:30	7440-47-3	
Cobalt	<b>0.058</b>	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:30	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:30	7439-92-1	
Lithium	<b>0.0050J</b>	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:30	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	08/01/23 07:00	08/01/23 11:45	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1310</b>	mg/L	25.0	25.0	1		07/18/23 15:26		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>155</b>	mg/L	5.0	5.0	1		07/20/23 18:14		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:14		
Alkalinity, Total as CaCO3	<b>155</b>	mg/L	5.0	5.0	1		07/20/23 18:14		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-04		Lab ID: 92677696004		Collected: 07/14/23 14:03		Received: 07/17/23 12:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:44	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>153</b>	mg/L	10.0	6.0	10		07/19/23 14:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 07:44	16984-48-8	
Sulfate	<b>535</b>	mg/L	10.0	5.0	10		07/19/23 14:35	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-INW-02**      **Lab ID: 92677696005**      Collected: 07/14/23 14:57      Received: 07/17/23 12:30      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		07/17/23 17:11		
pH	<b>6.27</b>	Std. Units			1		07/17/23 17:11		

**6010D ATL ICP**

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

Calcium	<b>306</b>	mg/L	5.0	0.61	5	07/20/23 09:50	07/25/23 17:53	7440-70-2	
Iron	<b>10.7</b>	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 17:48	7439-89-6	
Manganese	<b>16.0</b>	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 17:14	7439-96-5	
Potassium	<b>6.0</b>	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 17:14	7440-09-7	
Sodium	<b>11.1</b>	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 17:14	7440-23-5	
Magnesium	<b>25.8</b>	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 17:14	7439-95-4	

**6020 MET ICPMS**

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

Antimony	ND	mg/L	0.0030	0.0012	1	07/18/23 13:46	07/19/23 19:36	7440-36-0	
Arsenic	<b>0.0057J</b>	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:36	7440-38-2	
Barium	<b>0.070</b>	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:36	7440-41-7	
Boron	<b>7.1</b>	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 18:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:36	7440-47-3	
Cobalt	<b>0.060</b>	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:36	7439-92-1	
Lithium	<b>0.0057J</b>	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:36	7782-49-2	
Thallium	<b>0.00037J</b>	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:36	7440-28-0	

**7470 Mercury**

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

Mercury	ND	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 11:48	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>1460</b>	mg/L	25.0	25.0	1		07/18/23 15:29		
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**2320B Alkalinity**

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	<b>159</b>	mg/L	5.0	5.0	1		07/20/23 18:27		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:27		
Alkalinity, Total as CaCO3	<b>159</b>	mg/L	5.0	5.0	1		07/20/23 18:27		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-INW-02		Lab ID: 92677696005		Collected: 07/14/23 14:57		Received: 07/17/23 12:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:45	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>153</b>	mg/L	10.0	6.0	10		07/19/23 14:49	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 07:59	16984-48-8	
Sulfate	<b>532</b>	mg/L	10.0	5.0	10		07/19/23 14:49	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-AP2-FD-01		Lab ID: 92677696006		Collected: 07/14/23 00:00		Received: 07/17/23 12:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	10.1	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 17:58	7439-89-6	
Manganese	15.5	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 17:19	7439-96-5	
Potassium	5.8	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 17:19	7440-09-7	
Sodium	10.8	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 17:19	7440-23-5	
Calcium	299	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 17:19	7440-70-2	
Magnesium	25.0	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 17:19	7439-95-4	
<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	0.0012	1	07/18/23 13:46	07/19/23 19:48	7440-36-0	
Arsenic	0.0054J	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:48	7440-38-2	
Barium	0.069	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:48	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:48	7440-41-7	
Boron	7.1	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 18:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:48	7440-47-3	
Cobalt	0.059	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:48	7439-92-1	
Lithium	0.0056J	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:48	7782-49-2	
Thallium	0.00037J	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:48	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	08/01/23 07:00	08/01/23 11:56	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1520	mg/L	25.0	25.0	1		07/18/23 15:29		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	159	mg/L	5.0	5.0	1		07/20/23 18:38		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:38		
Alkalinity, Total as CaCO3	159	mg/L	5.0	5.0	1		07/20/23 18:38		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:46	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	152	mg/L	10.0	6.0	10		07/19/23 15:03	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-AP2-FD-01**      **Lab ID: 92677696006**      Collected: 07/14/23 00:00      Received: 07/17/23 12:30      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 08:13	16984-48-8	
Sulfate	531	mg/L	10.0	5.0	10		07/19/23 15:03	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-AP2-FB-01		Lab ID: 92677696007		Collected: 07/17/23 08:45		Received: 07/17/23 12:30		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								
Iron	ND	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 18:03	7439-89-6		
Manganese	ND	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 17:24	7439-96-5		
Potassium	ND	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 17:24	7440-09-7		
Sodium	ND	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 17:24	7440-23-5		
Calcium	ND	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 17:24	7440-70-2		
Magnesium	ND	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 17:24	7439-95-4		
<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	0.0012	1	07/18/23 13:46	07/19/23 20:06	7440-36-0		
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 20:06	7440-38-2		
Barium	ND	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 20:06	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 20:06	7440-41-7		
Boron	ND	mg/L	0.040	0.0086	1	07/18/23 13:46	08/04/23 12:45	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 20:06	7440-43-9		
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 20:06	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 20:06	7440-48-4		
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	08/04/23 12:45	7439-92-1		
Lithium	ND	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 20:06	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 20:06	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 20:06	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 20:06	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	08/01/23 07:00	08/01/23 11:58	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	25.0	25.0	1		07/18/23 15:31			
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:50			
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:50			
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/20/23 18:50			
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville								
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:01	18496-25-8		
<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		07/19/23 08:27	16887-00-6		

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**ANALYTICAL RESULTS**

Project: Hammond AP-2  
 Pace Project No.: 92677696

**Sample: HAM-AP2-FB-01**      **Lab ID: 92677696007**      Collected: 07/17/23 08:45      Received: 07/17/23 12:30      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 08:27	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		07/19/23 08:27	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-59</b>									
<b>Lab ID: 92677696008</b>									
Collected: 07/17/23 16:24 Received: 07/19/23 13:53 Matrix: Water									
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		07/19/23 15:54		
pH	<b>4.59</b>	Std. Units			1		07/19/23 15:54		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	<b>9.7</b>	mg/L	0.040	0.027	1	07/21/23 11:15	08/01/23 14:52	7440-42-8	M1
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Cobalt	<b>0.16</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 15:24	7440-48-4	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-MW-33**      **Lab ID: 92677696009**      Collected: 07/18/23 09:47      Received: 07/19/23 13:53      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		07/19/23 15:54		
pH	<b>4.48</b>	Std. Units			1		07/19/23 15:54		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.22</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:12	7439-89-6	
Manganese	<b>4.1</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:12	7439-96-5	
Potassium	<b>9.6</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:12	7440-09-7	
Sodium	<b>9.3</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:12	7440-23-5	
Magnesium	<b>38.9</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:12	7439-95-4	
Calcium	<b>397</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/02/23 12:39	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	0.0012	1	07/21/23 13:26	07/27/23 15:30	7440-36-0	
Arsenic	<b>0.0050J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 15:30	7440-38-2	
Barium	<b>0.022</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 15:30	7440-39-3	
Beryllium	<b>0.00096</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 15:30	7440-41-7	
Boron	<b>6.9</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 15:30	7440-42-8	
Cadmium	<b>0.00017J</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 15:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 15:30	7440-47-3	
Cobalt	<b>0.060</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 15:30	7440-48-4	
Lead	<b>0.0012</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 15:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 15:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 15:30	7439-98-7	
Selenium	<b>0.0051</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 15:30	7782-49-2	
Thallium	<b>0.00022J</b>	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 15:30	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	08/01/23 07:00	08/01/23 12:01	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1850</b>	mg/L	25.0	25.0	1		07/21/23 12:01		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 12:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 12:42		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/24/23 12:42		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-MW-33 Lab ID: 92677696009 Collected: 07/18/23 09:47 Received: 07/19/23 13:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:03	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>102</b>	mg/L	21.0	12.6	21		07/21/23 13:39	16887-00-6	
Fluoride	<b>0.22</b>	mg/L	0.10	0.050	1		07/20/23 18:59	16984-48-8	
Sulfate	<b>1090</b>	mg/L	21.0	10.5	21		07/21/23 13:39	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-MW-35**      **Lab ID: 92677696010**      Collected: 07/18/23 11:29      Received: 07/19/23 13:53      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		07/19/23 15:55		
pH	<b>4.93</b>	Std. Units			1		07/19/23 15:55		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.76</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:17	7439-89-6	
Manganese	<b>9.7</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:17	7439-96-5	
Potassium	<b>7.1</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:17	7440-09-7	
Sodium	<b>12.1</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:17	7440-23-5	
Magnesium	<b>74.1</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:17	7439-95-4	
Calcium	<b>492</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/02/23 12:44	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	0.0012	1	07/21/23 13:26	07/27/23 15:36	7440-36-0	
Arsenic	<b>0.0056J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 15:36	7440-38-2	
Barium	<b>0.022</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 15:36	7440-39-3	
Beryllium	<b>0.00053</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 15:36	7440-41-7	
Boron	<b>9.5</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 15:36	7440-42-8	
Cadmium	<b>0.0012</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 15:36	7440-43-9	
Chromium	<b>0.0014J</b>	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 15:36	7440-47-3	
Cobalt	<b>0.087</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 15:36	7440-48-4	
Lead	<b>0.00090J</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 15:36	7439-92-1	
Lithium	<b>0.0035J</b>	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 15:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 15:36	7439-98-7	
Selenium	<b>0.0052</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 15:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 15:36	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	08/01/23 07:00	08/01/23 12:04	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>2340</b>	mg/L	25.0	25.0	1		07/21/23 12:02		1g
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 12:56		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 12:56		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/24/23 12:56		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-MW-35		Lab ID: 92677696010		Collected: 07/18/23 11:29		Received: 07/19/23 13:53		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:03	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>191</b>	mg/L	24.0	14.4	24		07/21/23 07:01	16887-00-6	
Fluoride	<b>0.077J</b>	mg/L	0.10	0.050	1		07/20/23 19:15	16984-48-8	
Sulfate	<b>1200</b>	mg/L	24.0	12.0	24		07/21/23 07:01	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-03 Lab ID: 92677696011 Collected: 07/18/23 12:33 Received: 07/19/23 13:53 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		07/19/23 15:55		
pH	<b>4.64</b>	Std. Units			1		07/19/23 15:55		

#### 6010D ATL ICP

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

Iron	<b>0.26</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:22	7439-89-6	
Manganese	<b>8.2</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:22	7439-96-5	
Potassium	<b>5.4</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:22	7440-09-7	
Sodium	<b>11.7</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:22	7440-23-5	
Magnesium	<b>36.9</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:22	7439-95-4	
Calcium	<b>382</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/03/23 17:02	7440-70-2	

#### 6020 MET ICPMS

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

Antimony	<b>0.0029J</b>	mg/L	0.0030	0.0012	1	07/21/23 13:26	07/27/23 16:00	7440-36-0	
Arsenic	<b>0.0076J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 16:00	7440-38-2	
Barium	<b>0.025</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 16:00	7440-39-3	
Beryllium	<b>0.0026</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 16:00	7440-41-7	
Boron	<b>8.2</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 16:00	7440-42-8	
Cadmium	<b>0.00062</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 16:00	7440-43-9	
Chromium	<b>0.0011J</b>	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 16:00	7440-47-3	
Cobalt	<b>0.12</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 16:00	7440-48-4	
Lead	<b>0.0014</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 16:00	7439-92-1	
Lithium	<b>0.0031J</b>	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 16:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 16:00	7439-98-7	
Selenium	<b>0.011</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 16:00	7782-49-2	
Thallium	<b>0.00021J</b>	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 16:00	7440-28-0	

#### 7470 Mercury

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

Mercury	ND	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 12:06	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>2690</b>	mg/L	25.0	25.0	1		07/21/23 12:02		1g
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#### 2320B Alkalinity

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:01		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:01		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/24/23 13:01		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-03		Lab ID: 92677696011		Collected: 07/18/23 12:33		Received: 07/19/23 13:53		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:04	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>138</b>	mg/L	19.0	11.4	19		07/21/23 07:47	16887-00-6	
Fluoride	<b>0.84</b>	mg/L	0.10	0.050	1		07/21/23 01:51	16984-48-8	
Sulfate	<b>948</b>	mg/L	19.0	9.5	19		07/21/23 07:47	14808-79-8	M1

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-PT-01**      **Lab ID: 92677696012**      Collected: 07/18/23 13:24      Received: 07/19/23 13:53      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		07/19/23 15:56		
pH	<b>4.63</b>	Std. Units			1		07/19/23 15:56		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.078</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:27	7439-89-6	
Manganese	<b>9.6</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:27	7439-96-5	
Potassium	<b>5.2</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:27	7440-09-7	
Sodium	<b>8.8</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:27	7440-23-5	
Magnesium	<b>38.2</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:27	7439-95-4	
Calcium	<b>370</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/02/23 12:54	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	0.0012	1	07/21/23 13:26	07/27/23 16:06	7440-36-0	
Arsenic	<b>0.0075J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 16:06	7440-38-2	
Barium	<b>0.046</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 16:06	7440-39-3	
Beryllium	<b>0.0024</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 16:06	7440-41-7	
Boron	<b>8.1</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 16:06	7440-42-8	
Cadmium	<b>0.00099</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 16:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 16:06	7440-47-3	
Cobalt	<b>0.11</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 16:06	7440-48-4	
Lead	<b>0.00072J</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 16:06	7439-92-1	
Lithium	<b>0.0052J</b>	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 16:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 16:06	7439-98-7	
Selenium	<b>0.011</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 16:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 16:06	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	<b>0.00023</b>	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 12:09	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1700</b>	mg/L	25.0	25.0	1		07/21/23 12:02		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:06		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:06		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/24/23 13:06		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-01 Lab ID: 92677696012 Collected: 07/18/23 13:24 Received: 07/19/23 13:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:04	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	147	mg/L	11.0	6.6	11		07/21/23 08:32	16887-00-6	
Fluoride	0.70	mg/L	0.10	0.050	1		07/21/23 02:38	16984-48-8	
Sulfate	892	mg/L	11.0	5.5	11		07/21/23 08:32	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-PT-02**      **Lab ID: 92677696013**      Collected: 07/18/23 16:20      Received: 07/19/23 13:53      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		07/19/23 15:56		
pH	<b>4.97</b>	Std. Units			1		07/19/23 15:56		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.44</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:47	7439-89-6	
Manganese	<b>12.6</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:47	7439-96-5	
Potassium	<b>5.2</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:47	7440-09-7	
Sodium	<b>9.3</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:47	7440-23-5	
Magnesium	<b>44.0</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:47	7439-95-4	
Calcium	<b>379</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/02/23 12:59	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	0.0012	1	07/21/23 13:26	07/27/23 16:58	7440-36-0	
Arsenic	<b>0.0063J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 16:58	7440-38-2	
Barium	<b>0.054</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 16:58	7440-39-3	
Beryllium	<b>0.0016</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 16:58	7440-41-7	
Boron	<b>8.3</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 16:58	7440-42-8	
Cadmium	<b>0.00091</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 16:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 16:58	7440-47-3	
Cobalt	<b>0.13</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 16:58	7440-48-4	
Lead	<b>0.00043J</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 16:58	7439-92-1	
Lithium	<b>0.0069J</b>	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 16:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 16:58	7439-98-7	
Selenium	<b>0.0075</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 16:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 16:58	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	08/01/23 07:00	08/01/23 12:12	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1830</b>	mg/L	25.0	25.0	1		07/21/23 12:03		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>5.5</b>	mg/L	5.0	5.0	1		07/24/23 13:11		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:11		
Alkalinity, Total as CaCO3	<b>5.5</b>	mg/L	5.0	5.0	1		07/24/23 13:11		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-02 Lab ID: 92677696013 Collected: 07/18/23 16:20 Received: 07/19/23 13:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:06	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	174	mg/L	11.0	6.6	11		07/21/23 08:47	16887-00-6	
Fluoride	0.47	mg/L	0.10	0.050	1		07/21/23 02:54	16984-48-8	
Sulfate	938	mg/L	11.0	5.5	11		07/21/23 08:47	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-INW-01**      **Lab ID: 92677696014**      Collected: 07/19/23 09:31      Received: 07/19/23 13:53      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		07/19/23 15:56		
pH	<b>5.18</b>	Std. Units			1		07/19/23 15:56		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>2.9</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:53	7439-89-6	
Manganese	<b>14.4</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:53	7439-96-5	
Potassium	<b>5.4</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:53	7440-09-7	
Sodium	<b>10</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:53	7440-23-5	
Magnesium	<b>52.3</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:53	7439-95-4	
Calcium	<b>397</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/02/23 13:04	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	0.0012	1	07/21/23 13:26	07/27/23 17:04	7440-36-0	
Arsenic	<b>0.0061J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 17:04	7440-38-2	
Barium	<b>0.069</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 17:04	7440-39-3	
Beryllium	<b>0.0010</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 17:04	7440-41-7	
Boron	<b>8.7</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 17:04	7440-42-8	
Cadmium	<b>0.00059</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 17:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 17:04	7440-47-3	
Cobalt	<b>0.13</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 17:04	7440-48-4	
Lead	<b>0.00037J</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 17:04	7439-92-1	
Lithium	<b>0.0064J</b>	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 17:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 17:04	7439-98-7	
Selenium	<b>0.0075</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 17:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 17:04	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	08/01/23 07:00	08/01/23 12:14	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>2000</b>	mg/L	25.0	25.0	1		07/21/23 12:03		1g
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>14.9</b>	mg/L	5.0	5.0	1		07/24/23 13:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:16		
Alkalinity, Total as CaCO3	<b>14.9</b>	mg/L	5.0	5.0	1		07/24/23 13:16		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-INW-01 Lab ID: 92677696014 Collected: 07/19/23 09:31 Received: 07/19/23 13:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:06	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>210</b>	mg/L	19.0	11.4	19		07/21/23 09:18	16887-00-6	
Fluoride	<b>0.34</b>	mg/L	0.10	0.050	1		07/21/23 03:56	16984-48-8	
Sulfate	<b>975</b>	mg/L	19.0	9.5	19		07/21/23 09:18	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-57</b>									
<b>Lab ID: 92677696015</b>									
Collected: 07/19/23 10:40									
Received: 07/19/23 13:53									
Matrix: Water									
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		07/19/23 15:57		
pH	<b>6.45</b>	Std. Units			1		07/19/23 15:57		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	<b>8.5</b>	mg/L	0.040	0.027	1	07/21/23 11:15	08/01/23 15:58	7440-42-8	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Cobalt	<b>0.049</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 17:10	7440-48-4	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	787863	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

METHOD BLANK: 4084625 Matrix: Water  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	07/20/23 15:30	
Iron	mg/L	ND	0.040	0.025	07/25/23 15:43	
Magnesium	mg/L	ND	0.050	0.012	07/20/23 15:30	
Manganese	mg/L	ND	0.040	0.011	07/20/23 15:30	
Potassium	mg/L	ND	0.50	0.15	07/20/23 15:30	
Sodium	mg/L	ND	1.0	0.58	07/20/23 15:30	

LABORATORY CONTROL SAMPLE: 4084626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.92J	92	80-120	
Iron	mg/L	1	0.99	99	80-120	
Magnesium	mg/L	1	0.93	93	80-120	
Manganese	mg/L	1	0.94	94	80-120	
Potassium	mg/L	1	0.88	88	80-120	
Sodium	mg/L	1	0.84J	84	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4085060 4085061

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Spike Conc.	Result	Spike Conc.	Result						
Calcium	mg/L	107	1	1	109	104	196	-279	75-125	4	20 M1
Iron	mg/L	0.27	1	1	1.3	1.3	99	105	75-125	5	20
Magnesium	mg/L	14.9	1	1	16.2	15.6	128	74	75-125	3	20 M1
Manganese	mg/L	0.28	1	1	1.2	1.3	96	100	75-125	3	20
Potassium	mg/L	6.9	1	1	8.1	7.8	118	90	75-125	3	20
Sodium	mg/L	8.8	1	1	9.9	9.5	111	73	75-125	4	20 M1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	788329	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92677696008, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014, 92677696015		

METHOD BLANK:	4086684	Matrix:	Water
Associated Lab Samples:	92677696008, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014, 92677696015		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.027	08/01/23 14:43	
Calcium	mg/L	ND	1.0	0.12	08/01/23 14:43	
Iron	mg/L	ND	0.040	0.025	08/02/23 16:01	
Magnesium	mg/L	ND	0.050	0.012	08/01/23 14:43	
Manganese	mg/L	ND	0.040	0.011	08/01/23 14:43	
Potassium	mg/L	ND	0.50	0.15	08/01/23 14:43	
Sodium	mg/L	ND	1.0	0.58	08/01/23 14:43	

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.99	99	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.0	103	80-120	
Manganese	mg/L	1	1.0	104	80-120	
Potassium	mg/L	1	1.0	101	80-120	
Sodium	mg/L	1	0.98J	98	80-120	

Parameter	Units	4086751		4086752		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Boron	mg/L	9.7	1	10.6	1	95	136	75-125	4	20	M1
Calcium	mg/L		1	512	1	-572	606	75-125	2	20	M1
Iron	mg/L		1	3.0	1	96	100	75-125	1	20	
Magnesium	mg/L		1	46.7	1	11	135	75-125	3	20	M1
Manganese	mg/L		1	11.2	1	84	122	75-125	3	20	
Potassium	mg/L		1	7.7	1	76	101	75-125	3	20	
Sodium	mg/L		1	16.7	1	84	120	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	787489	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

METHOD BLANK: 4082463 Matrix: Water

Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	07/19/23 17:43	
Arsenic	mg/L	ND	0.010	0.0037	07/19/23 17:43	
Barium	mg/L	ND	0.0050	0.00067	07/19/23 17:43	
Beryllium	mg/L	ND	0.00050	0.000054	07/19/23 17:43	
Boron	mg/L	ND	0.040	0.0086	07/21/23 16:25	
Cadmium	mg/L	ND	0.00050	0.00011	07/19/23 17:43	
Chromium	mg/L	ND	0.0050	0.0011	07/19/23 17:43	
Cobalt	mg/L	ND	0.0050	0.00039	07/19/23 17:43	
Lead	mg/L	ND	0.0010	0.00012	07/19/23 17:43	
Lithium	mg/L	ND	0.030	0.00073	07/19/23 17:43	
Molybdenum	mg/L	ND	0.010	0.00074	07/19/23 17:43	
Selenium	mg/L	ND	0.0050	0.0014	07/19/23 17:43	
Thallium	mg/L	ND	0.0010	0.00018	07/19/23 17:43	

LABORATORY CONTROL SAMPLE: 4082464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.1	110	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4082465 4082466

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92677694001	Result	Spike Conc.	Spike Conc.								
Antimony	mg/L	ND	0.1	0.1	0.1	0.11	0.11	109	110	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.1	0.10	0.11	104	106	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

Parameter	Units	4082465		4082466		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92677694001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.047	0.1	0.1	0.16	0.16	114	113	75-125	1	20		
Beryllium	mg/L	0.000073J	0.1	0.1	0.095	0.096	95	96	75-125	1	20		
Boron	mg/L	2.0	1	1	3.1	2.9	108	94	75-125	5	20		
Cadmium	mg/L	0.00031J	0.1	0.1	0.10	0.10	102	104	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20		
Cobalt	mg/L	0.0015J	0.1	0.1	0.10	0.099	99	97	75-125	1	20		
Lead	mg/L	0.00013J	0.1	0.1	0.10	0.10	100	100	75-125	1	20		
Lithium	mg/L	0.0015J	0.1	0.1	0.099	0.099	97	98	75-125	0	20		
Molybdenum	mg/L	0.30	0.1	0.1	0.42	0.42	121	123	75-125	1	20		
Selenium	mg/L	ND	0.1	0.1	0.11	0.11	106	106	75-125	0	20		
Thallium	mg/L	0.00026J	0.1	0.1	0.097	0.096	97	96	75-125	1	20		

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 788417 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92677696008, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014, 92677696015

METHOD BLANK: 4086984 Matrix: Water  
 Associated Lab Samples: 92677696008, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014, 92677696015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	07/27/23 15:12	
Arsenic	mg/L	ND	0.010	0.0037	07/27/23 15:12	
Barium	mg/L	ND	0.0050	0.00067	07/27/23 15:12	
Beryllium	mg/L	ND	0.00050	0.000054	07/27/23 15:12	
Boron	mg/L	ND	0.040	0.0086	07/27/23 15:12	
Cadmium	mg/L	ND	0.00050	0.00011	07/27/23 15:12	
Chromium	mg/L	ND	0.0050	0.0011	07/27/23 15:12	
Cobalt	mg/L	ND	0.0050	0.00039	07/27/23 15:12	
Lead	mg/L	ND	0.0010	0.00012	07/27/23 15:12	
Lithium	mg/L	ND	0.030	0.00073	07/27/23 15:12	
Molybdenum	mg/L	ND	0.010	0.00074	07/27/23 15:12	
Selenium	mg/L	ND	0.0050	0.0014	07/27/23 15:12	
Thallium	mg/L	ND	0.0010	0.00018	07/27/23 15:12	

LABORATORY CONTROL SAMPLE: 4086985

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	114	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Boron	mg/L	1	1.1	108	80-120	
Cadmium	mg/L	0.1	0.10	105	80-120	
Chromium	mg/L	0.1	0.11	105	80-120	
Cobalt	mg/L	0.1	0.11	105	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.11	111	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4087071 4087072

Parameter	Units	92677696010 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.12	0.11	117	112	75-125	4	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4087071 4087072												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92677696010 Result	Spike Conc.	Spike Conc.	MS Result							
Arsenic	mg/L	0.0056J	0.1	0.1	0.12	0.11	110	107	75-125	3	20	
Barium	mg/L	0.022	0.1	0.1	0.13	0.12	104	100	75-125	3	20	
Beryllium	mg/L	0.00053	0.1	0.1	0.093	0.092	92	91	75-125	1	20	
Boron	mg/L	9.5	1	1	10.4	10.2	87	71	75-125	2	20	
Cadmium	mg/L	0.0012	0.1	0.1	0.10	0.10	101	99	75-125	2	20	
Chromium	mg/L	0.0014J	0.1	0.1	0.10	0.10	103	100	75-125	3	20	
Cobalt	mg/L	0.087	0.1	0.1	0.19	0.18	100	98	75-125	1	20	
Lead	mg/L	0.00090J	0.1	0.1	0.094	0.091	93	91	75-125	3	20	
Lithium	mg/L	0.0035J	0.1	0.1	0.10	0.10	97	96	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	107	104	75-125	2	20	
Selenium	mg/L	0.0052	0.1	0.1	0.12	0.12	116	113	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.090	92	90	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

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QC Batch: 790376 Analysis Method: EPA 7470A  
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

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METHOD BLANK: 4096218 Matrix: Water  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/01/23 11:24	

LABORATORY CONTROL SAMPLE: 4096219

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: 4096220 4096221

Parameter	Units	92677696001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020J	0.0025	0.0025	0.0023	0.0023	84	83	75-125	1	20	

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	787441	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: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

METHOD BLANK: 4082157 Matrix: Water

Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	07/18/23 15:23	

LABORATORY CONTROL SAMPLE: 4082158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	409	102	80-120	

SAMPLE DUPLICATE: 4082159

Parameter	Units	92677694001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	513	511	0	10	

SAMPLE DUPLICATE: 4082160

Parameter	Units	92677696005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1460	1570	8	10	

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	788206	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:	92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014		

METHOD BLANK:	4086319	Matrix:	Water
Associated Lab Samples:	92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	07/21/23 11:58	

LABORATORY CONTROL SAMPLE: 4086320						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	412	103	80-120	

SAMPLE DUPLICATE: 4086321						
Parameter	Units	92678098001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	139	106	27	10	D6

SAMPLE DUPLICATE: 4086322						
Parameter	Units	92678314001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2420	8220	109	10	D6

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 788121 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

METHOD BLANK: 4085797 Matrix: Water  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	07/20/23 16:09	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	07/20/23 16:09	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	07/20/23 16:09	

LABORATORY CONTROL SAMPLE: 4085798

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

LABORATORY CONTROL SAMPLE: 4085799

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.7	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4085800 4085801

Parameter	Units	92677753005		4085801		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	121	50	180	50	118	118	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4085802 4085803

Parameter	Units	92677753006		4085803		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	76.8	50	129	50	103	108	80-120	2	25	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 788708 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

METHOD BLANK: 4087983 Matrix: Water  
 Associated Lab Samples: 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	07/24/23 11:40	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	07/24/23 11:40	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	07/24/23 11:40	

LABORATORY CONTROL SAMPLE: 4087984

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.1	102	80-120	

LABORATORY CONTROL SAMPLE: 4087985

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4087986 4087987

Parameter	Units	4087986		4087987		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92678264010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO3	mg/L	7.2	50	50	57.9	57.8	101	101	80-120	0	25 H1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4087988 4087989

Parameter	Units	4087988		4087989		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92678043001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO3	mg/L	32.2	50	50	82.7	84.0	101	104	80-120	2	25

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 787902 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006

METHOD BLANK: 4084741 Matrix: Water  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	07/20/23 03:38	

LABORATORY CONTROL SAMPLE: 4084742

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.49	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084743 4084744

Parameter	Units	92677694001		4084744		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.							
Sulfide	mg/L	ND	0.5	0.5	0.47	0.47	93	93	80-120	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084745 4084746

Parameter	Units	92677696005		4084746		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.							
Sulfide	mg/L	ND	0.5	0.5	0.48	0.46	94	90	80-120	5	10	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	787903	Analysis Method:	SM 4500-S2D-2011
QC Batch Method:	SM 4500-S2D-2011	Analysis Description:	4500S2D Sulfide Water
		Laboratory:	Pace Analytical Services - Asheville

Associated Lab Samples: 92677696007, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

METHOD BLANK: 4084747 Matrix: Water  
 Associated Lab Samples: 92677696007, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	07/20/23 03:57	

LABORATORY CONTROL SAMPLE: 4084748

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.49	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084749 4084750

Parameter	Units	92678161006		4084749		4084750		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.					
Sulfide	mg/L	ND	0.5	0.5	0.53	0.54	105	108	80-120	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084751 4084752

Parameter	Units	92677696012		4084751		4084752		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.					
Sulfide	mg/L	ND	0.5	0.5	0.43	0.47	84	93	80-120	10	10	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	787377	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:	92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007		

METHOD BLANK:	4081859	Matrix:	Water
Associated Lab Samples:	92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	07/19/23 05:21	
Fluoride	mg/L	ND	0.10	0.050	07/19/23 05:21	
Sulfate	mg/L	ND	1.0	0.50	07/19/23 05:21	

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	2.4	98	90-110	
Sulfate	mg/L	50	49.8	100	90-110	

Parameter	Units	4081861		4081862		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92677694008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Chloride	mg/L	17.8	50	50	69.7	70.1	104	105	90-110	1	10		
Fluoride	mg/L	0.32	2.5	2.5	2.8	2.8	98	99	90-110	1	10		
Sulfate	mg/L	393	50	50	422	418	58	49	90-110	1	10	M1	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	787928	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: 92677696009, 92677696010

METHOD BLANK: 4084797 Matrix: Water

Associated Lab Samples: 92677696009, 92677696010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	07/20/23 11:29	
Fluoride	mg/L	ND	0.10	0.050	07/20/23 11:29	
Sulfate	mg/L	ND	1.0	0.50	07/20/23 11:29	

LABORATORY CONTROL SAMPLE: 4084798

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.7	105	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	53.2	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084799 4084800

Parameter	Units	92678109003		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	12.9	50	50	66.6	67.3	107	109	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.7	2.8	107	109	90-110	1	10		
Sulfate	mg/L	84.7	50	50	128	129	87	89	90-110	1	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084801 4084802

Parameter	Units	92677725002		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	22.3	50	50	76.5	77.2	108	110	90-110	1	10		
Fluoride	mg/L	0.31	2.5	2.5	3.6	3.7	131	134	90-110	2	10	M1	
Sulfate	mg/L	ND	50	50	54.9	55.6	109	111	90-110	1	10	M1	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 787930 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: 92677696011, 92677696012, 92677696013, 92677696014

METHOD BLANK: 4084807 Matrix: Water  
 Associated Lab Samples: 92677696011, 92677696012, 92677696013, 92677696014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	07/21/23 12:06	
Fluoride	mg/L	ND	0.10	0.050	07/21/23 12:06	
Sulfate	mg/L	ND	1.0	0.50	07/21/23 12:06	

LABORATORY CONTROL SAMPLE: 4084808

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.2	102	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084809 4084810

Parameter	Units	92677696011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	138	50	50	185	187	94	97	90-110	1	10	
Fluoride	mg/L	0.84	2.5	2.5	3.5	3.6	105	109	90-110	3	10	
Sulfate	mg/L	948	50	50	991	1000	86	109	90-110	1	10	M1

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## QUALIFIERS

Project: Hammond AP-2

Pace Project No.: 92677696

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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

1g "Sample residue exceeded method SM 2540C recommended 200 mg."

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

H1 Analysis conducted outside the EPA method holding time.

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92677696001	HAM-HGWC-18				
92677696002	HAM-PT-06				
92677696003	HAM-PT-05				
92677696004	HAM-PT-04				
92677696005	HAM-INW-02				
92677696008	HAM-MW-59				
92677696009	HAM-MW-33				
92677696010	HAM-MW-35				
92677696011	HAM-PT-03				
92677696012	HAM-PT-01				
92677696013	HAM-PT-02				
92677696014	HAM-INW-01				
92677696015	HAM-MW-57				
92677696001	HAM-HGWC-18	EPA 3010A	787863	EPA 6010D	788067
92677696002	HAM-PT-06	EPA 3010A	787863	EPA 6010D	788067
92677696003	HAM-PT-05	EPA 3010A	787863	EPA 6010D	788067
92677696004	HAM-PT-04	EPA 3010A	787863	EPA 6010D	788067
92677696005	HAM-INW-02	EPA 3010A	787863	EPA 6010D	788067
92677696006	HAM-AP2-FD-01	EPA 3010A	787863	EPA 6010D	788067
92677696007	HAM-AP2-FB-01	EPA 3010A	787863	EPA 6010D	788067
92677696008	HAM-MW-59	EPA 3010A	788329	EPA 6010D	788467
92677696009	HAM-MW-33	EPA 3010A	788329	EPA 6010D	788467
92677696010	HAM-MW-35	EPA 3010A	788329	EPA 6010D	788467
92677696011	HAM-PT-03	EPA 3010A	788329	EPA 6010D	788467
92677696012	HAM-PT-01	EPA 3010A	788329	EPA 6010D	788467
92677696013	HAM-PT-02	EPA 3010A	788329	EPA 6010D	788467
92677696014	HAM-INW-01	EPA 3010A	788329	EPA 6010D	788467
92677696015	HAM-MW-57	EPA 3010A	788329	EPA 6010D	788467
92677696001	HAM-HGWC-18	EPA 3005A	787489	EPA 6020B	787561
92677696002	HAM-PT-06	EPA 3005A	787489	EPA 6020B	787561
92677696003	HAM-PT-05	EPA 3005A	787489	EPA 6020B	787561
92677696004	HAM-PT-04	EPA 3005A	787489	EPA 6020B	787561
92677696005	HAM-INW-02	EPA 3005A	787489	EPA 6020B	787561
92677696006	HAM-AP2-FD-01	EPA 3005A	787489	EPA 6020B	787561
92677696007	HAM-AP2-FB-01	EPA 3005A	787489	EPA 6020B	787561
92677696008	HAM-MW-59	EPA 3005A	788417	EPA 6020B	788528
92677696009	HAM-MW-33	EPA 3005A	788417	EPA 6020B	788528
92677696010	HAM-MW-35	EPA 3005A	788417	EPA 6020B	788528
92677696011	HAM-PT-03	EPA 3005A	788417	EPA 6020B	788528
92677696012	HAM-PT-01	EPA 3005A	788417	EPA 6020B	788528
92677696013	HAM-PT-02	EPA 3005A	788417	EPA 6020B	788528
92677696014	HAM-INW-01	EPA 3005A	788417	EPA 6020B	788528
92677696015	HAM-MW-57	EPA 3005A	788417	EPA 6020B	788528
92677696001	HAM-HGWC-18	EPA 7470A	790376	EPA 7470A	790494
92677696002	HAM-PT-06	EPA 7470A	790376	EPA 7470A	790494
92677696003	HAM-PT-05	EPA 7470A	790376	EPA 7470A	790494

REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92677696004	HAM-PT-04	EPA 7470A	790376	EPA 7470A	790494
92677696005	HAM-INW-02	EPA 7470A	790376	EPA 7470A	790494
92677696006	HAM-AP2-FD-01	EPA 7470A	790376	EPA 7470A	790494
92677696007	HAM-AP2-FB-01	EPA 7470A	790376	EPA 7470A	790494
92677696009	HAM-MW-33	EPA 7470A	790376	EPA 7470A	790494
92677696010	HAM-MW-35	EPA 7470A	790376	EPA 7470A	790494
92677696011	HAM-PT-03	EPA 7470A	790376	EPA 7470A	790494
92677696012	HAM-PT-01	EPA 7470A	790376	EPA 7470A	790494
92677696013	HAM-PT-02	EPA 7470A	790376	EPA 7470A	790494
92677696014	HAM-INW-01	EPA 7470A	790376	EPA 7470A	790494
92677696001	HAM-HGWC-18	SM 2540C-2015	787441		
92677696002	HAM-PT-06	SM 2540C-2015	787441		
92677696003	HAM-PT-05	SM 2540C-2015	787441		
92677696004	HAM-PT-04	SM 2540C-2015	787441		
92677696005	HAM-INW-02	SM 2540C-2015	787441		
92677696006	HAM-AP2-FD-01	SM 2540C-2015	787441		
92677696007	HAM-AP2-FB-01	SM 2540C-2015	787441		
92677696009	HAM-MW-33	SM 2540C-2015	788206		
92677696010	HAM-MW-35	SM 2540C-2015	788206		
92677696011	HAM-PT-03	SM 2540C-2015	788206		
92677696012	HAM-PT-01	SM 2540C-2015	788206		
92677696013	HAM-PT-02	SM 2540C-2015	788206		
92677696014	HAM-INW-01	SM 2540C-2015	788206		
92677696001	HAM-HGWC-18	SM 2320B-2011	788121		
92677696002	HAM-PT-06	SM 2320B-2011	788121		
92677696003	HAM-PT-05	SM 2320B-2011	788121		
92677696004	HAM-PT-04	SM 2320B-2011	788121		
92677696005	HAM-INW-02	SM 2320B-2011	788121		
92677696006	HAM-AP2-FD-01	SM 2320B-2011	788121		
92677696007	HAM-AP2-FB-01	SM 2320B-2011	788121		
92677696009	HAM-MW-33	SM 2320B-2011	788708		
92677696010	HAM-MW-35	SM 2320B-2011	788708		
92677696011	HAM-PT-03	SM 2320B-2011	788708		
92677696012	HAM-PT-01	SM 2320B-2011	788708		
92677696013	HAM-PT-02	SM 2320B-2011	788708		
92677696014	HAM-INW-01	SM 2320B-2011	788708		
92677696001	HAM-HGWC-18	SM 4500-S2D-2011	787902		
92677696002	HAM-PT-06	SM 4500-S2D-2011	787902		
92677696003	HAM-PT-05	SM 4500-S2D-2011	787902		
92677696004	HAM-PT-04	SM 4500-S2D-2011	787902		
92677696005	HAM-INW-02	SM 4500-S2D-2011	787902		
92677696006	HAM-AP2-FD-01	SM 4500-S2D-2011	787902		
92677696007	HAM-AP2-FB-01	SM 4500-S2D-2011	787903		
92677696009	HAM-MW-33	SM 4500-S2D-2011	787903		
92677696010	HAM-MW-35	SM 4500-S2D-2011	787903		
92677696011	HAM-PT-03	SM 4500-S2D-2011	787903		

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92677696012	HAM-PT-01	SM 4500-S2D-2011	787903		
92677696013	HAM-PT-02	SM 4500-S2D-2011	787903		
92677696014	HAM-INW-01	SM 4500-S2D-2011	787903		
92677696001	HAM-HGWC-18	EPA 300.0 Rev 2.1 1993	787377		
92677696002	HAM-PT-06	EPA 300.0 Rev 2.1 1993	787377		
92677696003	HAM-PT-05	EPA 300.0 Rev 2.1 1993	787377		
92677696004	HAM-PT-04	EPA 300.0 Rev 2.1 1993	787377		
92677696005	HAM-INW-02	EPA 300.0 Rev 2.1 1993	787377		
92677696006	HAM-AP2-FD-01	EPA 300.0 Rev 2.1 1993	787377		
92677696007	HAM-AP2-FB-01	EPA 300.0 Rev 2.1 1993	787377		
92677696009	HAM-MW-33	EPA 300.0 Rev 2.1 1993	787928		
92677696010	HAM-MW-35	EPA 300.0 Rev 2.1 1993	787928		
92677696011	HAM-PT-03	EPA 300.0 Rev 2.1 1993	787930		
92677696012	HAM-PT-01	EPA 300.0 Rev 2.1 1993	787930		
92677696013	HAM-PT-02	EPA 300.0 Rev 2.1 1993	787930		
92677696014	HAM-INW-01	EPA 300.0 Rev 2.1 1993	787930		

### REPORT OF LABORATORY ANALYSIS

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DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92677696**



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

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 7-19-23 AY

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 214 Type of Ice:  Wet  Blue  None

Cooler Temp: 6.5 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): 6.5

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 type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WG</u>		
Headspace in VOA Vials (>5.6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_





DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92677696

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

Project #

PH: BV

Due Date: 07/31/23

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

CLIENT: 92- GP-HAM

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1																												
2		21																										
3		21																										
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pH Adjustment Log for Preserved Samples

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

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

# CHAIN-OF-CUSTODY / Analytical Request Document

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



Section A  
Client Information:  
Company: GA Power  
Address: Atlanta, GA  
City: SCS Contacts  
Task Code: HAM-CCR-CA-20230713  
Project Name: Hammond AP-2  
Project Number: 10463-20

Section B  
Required Project Information:  
Report To: SCS Contacts  
Copy To: Geosyntec Contacts  
Purchase Order No.:  
Task Code: HAM-CCR-CA-20230713

Section C  
Invoice Information:  
Attention: Southern Co.  
Company Name:  
Address:  
City: Hammond  
State: GA

REGULATORY AGENCY  
 NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER  COR—

Site Location: \_\_\_\_\_ STATE: GA

Page: 1 of

Section D Required Client Information	Valid Matrix Codes MATRIX CODE DW WT WW PW SL OL WP AP OT TS	SAMPLE TYPE (G=GRAV C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives											Analysis Test	Full App. III and IV metals	Major Ions (1000-2)	Boron and Cobalt	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.				
			COMPOSITE	DATE			TIME	DATE	TIME	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> SO <sub>4</sub>	Methanol	Other											
HAM-HGNC-18	DW	WG G	7/17/23	1425	12	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	N	N	N	N	081	pH = 4.59
HAM-PT-00	WT	WG G	7/17/23	1425	12	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	022	pH = 6.09
HAM-PT-05	WW	WG G	7/17/23	1300	24	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	003	pH = 6.13	
HAM-PT-04	PW	WG G	7/17/23	1423	12	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	004	pH = 6.30	
HAM-NN-02	SL	WG G	7/17/23	1425	13	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	005	pH = 6.27	
HAM-AP2-FD-01	OL	WG G	7/17/23	1425	-	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	006	-	
HAM-AP2-FB-01	WP	WG G	7/17/23	1425	-	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	007	-	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
HAM-CCR-CA-20230713	Miana Neely Geosyntec	7/17/23	1425	Ray Williams / Pace	7/17/23	1250	
	Ray Williams / Pace	7/17/23	1425	Ray Williams / Pace	7/19	1425	

SAMPLER NAME AND SIGNATURE  
 PRINT Name of SAMPLER: Miana Neely / Geosyntec Consultants, Inc.  
 SIGNATURE of SAMPLER: *Miana Neely*  
 DATE Signed (MM/DD/YYYY): 7/17/23



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92677696

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

PM: BV Due Date: 07/31/23  
CLIENT: 92- GP-HAM

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 9-19-23

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

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

Cooler Temp: 7.6 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): 7.6

USDA Regulated Soil (  N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92677696

PM: BV

Due Date: 07/31/23

CLIENT: 92- GP-HAM

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP9U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP9R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1		2	1																									
2		2	1																									
3		2	1																									
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pH Adjustment Log for Preserved Samples

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

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



# CHAIN-OF-CUSTODY / Analytical Request Document

**Section A**  
 Client Information:  
 Client Name: GA Power  
 Address: Atlanta, GA  
 Contact: [ ]  
 Project Name: SCS Contacts  
 Project Number: [ ]  
 Requested Due Date: 19 day

**Section B**  
 Required Project Information:  
 Report To: SCS Contacts  
 Copy To: Geosyntec Contacts  
 Task Code: HAM-COR-CA-20230713  
 Purchase Order No.: [ ]  
 Project Name: P1001 Hammond AP-2  
 Project Number: [ ]

**Section C**  
 Invoice Information:  
 Attention: Southern Co.  
 Company Name: [ ]  
 Address: [ ]  
 Person: Bonnie Vang  
 Phone: 108997  
 Fax: 160483-20  
 State: GA

**REGULATORY AGENCY**  
 NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER  
 Site Location: [ ]  
 STATE: GA

Section D Required Clean Information	Valid Matrix Codes MATRIX CODE	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test			Residual Chlorine (Y/N)	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		COMPOSITE	COMPOSITE			H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Full App. III and IV metals	Major Ions (10899-2)					
HAM-MW-59	WIG G	7/19/13	10:24	13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HAM-MW-33	WIG G	7/18/13	09:47	19	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HAM-MW-35	WIG G	7/18/13	11:19	22	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HAM-DT-03	WIG G	7/18/13	11:55	21	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HAM-DT-01	WIG G	7/18/13	12:54	22	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HAM-YT-02	WIG G	7/18/13	10:20	31	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HAM-MW-07	WIG G	7/19/13	09:51	20	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X
HAM-MW-57	WIG G	7/19/13	10:40	20	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Alonnanvely / Geosyntec	7/19/13	13:55	[Signature]	7/19	13:55	

**SAMPLER NAME AND SIGNATURE**  
 PRINT Name of SAMPLER: MANNA NEVIL  
 SIGNATURE of SAMPLER: [Signature]  
 DATE Signed (MM/DD/YYYY): 07/19/13  
 / Geosyntec Consultants, Inc.

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



August 25, 2023

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

RE: Project: Hammond AP-2-(CCR-CA)  
Pace Project No.: 92682396

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on August 11, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

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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

Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92682396001	HAM-INW-01	Water	08/09/23 13:36	08/11/23 13:12
92682396002	HAM-INW-02	Water	08/09/23 13:10	08/11/23 13:12
92682396003	HAM-PT-01	Water	08/09/23 12:13	08/11/23 13:12
92682396004	HAM-PT-02	Water	08/09/23 14:23	08/11/23 13:12
92682396005	HAM-PT-03	Water	08/09/23 10:47	08/11/23 13:12
92682396006	HAM-PT-04	Water	08/09/23 14:22	08/11/23 13:12
92682396007	HAM-PT-05	Water	08/09/23 17:39	08/11/23 13:12
92682396008	HAM-PT-06	Water	08/09/23 15:48	08/11/23 13:12
92682396009	HAM-MW-55	Water	08/09/23 18:22	08/11/23 13:12
92682396010	HAM-MW-56	Water	08/09/23 16:51	08/11/23 13:12
92682396011	HAM-MW-57	Water	08/09/23 12:28	08/11/23 13:12
92682396012	HAM-MW-58	Water	08/09/23 10:34	08/11/23 13:12
92682396013	HAM-MW-59	Water	08/09/23 16:51	08/11/23 13:12
92682396014	HAM-AP2-FD-07	Water	08/09/23 00:00	08/11/23 13:12
92682396015	HAM-AP2-FB-07	Water	08/09/23 18:10	08/11/23 13:12

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92682396001	HAM-INW-01	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396002	HAM-INW-02	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396003	HAM-PT-01	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396004	HAM-PT-02	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396005	HAM-PT-03	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396006	HAM-PT-04	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396007	HAM-PT-05	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396008	HAM-PT-06	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396009	HAM-MW-55	EPA 6020B	CW1	2
92682396010	HAM-MW-56	EPA 6020B	CW1	2
92682396011	HAM-MW-57	EPA 6020B	CW1	2
92682396012	HAM-MW-58	EPA 6020B	CW1	2
92682396013	HAM-MW-59	EPA 6020B	CW1	2
92682396014	HAM-AP2-FD-07	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396015	HAM-AP2-FB-07	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2-(CCR-CA)  
Pace Project No.: 92682396

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Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	CDC	3

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

### REPORT OF LABORATORY ANALYSIS

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**SUMMARY OF DETECTION**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92682396001</b>	<b>HAM-INW-01</b>					
EPA 6010D	Calcium	409	mg/L	5.0	08/23/23 05:18	
EPA 6010D	Iron	12.3	mg/L	0.040	08/18/23 20:03	
EPA 6010D	Manganese	20.7	mg/L	0.040	08/18/23 20:03	
EPA 6010D	Potassium	6.2	mg/L	0.50	08/18/23 20:03	
EPA 6010D	Sodium	12.5	mg/L	1.0	08/18/23 20:03	
EPA 6010D	Magnesium	58.4	mg/L	0.050	08/18/23 20:03	
EPA 6020B	Barium	0.053	mg/L	0.0050	08/18/23 19:14	
EPA 6020B	Beryllium	0.00059	mg/L	0.00050	08/18/23 19:14	
EPA 6020B	Boron	8.0	mg/L	0.40	08/21/23 15:51	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	08/18/23 19:14	
EPA 6020B	Lithium	0.0036J	mg/L	0.030	08/18/23 19:14	
EPA 6020B	Selenium	0.011	mg/L	0.0050	08/18/23 19:14	
SM 2540C-2015	Total Dissolved Solids	1890	mg/L	25.0	08/15/23 16:53	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	46.5	mg/L	5.0	08/16/23 15:19	
SM 2320B-2011	Alkalinity, Total as CaCO3	46.5	mg/L	5.0	08/16/23 15:19	
EPA 300.0 Rev 2.1 1993	Chloride	207	mg/L	16.0	08/16/23 05:14	
EPA 300.0 Rev 2.1 1993	Fluoride	0.19	mg/L	0.10	08/15/23 17:22	
EPA 300.0 Rev 2.1 1993	Sulfate	763	mg/L	16.0	08/16/23 05:14	
<b>92682396002</b>	<b>HAM-INW-02</b>					
EPA 6010D	Calcium	306	mg/L	5.0	08/23/23 05:34	
EPA 6010D	Iron	9.4	mg/L	0.040	08/18/23 20:08	
EPA 6010D	Manganese	13.3	mg/L	0.040	08/18/23 20:08	
EPA 6010D	Potassium	6.6	mg/L	0.50	08/18/23 20:08	
EPA 6010D	Sodium	12.9	mg/L	1.0	08/18/23 20:08	
EPA 6010D	Magnesium	27.0	mg/L	0.050	08/18/23 20:08	
EPA 6020B	Arsenic	0.0054J	mg/L	0.010	08/18/23 19:18	
EPA 6020B	Barium	0.042	mg/L	0.0050	08/18/23 19:18	
EPA 6020B	Boron	6.3	mg/L	0.40	08/21/23 15:57	
EPA 6020B	Cobalt	0.050	mg/L	0.0050	08/18/23 19:18	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	08/18/23 19:18	
EPA 6020B	Thallium	0.00045J	mg/L	0.0010	08/18/23 19:18	
SM 2540C-2015	Total Dissolved Solids	1350	mg/L	25.0	08/15/23 16:55	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	166	mg/L	5.0	08/16/23 15:26	
SM 2320B-2011	Alkalinity, Total as CaCO3	166	mg/L	5.0	08/16/23 15:26	
EPA 300.0 Rev 2.1 1993	Chloride	135	mg/L	10.0	08/16/23 05:28	
EPA 300.0 Rev 2.1 1993	Sulfate	457	mg/L	10.0	08/16/23 05:28	
<b>92682396003</b>	<b>HAM-PT-01</b>					
EPA 6010D	Calcium	326	mg/L	5.0	08/23/23 05:39	
EPA 6010D	Manganese	10.3	mg/L	0.040	08/18/23 20:14	
EPA 6010D	Potassium	6.5	mg/L	0.50	08/18/23 20:14	
EPA 6010D	Sodium	10.6	mg/L	1.0	08/18/23 20:14	
EPA 6010D	Magnesium	39.0	mg/L	0.050	08/18/23 20:14	
EPA 6020B	Arsenic	0.0052J	mg/L	0.010	08/18/23 19:21	
EPA 6020B	Barium	0.037	mg/L	0.0050	08/18/23 19:21	
EPA 6020B	Beryllium	0.0021	mg/L	0.00050	08/18/23 19:21	
EPA 6020B	Boron	7.9	mg/L	0.20	08/21/23 16:03	

**REPORT OF LABORATORY ANALYSIS**

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### SUMMARY OF DETECTION

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92682396003</b>	<b>HAM-PT-01</b>					
EPA 6020B	Cadmium	0.0010	mg/L	0.00050	08/18/23 19:21	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	08/18/23 19:21	
EPA 6020B	Lithium	0.0039J	mg/L	0.030	08/18/23 19:21	
EPA 6020B	Selenium	0.020	mg/L	0.0050	08/18/23 19:21	
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/15/23 16:25	
SM 2540C-2015	Total Dissolved Solids	1820	mg/L	25.0	08/15/23 16:55	
EPA 300.0 Rev 2.1 1993	Chloride	141	mg/L	16.0	08/16/23 06:11	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.56	mg/L	0.10	08/15/23 17:51	
EPA 300.0 Rev 2.1 1993	Sulfate	762	mg/L	16.0	08/16/23 06:11	M1
<b>92682396004</b>	<b>HAM-PT-02</b>					
EPA 6010D	Iron	0.39	mg/L	0.040	08/18/23 20:19	
EPA 6010D	Manganese	11.5	mg/L	0.040	08/18/23 20:19	
EPA 6010D	Potassium	6.5	mg/L	0.50	08/18/23 20:19	
EPA 6010D	Sodium	9.8	mg/L	1.0	08/18/23 20:19	
EPA 6010D	Magnesium	37.2	mg/L	0.050	08/18/23 20:19	
EPA 6010D	Calcium	276	mg/L	5.0	08/23/23 05:44	
EPA 6020B	Arsenic	0.0051J	mg/L	0.010	08/18/23 19:33	
EPA 6020B	Barium	0.045	mg/L	0.0050	08/18/23 19:33	
EPA 6020B	Beryllium	0.0022	mg/L	0.00050	08/18/23 19:33	
EPA 6020B	Boron	8.4	mg/L	0.20	08/21/23 16:08	
EPA 6020B	Cadmium	0.00092	mg/L	0.00050	08/18/23 19:33	
EPA 6020B	Cobalt	0.13	mg/L	0.0050	08/18/23 19:33	
EPA 6020B	Lead	0.00071J	mg/L	0.0050	08/21/23 16:08	D3
EPA 6020B	Lithium	0.0043J	mg/L	0.030	08/18/23 19:33	
EPA 6020B	Selenium	0.021	mg/L	0.0050	08/18/23 19:33	
SM 2540C-2015	Total Dissolved Solids	1800	mg/L	25.0	08/15/23 16:55	
EPA 300.0 Rev 2.1 1993	Chloride	138	mg/L	17.0	08/16/23 06:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.67	mg/L	0.10	08/15/23 19:03	
EPA 300.0 Rev 2.1 1993	Sulfate	767	mg/L	17.0	08/16/23 06:54	
<b>92682396005</b>	<b>HAM-PT-03</b>					
EPA 6010D	Iron	0.59	mg/L	0.040	08/18/23 20:24	
EPA 6010D	Manganese	7.5	mg/L	0.040	08/18/23 20:24	
EPA 6010D	Potassium	6.6	mg/L	0.50	08/18/23 20:24	
EPA 6010D	Sodium	14.7	mg/L	1.0	08/18/23 20:24	
EPA 6010D	Magnesium	35.1	mg/L	0.050	08/18/23 20:24	
EPA 6010D	Calcium	360	mg/L	5.0	08/23/23 20:31	
EPA 6020B	Arsenic	0.0056J	mg/L	0.010	08/18/23 19:40	
EPA 6020B	Barium	0.021	mg/L	0.0050	08/18/23 19:40	
EPA 6020B	Beryllium	0.0024	mg/L	0.00050	08/18/23 19:40	
EPA 6020B	Boron	8.7	mg/L	0.20	08/21/23 16:14	
EPA 6020B	Cadmium	0.00055	mg/L	0.00050	08/18/23 19:40	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	08/18/23 19:40	
EPA 6020B	Lead	0.0020J	mg/L	0.0050	08/21/23 16:14	D3
EPA 6020B	Lithium	0.0023J	mg/L	0.030	08/18/23 19:40	
EPA 6020B	Selenium	0.021	mg/L	0.0050	08/18/23 19:40	
SM 2540C-2015	Total Dissolved Solids	1750	mg/L	25.0	08/15/23 16:55	

### REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92682396005</b>	<b>HAM-PT-03</b>					
EPA 300.0 Rev 2.1 1993	Chloride	113	mg/L	17.0	08/16/23 07:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.77	mg/L	0.10	08/15/23 19:18	
EPA 300.0 Rev 2.1 1993	Sulfate	778	mg/L	17.0	08/16/23 07:08	
<b>92682396006</b>	<b>HAM-PT-04</b>					
EPA 6010D	Calcium	287	mg/L	5.0	08/23/23 20:41	
EPA 6010D	Iron	13.2	mg/L	0.040	08/18/23 20:29	
EPA 6010D	Manganese	17.0	mg/L	0.040	08/18/23 20:29	
EPA 6010D	Potassium	7.6	mg/L	0.50	08/18/23 20:29	
EPA 6010D	Sodium	11.4	mg/L	1.0	08/18/23 20:29	
EPA 6010D	Magnesium	24.3	mg/L	0.050	08/18/23 20:29	
EPA 6020B	Arsenic	0.0081J	mg/L	0.010	08/18/23 19:44	
EPA 6020B	Barium	0.039	mg/L	0.0050	08/18/23 19:44	
EPA 6020B	Boron	7.8	mg/L	0.40	08/21/23 16:20	
EPA 6020B	Cobalt	0.056	mg/L	0.0050	08/18/23 19:44	
EPA 6020B	Lithium	0.0047J	mg/L	0.030	08/18/23 19:44	
EPA 6020B	Thallium	0.00027J	mg/L	0.0010	08/18/23 19:44	
SM 2540C-2015	Total Dissolved Solids	1320	mg/L	25.0	08/15/23 16:55	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	168	mg/L	5.0	08/16/23 14:27	
SM 2320B-2011	Alkalinity, Total as CaCO3	168	mg/L	5.0	08/16/23 14:27	
SM 4500-S2D-2011	Sulfide	0.031J	mg/L	0.10	08/15/23 06:27	
EPA 300.0 Rev 2.1 1993	Chloride	132	mg/L	10.0	08/16/23 07:22	
EPA 300.0 Rev 2.1 1993	Sulfate	458	mg/L	10.0	08/16/23 07:22	
<b>92682396007</b>	<b>HAM-PT-05</b>					
EPA 6010D	Calcium	370	mg/L	5.0	08/23/23 06:00	
EPA 6010D	Iron	1.6	mg/L	0.040	08/18/23 20:34	
EPA 6010D	Manganese	10.7	mg/L	0.040	08/18/23 20:34	
EPA 6010D	Potassium	5.0	mg/L	0.50	08/18/23 20:34	
EPA 6010D	Sodium	11.8	mg/L	1.0	08/18/23 20:34	
EPA 6010D	Magnesium	26.5	mg/L	0.050	08/18/23 20:34	
EPA 6020B	Barium	0.040	mg/L	0.0050	08/18/23 19:47	
EPA 6020B	Boron	7.2	mg/L	0.40	08/21/23 16:39	
EPA 6020B	Cobalt	0.039	mg/L	0.0050	08/18/23 19:47	
EPA 6020B	Lithium	0.0049J	mg/L	0.030	08/18/23 19:47	
SM 2540C-2015	Total Dissolved Solids	1480	mg/L	25.0	08/15/23 16:55	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	150	mg/L	5.0	08/16/23 14:39	
SM 2320B-2011	Alkalinity, Total as CaCO3	150	mg/L	5.0	08/16/23 14:39	
EPA 300.0 Rev 2.1 1993	Chloride	145	mg/L	10.0	08/16/23 07:36	
EPA 300.0 Rev 2.1 1993	Sulfate	479	mg/L	10.0	08/16/23 07:36	
<b>92682396008</b>	<b>HAM-PT-06</b>					
EPA 6010D	Calcium	300	mg/L	5.0	08/23/23 06:05	
EPA 6010D	Iron	5.8	mg/L	0.040	08/18/23 20:48	
EPA 6010D	Manganese	17.4	mg/L	0.040	08/18/23 20:48	
EPA 6010D	Potassium	7.3	mg/L	0.50	08/18/23 20:48	
EPA 6010D	Sodium	15.3	mg/L	1.0	08/18/23 20:48	
EPA 6010D	Magnesium	26.1	mg/L	0.050	08/18/23 20:48	
EPA 6020B	Barium	0.032	mg/L	0.0050	08/18/23 19:51	

## REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92682396008</b>	<b>HAM-PT-06</b>					
EPA 6020B	Boron	7.2	mg/L	0.40	08/21/23 16:45	
EPA 6020B	Cadmium	0.00025J	mg/L	0.00050	08/18/23 19:51	
EPA 6020B	Cobalt	0.058	mg/L	0.0050	08/18/23 19:51	
EPA 6020B	Lithium	0.0055J	mg/L	0.030	08/18/23 19:51	
EPA 6020B	Thallium	0.00064J	mg/L	0.0010	08/18/23 19:51	
SM 2540C-2015	Total Dissolved Solids	1420	mg/L	25.0	08/15/23 16:55	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	144	mg/L	5.0	08/16/23 14:51	
SM 2320B-2011	Alkalinity, Total as CaCO3	144	mg/L	5.0	08/16/23 14:51	
EPA 300.0 Rev 2.1 1993	Chloride	140	mg/L	10.0	08/16/23 07:50	
EPA 300.0 Rev 2.1 1993	Sulfate	473	mg/L	10.0	08/16/23 07:50	
<b>92682396009</b>	<b>HAM-MW-55</b>					
EPA 6020B	Boron	3.1	mg/L	0.40	08/23/23 18:31	
EPA 6020B	Cobalt	0.0044J	mg/L	0.0050	08/22/23 15:12	
<b>92682396010</b>	<b>HAM-MW-56</b>					
EPA 6020B	Boron	10.1	mg/L	0.40	08/23/23 18:37	M1
EPA 6020B	Cobalt	0.21	mg/L	0.0050	08/22/23 15:16	
<b>92682396011</b>	<b>HAM-MW-57</b>					
EPA 6020B	Boron	8.5	mg/L	0.40	08/23/23 18:55	
EPA 6020B	Cobalt	0.030	mg/L	0.0050	08/22/23 15:31	
<b>92682396012</b>	<b>HAM-MW-58</b>					
EPA 6020B	Boron	4.0	mg/L	0.40	08/23/23 19:01	
EPA 6020B	Cobalt	0.098	mg/L	0.0050	08/22/23 15:34	
<b>92682396013</b>	<b>HAM-MW-59</b>					
EPA 6020B	Boron	9.5	mg/L	0.40	08/23/23 19:07	
EPA 6020B	Cobalt	0.16	mg/L	0.0050	08/22/23 15:38	
<b>92682396014</b>	<b>HAM-AP2-FD-07</b>					
EPA 6010D	Iron	13.9	mg/L	0.040	08/18/23 20:53	
EPA 6010D	Manganese	17.7	mg/L	0.040	08/18/23 20:53	
EPA 6010D	Potassium	8.0	mg/L	0.50	08/18/23 20:53	
EPA 6010D	Sodium	12.2	mg/L	1.0	08/18/23 20:53	
EPA 6010D	Magnesium	25.3	mg/L	0.050	08/18/23 20:53	
EPA 6010D	Calcium	310	mg/L	5.0	08/23/23 06:10	
EPA 6020B	Arsenic	0.0088J	mg/L	0.010	08/22/23 16:24	
EPA 6020B	Barium	0.041	mg/L	0.0050	08/22/23 16:24	
EPA 6020B	Boron	7.7	mg/L	0.40	08/23/23 19:13	
EPA 6020B	Cobalt	0.058	mg/L	0.0050	08/22/23 16:24	
EPA 6020B	Lithium	0.0047J	mg/L	0.030	08/22/23 16:24	
EPA 6020B	Thallium	0.00024J	mg/L	0.0010	08/22/23 16:24	
SM 2540C-2015	Total Dissolved Solids	1460	mg/L	25.0	08/15/23 16:56	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	170	mg/L	5.0	08/16/23 15:03	
SM 2320B-2011	Alkalinity, Total as CaCO3	170	mg/L	5.0	08/16/23 15:03	
SM 4500-S2D-2011	Sulfide	0.032J	mg/L	0.10	08/15/23 06:28	
EPA 300.0 Rev 2.1 1993	Chloride	132	mg/L	10.0	08/16/23 08:05	
EPA 300.0 Rev 2.1 1993	Sulfate	454	mg/L	10.0	08/16/23 08:05	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-INW-01		Lab ID: 92682396001		Collected: 08/09/23 13:36		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	409	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 05:18	7440-70-2	
Iron	12.3	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:03	7439-89-6	
Manganese	20.7	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:03	7439-96-5	
Potassium	6.2	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:03	7440-09-7	
Sodium	12.5	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:03	7440-23-5	
Magnesium	58.4	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:03	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:14	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:14	7440-38-2	
Barium	0.053	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:14	7440-39-3	
Beryllium	0.00059	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:14	7440-41-7	
Boron	8.0	mg/L	0.40	0.086	10	08/16/23 10:27	08/21/23 15:51	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:14	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:14	7440-47-3	
Cobalt	0.11	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:14	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 19:14	7439-92-1	
Lithium	0.0036J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:14	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:14	7439-98-7	
Selenium	0.011	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:14	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 19:14	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	08/15/23 11:30	08/15/23 16:20	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1890	mg/L	25.0	25.0	1		08/15/23 16:53		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	46.5	mg/L	5.0	5.0	1		08/16/23 15:19		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:19		
Alkalinity, Total as CaCO3	46.5	mg/L	5.0	5.0	1		08/16/23 15:19		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:21	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	207	mg/L	16.0	9.6	16		08/16/23 05:14	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-INW-01 Lab ID: 92682396001 Collected: 08/09/23 13:36 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.19</b>	mg/L	0.10	0.050	1		08/15/23 17:22	16984-48-8	
Sulfate	<b>763</b>	mg/L	16.0	8.0	16		08/16/23 05:14	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

**Sample: HAM-INW-02**      **Lab ID: 92682396002**      Collected: 08/09/23 13:10      Received: 08/11/23 13:12      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>306</b>	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 05:34	7440-70-2	
Iron	<b>9.4</b>	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:08	7439-89-6	
Manganese	<b>13.3</b>	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:08	7439-96-5	
Potassium	<b>6.6</b>	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:08	7440-09-7	
Sodium	<b>12.9</b>	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:08	7440-23-5	
Magnesium	<b>27.0</b>	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:08	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:18	7440-36-0	
Arsenic	<b>0.0054J</b>	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:18	7440-38-2	
Barium	<b>0.042</b>	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:18	7440-41-7	
Boron	<b>6.3</b>	mg/L	0.40	0.086	10	08/16/23 10:27	08/21/23 15:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:18	7440-47-3	
Cobalt	<b>0.050</b>	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 19:18	7439-92-1	
Lithium	<b>0.0038J</b>	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:18	7782-49-2	
Thallium	<b>0.00045J</b>	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 19:18	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	08/15/23 11:30	08/15/23 16:22	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1350</b>	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>166</b>	mg/L	5.0	5.0	1		08/16/23 15:26		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:26		
Alkalinity, Total as CaCO3	<b>166</b>	mg/L	5.0	5.0	1		08/16/23 15:26		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:22	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>135</b>	mg/L	10.0	6.0	10		08/16/23 05:28	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)  
 Pace Project No.: 92682396

Sample: HAM-INW-02		Lab ID: 92682396002		Collected: 08/09/23 13:10		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 17:37	16984-48-8	
Sulfate	457	mg/L	10.0	5.0	10		08/16/23 05:28	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-01		Lab ID: 92682396003		Collected: 08/09/23 12:13		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	326	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 05:39	7440-70-2	
Iron	ND	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:14	7439-89-6	
Manganese	10.3	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:14	7439-96-5	
Potassium	6.5	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:14	7440-09-7	
Sodium	10.6	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:14	7440-23-5	
Magnesium	39.0	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:14	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:21	7440-36-0	
Arsenic	0.0052J	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:21	7440-38-2	
Barium	0.037	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:21	7440-39-3	
Beryllium	0.0021	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:21	7440-41-7	
Boron	7.9	mg/L	0.20	0.043	5	08/16/23 10:27	08/21/23 16:03	7440-42-8	
Cadmium	0.0010	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:21	7440-47-3	
Cobalt	0.11	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:21	7440-48-4	
Lead	ND	mg/L	0.0050	0.00060	5	08/16/23 10:27	08/21/23 16:03	7439-92-1	D3
Lithium	0.0039J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:21	7439-98-7	
Selenium	0.020	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:21	7782-49-2	
Thallium	ND	mg/L	0.0050	0.00090	5	08/16/23 10:27	08/21/23 16:03	7440-28-0	D3
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	0.00014J	mg/L	0.00020	0.00013	1	08/15/23 11:30	08/15/23 16:25	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1820	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:37		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:37		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/16/23 15:37		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:22	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	141	mg/L	16.0	9.6	16		08/16/23 06:11	16887-00-6	M1

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-01 Lab ID: 92682396003 Collected: 08/09/23 12:13 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.56	mg/L	0.10	0.050	1		08/15/23 17:51	16984-48-8	
Sulfate	762	mg/L	16.0	8.0	16		08/16/23 06:11	14808-79-8	M1

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## ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-02		Lab ID: 92682396004		Collected: 08/09/23 14:23		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	0.39	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:19	7439-89-6	
Manganese	11.5	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:19	7439-96-5	
Potassium	6.5	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:19	7440-09-7	
Sodium	9.8	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:19	7440-23-5	
Magnesium	37.2	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:19	7439-95-4	
Calcium	276	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 05:44	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	0.0012	1	08/16/23 10:27	08/18/23 19:33	7440-36-0	
Arsenic	0.0051J	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:33	7440-38-2	
Barium	0.045	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:33	7440-39-3	
Beryllium	0.0022	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:33	7440-41-7	
Boron	8.4	mg/L	0.20	0.043	5	08/16/23 10:27	08/21/23 16:08	7440-42-8	
Cadmium	0.00092	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:33	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:33	7440-47-3	
Cobalt	0.13	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:33	7440-48-4	
Lead	0.00071J	mg/L	0.0050	0.00060	5	08/16/23 10:27	08/21/23 16:08	7439-92-1	D3
Lithium	0.0043J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:33	7439-98-7	
Selenium	0.021	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:33	7782-49-2	
Thallium	ND	mg/L	0.0050	0.00090	5	08/16/23 10:27	08/21/23 16:08	7440-28-0	D3
<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	08/15/23 11:30	08/15/23 16:28	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1800	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:53		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:53		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/16/23 15:53		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:23	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	138	mg/L	17.0	10.2	17		08/16/23 06:54	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2 (CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-02 Lab ID: 92682396004 Collected: 08/09/23 14:23 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.67</b>	mg/L	0.10	0.050	1		08/15/23 19:03	16984-48-8	
Sulfate	<b>767</b>	mg/L	17.0	8.5	17		08/16/23 06:54	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-03	Lab ID: 92682396005	Collected: 08/09/23 10:47	Received: 08/11/23 13:12	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	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									
Iron	0.59	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:24	7439-89-6	
Manganese	7.5	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:24	7439-96-5	
Potassium	6.6	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:24	7440-09-7	
Sodium	14.7	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:24	7440-23-5	
Magnesium	35.1	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:24	7439-95-4	
Calcium	360	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 20:31	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	0.0012	1	08/16/23 10:27	08/18/23 19:40	7440-36-0	
Arsenic	0.0056J	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:40	7440-38-2	
Barium	0.021	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:40	7440-39-3	
Beryllium	0.0024	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:40	7440-41-7	
Boron	8.7	mg/L	0.20	0.043	5	08/16/23 10:27	08/21/23 16:14	7440-42-8	
Cadmium	0.00055	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:40	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:40	7440-47-3	
Cobalt	0.11	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:40	7440-48-4	
Lead	0.0020J	mg/L	0.0050	0.00060	5	08/16/23 10:27	08/21/23 16:14	7439-92-1	D3
Lithium	0.0023J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:40	7439-98-7	
Selenium	0.021	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:40	7782-49-2	
Thallium	ND	mg/L	0.0050	0.00090	5	08/16/23 10:27	08/21/23 16:14	7440-28-0	D3
<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	08/15/23 11:30	08/15/23 16:35	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1750	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 16:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 16:16		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/16/23 16:16		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:25	18496-25-8	R1
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	113	mg/L	17.0	10.2	17		08/16/23 07:08	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-03 Lab ID: 92682396005 Collected: 08/09/23 10:47 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	<b>0.77</b>	mg/L	0.10	0.050	1		08/15/23 19:18	16984-48-8	
Sulfate	<b>778</b>	mg/L	17.0	8.5	17		08/16/23 07:08	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

**Sample: HAM-PT-04**      **Lab ID: 92682396006**      Collected: 08/09/23 14:22      Received: 08/11/23 13:12      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>287</b>	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 20:41	7440-70-2	
Iron	<b>13.2</b>	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:29	7439-89-6	
Manganese	<b>17.0</b>	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:29	7439-96-5	
Potassium	<b>7.6</b>	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:29	7440-09-7	
Sodium	<b>11.4</b>	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:29	7440-23-5	
Magnesium	<b>24.3</b>	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:29	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:44	7440-36-0	
Arsenic	<b>0.0081J</b>	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:44	7440-38-2	
Barium	<b>0.039</b>	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:44	7440-41-7	
Boron	<b>7.8</b>	mg/L	0.40	0.086	10	08/16/23 10:27	08/21/23 16:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:44	7440-47-3	
Cobalt	<b>0.056</b>	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 19:44	7439-92-1	
Lithium	<b>0.0047J</b>	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:44	7782-49-2	
Thallium	<b>0.00027J</b>	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 19:44	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	08/15/23 11:30	08/15/23 16:38	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1320</b>	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>168</b>	mg/L	5.0	5.0	1		08/16/23 14:27		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 14:27		
Alkalinity, Total as CaCO3	<b>168</b>	mg/L	5.0	5.0	1		08/16/23 14:27		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	<b>0.031J</b>	mg/L	0.10	0.022	1		08/15/23 06:27	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>132</b>	mg/L	10.0	6.0	10		08/16/23 07:22	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-04 Lab ID: 92682396006 Collected: 08/09/23 14:22 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 19:32	16984-48-8	
Sulfate	458	mg/L	10.0	5.0	10		08/16/23 07:22	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-05	Lab ID: 92682396007	Collected: 08/09/23 17:39	Received: 08/11/23 13:12	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	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	370	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 06:00	7440-70-2	
Iron	1.6	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:34	7439-89-6	
Manganese	10.7	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:34	7439-96-5	
Potassium	5.0	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:34	7440-09-7	
Sodium	11.8	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:34	7440-23-5	
Magnesium	26.5	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:34	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:47	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:47	7440-38-2	
Barium	0.040	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:47	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:47	7440-41-7	
Boron	7.2	mg/L	0.40	0.086	10	08/16/23 10:27	08/21/23 16:39	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:47	7440-47-3	
Cobalt	0.039	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 19:47	7439-92-1	
Lithium	0.0049J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 19:47	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	08/15/23 11:30	08/15/23 16:41	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1480	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	150	mg/L	5.0	5.0	1		08/16/23 14:39		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 14:39		
Alkalinity, Total as CaCO3	150	mg/L	5.0	5.0	1		08/16/23 14:39		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:27	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	145	mg/L	10.0	6.0	10		08/16/23 07:36	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-05 Lab ID: 92682396007 Collected: 08/09/23 17:39 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 19:47	16984-48-8	
Sulfate	479	mg/L	10.0	5.0	10		08/16/23 07:36	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-06		Lab ID: 92682396008		Collected: 08/09/23 15:48		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	300	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 06:05	7440-70-2	
Iron	5.8	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:48	7439-89-6	
Manganese	17.4	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:48	7439-96-5	
Potassium	7.3	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:48	7440-09-7	
Sodium	15.3	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:48	7440-23-5	
Magnesium	26.1	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:48	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:51	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:51	7440-38-2	
Barium	0.032	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:51	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:51	7440-41-7	
Boron	7.2	mg/L	0.40	0.086	10	08/16/23 10:27	08/21/23 16:45	7440-42-8	
Cadmium	0.00025J	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:51	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:51	7440-47-3	
Cobalt	0.058	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:51	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 19:51	7439-92-1	
Lithium	0.0055J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:51	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:51	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:51	7782-49-2	
Thallium	0.00064J	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 19:51	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	08/15/23 11:30	08/15/23 16:43	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1420	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	144	mg/L	5.0	5.0	1		08/16/23 14:51		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 14:51		
Alkalinity, Total as CaCO3	144	mg/L	5.0	5.0	1		08/16/23 14:51		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:27	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	140	mg/L	10.0	6.0	10		08/16/23 07:50	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

**Sample: HAM-PT-06**      **Lab ID: 92682396008**      Collected: 08/09/23 15:48      Received: 08/11/23 13:12      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 20:01	16984-48-8	
Sulfate	<b>473</b>	mg/L	10.0	5.0	10		08/16/23 07:50	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2 (CCR-CA)

Pace Project No.: 92682396

Sample: HAM-MW-55 Lab ID: 92682396009 Collected: 08/09/23 18:22 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	3.1	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 18:31	7440-42-8	
Cobalt	0.0044J	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 15:12	7440-48-4	

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### ANALYTICAL RESULTS

Project: Hammond AP-2 (CCR-CA)

Pace Project No.: 92682396

Sample: HAM-MW-56 Lab ID: 92682396010 Collected: 08/09/23 16:51 Received: 08/11/23 13:12 Matrix: Water

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

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

Boron	10.1	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 18:37	7440-42-8	M1
Cobalt	0.21	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 15:16	7440-48-4	

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### ANALYTICAL RESULTS

Project: Hammond AP-2(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-MW-57 Lab ID: 92682396011 Collected: 08/09/23 12:28 Received: 08/11/23 13:12 Matrix: Water

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

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

Boron	<b>8.5</b>	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 18:55	7440-42-8	
Cobalt	<b>0.030</b>	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 15:31	7440-48-4	

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### ANALYTICAL RESULTS

Project: Hammond AP-2 (CCR-CA)

Pace Project No.: 92682396

**Sample: HAM-MW-58**      **Lab ID: 92682396012**      Collected: 08/09/23 10:34      Received: 08/11/23 13:12      Matrix: Water

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

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

Boron	<b>4.0</b>	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:01	7440-42-8	
Cobalt	<b>0.098</b>	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 15:34	7440-48-4	

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### ANALYTICAL RESULTS

Project: Hammond AP-2 (CCR-CA)

Pace Project No.: 92682396

Sample: HAM-MW-59 Lab ID: 92682396013 Collected: 08/09/23 16:51 Received: 08/11/23 13:12 Matrix: Water

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

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

Boron	9.5	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:07	7440-42-8	
Cobalt	0.16	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 15:38	7440-48-4	

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## ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-AP2-FD-07 Lab ID: 92682396014 Collected: 08/09/23 00:00 Received: 08/11/23 13:12 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									
Iron	13.9	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:53	7439-89-6	
Manganese	17.7	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:53	7439-96-5	
Potassium	8.0	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:53	7440-09-7	
Sodium	12.2	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:53	7440-23-5	
Magnesium	25.3	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:53	7439-95-4	
Calcium	310	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 06:10	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	0.0012	1	08/16/23 14:27	08/22/23 16:24	7440-36-0	
Arsenic	0.0088J	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:24	7440-38-2	
Barium	0.041	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:24	7440-41-7	
Boron	7.7	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:13	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:24	7440-47-3	
Cobalt	0.058	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:24	7439-92-1	
Lithium	0.0047J	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:24	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:24	7782-49-2	
Thallium	0.00024J	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:24	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	08/17/23 13:00	08/17/23 18:09	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1460	mg/L	25.0	25.0	1		08/15/23 16:56		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	170	mg/L	5.0	5.0	1		08/16/23 15:03		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:03		
Alkalinity, Total as CaCO3	170	mg/L	5.0	5.0	1		08/16/23 15:03		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	0.032J	mg/L	0.10	0.022	1		08/15/23 06:28	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	132	mg/L	10.0	6.0	10		08/16/23 08:05	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-AP2-FD-07 Lab ID: 92682396014 Collected: 08/09/23 00:00 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 20:16	16984-48-8	
Sulfate	454	mg/L	10.0	5.0	10		08/16/23 08:05	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-AP2-FB-07 Lab ID: 92682396015 Collected: 08/09/23 18:10 Received: 08/11/23 13:12 Matrix: Water

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

#### 6010D ATL ICP

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

Iron	ND	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:58	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:58	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:58	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:58	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	08/18/23 10:36	08/18/23 20:58	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:58	7439-95-4	

#### 6020 MET ICPMS

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

Antimony	ND	mg/L	0.0030	0.0012	1	08/16/23 14:27	08/22/23 16:28	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:28	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:28	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:28	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/16/23 14:27	08/23/23 13:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:28	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:28	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:28	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:28	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:28	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:28	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:28	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:28	7440-28-0	

#### 7470 Mercury

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

Mercury	ND	mg/L	0.00020	0.00013	1	08/17/23 13:00	08/17/23 18:20	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	ND	mg/L	25.0	25.0	1		08/15/23 16:56		
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#### 2320B Alkalinity

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:15		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/16/23 15:15		

#### 4500S2D Sulfide Water

Analytical Method: SM 4500-S2D-2011  
Pace Analytical Services - Asheville

Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:28	18496-25-8	
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#### 300.0 IC Anions 28 Days

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

Chloride	ND	mg/L	1.0	0.60	1		08/15/23 20:30	16887-00-6	
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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-AP2-FB-07 Lab ID: 92682396015 Collected: 08/09/23 18:10 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 20:30	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/15/23 20:30	14808-79-8	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793618 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

METHOD BLANK: 4112489 Matrix: Water  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/18/23 19:00	
Iron	mg/L	ND	0.040	0.025	08/18/23 19:00	
Magnesium	mg/L	ND	0.050	0.012	08/18/23 19:00	
Manganese	mg/L	ND	0.040	0.011	08/18/23 19:00	
Potassium	mg/L	ND	0.50	0.15	08/18/23 19:00	
Sodium	mg/L	ND	1.0	0.58	08/18/23 19:00	

LABORATORY CONTROL SAMPLE: 4112490

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	108	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.0	101	80-120	
Manganese	mg/L	1	0.99	99	80-120	
Potassium	mg/L	1	1.1	106	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112491 4112492

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92682392001 Result	Spike Conc.	Spike Conc.	Conc.								
Calcium	mg/L	8.4	1	1	8.8	9.3	35	92	75-125	6	20	M1	
Iron	mg/L	ND	1	1	1.0	1.0	100	100	75-125	0	20		
Magnesium	mg/L	3.4	1	1	4.1	4.3	72	92	75-125	5	20	M1	
Manganese	mg/L	ND	1	1	0.98	0.99	97	98	75-125	1	20		
Potassium	mg/L	0.32J	1	1	1.3	1.5	102	113	75-125	8	20		
Sodium	mg/L	9.5	1	1	10	10.5	44	103	75-125	6	20	M1	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch:	793883	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008		

METHOD BLANK:	4113580	Matrix:	Water
Associated Lab Samples:	92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/18/23 18:03	
Arsenic	mg/L	ND	0.010	0.0037	08/18/23 18:03	
Barium	mg/L	ND	0.0050	0.00067	08/18/23 18:03	
Beryllium	mg/L	ND	0.00050	0.000054	08/18/23 18:03	
Boron	mg/L	ND	0.040	0.0086	08/18/23 18:03	
Cadmium	mg/L	ND	0.00050	0.00011	08/18/23 18:03	
Chromium	mg/L	ND	0.0050	0.0011	08/18/23 18:03	
Cobalt	mg/L	ND	0.0050	0.00039	08/18/23 18:03	
Lead	mg/L	ND	0.0010	0.00012	08/18/23 18:03	
Lithium	mg/L	ND	0.030	0.00073	08/18/23 18:03	
Molybdenum	mg/L	ND	0.010	0.00074	08/18/23 18:03	
Selenium	mg/L	ND	0.0050	0.0014	08/18/23 18:03	
Thallium	mg/L	ND	0.0010	0.00018	08/18/23 18:03	

LABORATORY CONTROL SAMPLE: 4113581

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.094	94	80-120	
Beryllium	mg/L	0.1	0.11	108	80-120	
Boron	mg/L	1	1.1	108	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.11	107	80-120	
Lithium	mg/L	0.1	0.11	113	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.11	107	80-120	
Thallium	mg/L	0.1	0.10	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113582 4113583

Parameter	Units	92681883002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	105	100	75-125	5	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		4113582			4113583							
Parameter	Units	92681883002 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual	
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD		
Arsenic	mg/L	ND	0.1	0.1	0.11	0.10	106	100	75-125	6	20	
Barium	mg/L	0.032	0.1	0.1	0.14	0.13	109	103	75-125	4	20	
Beryllium	mg/L	ND	0.1	0.1	0.097	0.092	97	92	75-125	5	20	
Boron	mg/L	0.18	1	1	1.2	1.2	102	98	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.096	100	95	75-125	4	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20	
Lead	mg/L	ND	0.1	0.1	0.11	0.10	109	104	75-125	5	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20	
Molybdenum	mg/L	0.0039J	0.1	0.1	0.11	0.10	102	99	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	110	104	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.11	0.10	108	103	75-125	5	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch:	794002	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92682396009, 92682396010, 92682396011, 92682396012, 92682396013, 92682396014, 92682396015

METHOD BLANK: 4114214 Matrix: Water  
 Associated Lab Samples: 92682396009, 92682396010, 92682396011, 92682396012, 92682396013, 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.0043	0.0030	0.0012	08/22/23 15:04	
Arsenic	mg/L	ND	0.010	0.0037	08/22/23 15:04	
Barium	mg/L	ND	0.0050	0.00067	08/22/23 15:04	
Beryllium	mg/L	ND	0.00050	0.000054	08/22/23 15:04	
Boron	mg/L	ND	0.040	0.0086	08/22/23 15:04	
Cadmium	mg/L	ND	0.00050	0.00011	08/22/23 15:04	
Chromium	mg/L	ND	0.0050	0.0011	08/22/23 15:04	
Cobalt	mg/L	ND	0.0050	0.00039	08/22/23 15:04	
Lead	mg/L	ND	0.0010	0.00012	08/22/23 15:04	
Lithium	mg/L	ND	0.030	0.00073	08/22/23 15:04	
Molybdenum	mg/L	ND	0.010	0.00074	08/22/23 15:04	
Selenium	mg/L	ND	0.0050	0.0014	08/22/23 15:04	
Thallium	mg/L	ND	0.0010	0.00018	08/22/23 15:04	

LABORATORY CONTROL SAMPLE: 4114215

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	112	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.11	110	80-120	
Boron	mg/L	1	1.1	110	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	105	80-120	
Lithium	mg/L	0.1	0.11	110	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.11	105	80-120	
Thallium	mg/L	0.1	0.11	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114216 4114217

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92682396010	Result	Spike Conc.	Spike Conc.								
Antimony	mg/L	0.0014J	0.1	0.1	0.11	0.10	107	101	75-125	6	20		
Arsenic	mg/L	0.0040J	0.1	0.1	0.12	0.11	112	104	75-125	7	20		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Parameter	Units	4114216		4114217		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92682396010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.042	0.1	0.1	0.16	0.15	118	108	75-125	6	20		
Beryllium	mg/L	0.00071	0.1	0.1	0.090	0.085	89	84	75-125	6	20		
Boron	mg/L	10.1	1	1	10.9	10.7	77	57	75-125	2	20	M1	
Cadmium	mg/L	0.00059	0.1	0.1	0.099	0.094	98	94	75-125	5	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.097	104	97	75-125	7	20		
Cobalt	mg/L	0.21	0.1	0.1	0.31	0.29	102	83	75-125	6	20		
Lead	mg/L	0.00013J	0.1	0.1	0.067	0.064	67	64	75-125	5	20	M1	
Lithium	mg/L	0.0024J	0.1	0.1	0.097	0.092	95	89	75-125	6	20		
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	109	104	75-125	5	20		
Selenium	mg/L	0.013	0.1	0.1	0.13	0.13	122	113	75-125	8	20		
Thallium	mg/L	0.00021J	0.1	0.1	0.069	0.066	68	65	75-125	5	20	M1	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch:	793573	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008

METHOD BLANK: 4112218 Matrix: Water

Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/15/23 15:25	

LABORATORY CONTROL SAMPLE: 4112219

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112220 4112221

Parameter	Units	92681883001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0023	0.0021	88	81	75-125	8	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch:	794228	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92682396014, 92682396015

METHOD BLANK: 4115390 Matrix: Water

Associated Lab Samples: 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/17/23 17:06	

LABORATORY CONTROL SAMPLE: 4115391

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115392 4115393

Parameter	Units	4115392		4115393		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	92682396014 ND	0.0025	0.0025	0.0026	0.0024	100	96	75-125	4	20

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch:	793700	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:	92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015		

METHOD BLANK:	4112841	Matrix:	Water
Associated Lab Samples:	92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/15/23 16:52	

LABORATORY CONTROL SAMPLE: 4112842						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	446	112	80-120	

SAMPLE DUPLICATE: 4112843						
Parameter	Units	92682396001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1890	1910	1	10	

SAMPLE DUPLICATE: 4112844						
Parameter	Units	92682397001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	771	760	1	10	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793717 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005

METHOD BLANK: 4112919 Matrix: Water  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/16/23 12:53	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/16/23 12:53	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/16/23 12:53	

LABORATORY CONTROL SAMPLE: 4112920

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112922 4112923

Parameter	Units	92682396004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	52.3	52.9	98	99	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112924 4112925

Parameter	Units	92682396005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	45.8	45.7	89	89	80-120	0	25	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793896 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

METHOD BLANK: 4113632 Matrix: Water  
 Associated Lab Samples: 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/16/23 13:58	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/16/23 13:58	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/16/23 13:58	

LABORATORY CONTROL SAMPLE: 4113633

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

LABORATORY CONTROL SAMPLE: 4113634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	55.0	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113635 4113636

Parameter	Units	92682175001		92682175002		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Spike Conc.								
Alkalinity, Total as CaCO3	mg/L	464	50	50	487	487	47	46	80-120	0	25	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113637 4113638

Parameter	Units	92682175002		92682175001		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Spike Conc.								
Alkalinity, Total as CaCO3	mg/L	12.5	50	50	65.7	65.4	106	106	80-120	0	25		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793499 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004

METHOD BLANK: 4111952 Matrix: Water  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	08/15/23 06:10	

LABORATORY CONTROL SAMPLE: 4111953

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.50	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111954 4111955

Parameter	Units	92681883001		4111954		4111955		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MS Spike Conc.	MS Result	MS Spike Conc.	MS Result	MS Spike Conc.				
Sulfide	mg/L	0.16	0.5	0.68	0.5	0.59	0.5	102	84	14	10 R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111956 4111957

Parameter	Units	92681885005		4111956		4111957		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MS Spike Conc.	MS Result	MS Spike Conc.	MS Result	MS Spike Conc.				
Sulfide	mg/L	0.14	0.5	0.53	0.5	0.60	0.5	79	93	12	10 M1,R1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793500 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

METHOD BLANK: 4111958 Matrix: Water  
 Associated Lab Samples: 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	08/15/23 06:24	

LABORATORY CONTROL SAMPLE: 4111959

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.50	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111960 4111961

Parameter	Units	92682396005		4111961		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	ND	0.5	0.5	0.50	0.45	99	89	80-120	11	10 R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111962 4111963

Parameter	Units	92682397007		4111963		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	ND	0.5	0.5	0.53	0.55	104	108	80-120	4	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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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch:	793550	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:	92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015		

METHOD BLANK:	4112126	Matrix:	Water
Associated Lab Samples:	92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/15/23 12:46	
Fluoride	mg/L	ND	0.10	0.050	08/15/23 12:46	
Sulfate	mg/L	ND	1.0	0.50	08/15/23 12:46	

LABORATORY CONTROL SAMPLE: 4112127						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.4	97	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	47.4	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112128												4112129	
Parameter	Units	92682198001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	ND	50	50	48.0	48.3	95	96	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	94	95	90-110	1	10		
Sulfate	mg/L	ND	50	50	47.3	47.6	93	94	90-110	1	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112130												4112131	
Parameter	Units	92682396003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	141	50	50	179	180	77	78	90-110	0	10	M1	
Fluoride	mg/L	0.56	2.5	2.5	3.1	3.2	102	104	90-110	2	10		
Sulfate	mg/L	762	50	50	787	789	50	53	90-110	0	10	M1	

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

**REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

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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

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

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 AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682396001	HAM-INW-01	EPA 3010A	793618	EPA 6010D	794582
92682396002	HAM-INW-02	EPA 3010A	793618	EPA 6010D	794582
92682396003	HAM-PT-01	EPA 3010A	793618	EPA 6010D	794582
92682396004	HAM-PT-02	EPA 3010A	793618	EPA 6010D	794582
92682396005	HAM-PT-03	EPA 3010A	793618	EPA 6010D	794582
92682396006	HAM-PT-04	EPA 3010A	793618	EPA 6010D	794582
92682396007	HAM-PT-05	EPA 3010A	793618	EPA 6010D	794582
92682396008	HAM-PT-06	EPA 3010A	793618	EPA 6010D	794582
92682396014	HAM-AP2-FD-07	EPA 3010A	793618	EPA 6010D	794582
92682396015	HAM-AP2-FB-07	EPA 3010A	793618	EPA 6010D	794582
92682396001	HAM-INW-01	EPA 3005A	793883	EPA 6020B	794015
92682396002	HAM-INW-02	EPA 3005A	793883	EPA 6020B	794015
92682396003	HAM-PT-01	EPA 3005A	793883	EPA 6020B	794015
92682396004	HAM-PT-02	EPA 3005A	793883	EPA 6020B	794015
92682396005	HAM-PT-03	EPA 3005A	793883	EPA 6020B	794015
92682396006	HAM-PT-04	EPA 3005A	793883	EPA 6020B	794015
92682396007	HAM-PT-05	EPA 3005A	793883	EPA 6020B	794015
92682396008	HAM-PT-06	EPA 3005A	793883	EPA 6020B	794015
92682396009	HAM-MW-55	EPA 3005A	794002	EPA 6020B	794064
92682396010	HAM-MW-56	EPA 3005A	794002	EPA 6020B	794064
92682396011	HAM-MW-57	EPA 3005A	794002	EPA 6020B	794064
92682396012	HAM-MW-58	EPA 3005A	794002	EPA 6020B	794064
92682396013	HAM-MW-59	EPA 3005A	794002	EPA 6020B	794064
92682396014	HAM-AP2-FD-07	EPA 3005A	794002	EPA 6020B	794064
92682396015	HAM-AP2-FB-07	EPA 3005A	794002	EPA 6020B	794064
92682396001	HAM-INW-01	EPA 7470A	793573	EPA 7470A	793628
92682396002	HAM-INW-02	EPA 7470A	793573	EPA 7470A	793628
92682396003	HAM-PT-01	EPA 7470A	793573	EPA 7470A	793628
92682396004	HAM-PT-02	EPA 7470A	793573	EPA 7470A	793628
92682396005	HAM-PT-03	EPA 7470A	793573	EPA 7470A	793628
92682396006	HAM-PT-04	EPA 7470A	793573	EPA 7470A	793628
92682396007	HAM-PT-05	EPA 7470A	793573	EPA 7470A	793628
92682396008	HAM-PT-06	EPA 7470A	793573	EPA 7470A	793628
92682396014	HAM-AP2-FD-07	EPA 7470A	794228	EPA 7470A	794260
92682396015	HAM-AP2-FB-07	EPA 7470A	794228	EPA 7470A	794260
92682396001	HAM-INW-01	SM 2540C-2015	793700		
92682396002	HAM-INW-02	SM 2540C-2015	793700		
92682396003	HAM-PT-01	SM 2540C-2015	793700		
92682396004	HAM-PT-02	SM 2540C-2015	793700		
92682396005	HAM-PT-03	SM 2540C-2015	793700		
92682396006	HAM-PT-04	SM 2540C-2015	793700		
92682396007	HAM-PT-05	SM 2540C-2015	793700		
92682396008	HAM-PT-06	SM 2540C-2015	793700		
92682396014	HAM-AP2-FD-07	SM 2540C-2015	793700		
92682396015	HAM-AP2-FB-07	SM 2540C-2015	793700		
92682396001	HAM-INW-01	SM 2320B-2011	793717		

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Hammond AP-2-(CCR-CA)  
 Pace Project No.: 92682396

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682396002	HAM-INW-02	SM 2320B-2011	793717		
92682396003	HAM-PT-01	SM 2320B-2011	793717		
92682396004	HAM-PT-02	SM 2320B-2011	793717		
92682396005	HAM-PT-03	SM 2320B-2011	793717		
92682396006	HAM-PT-04	SM 2320B-2011	793896		
92682396007	HAM-PT-05	SM 2320B-2011	793896		
92682396008	HAM-PT-06	SM 2320B-2011	793896		
92682396014	HAM-AP2-FD-07	SM 2320B-2011	793896		
92682396015	HAM-AP2-FB-07	SM 2320B-2011	793896		
92682396001	HAM-INW-01	SM 4500-S2D-2011	793499		
92682396002	HAM-INW-02	SM 4500-S2D-2011	793499		
92682396003	HAM-PT-01	SM 4500-S2D-2011	793499		
92682396004	HAM-PT-02	SM 4500-S2D-2011	793499		
92682396005	HAM-PT-03	SM 4500-S2D-2011	793500		
92682396006	HAM-PT-04	SM 4500-S2D-2011	793500		
92682396007	HAM-PT-05	SM 4500-S2D-2011	793500		
92682396008	HAM-PT-06	SM 4500-S2D-2011	793500		
92682396014	HAM-AP2-FD-07	SM 4500-S2D-2011	793500		
92682396015	HAM-AP2-FB-07	SM 4500-S2D-2011	793500		
92682396001	HAM-INW-01	EPA 300.0 Rev 2.1 1993	793550		
92682396002	HAM-INW-02	EPA 300.0 Rev 2.1 1993	793550		
92682396003	HAM-PT-01	EPA 300.0 Rev 2.1 1993	793550		
92682396004	HAM-PT-02	EPA 300.0 Rev 2.1 1993	793550		
92682396005	HAM-PT-03	EPA 300.0 Rev 2.1 1993	793550		
92682396006	HAM-PT-04	EPA 300.0 Rev 2.1 1993	793550		
92682396007	HAM-PT-05	EPA 300.0 Rev 2.1 1993	793550		
92682396008	HAM-PT-06	EPA 300.0 Rev 2.1 1993	793550		
92682396014	HAM-AP2-FD-07	EPA 300.0 Rev 2.1 1993	793550		
92682396015	HAM-AP2-FB-07	EPA 300.0 Rev 2.1 1993	793550		

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DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: B A Power

Project #:

WO#: 92682396



Courier:  Fed Ex  UPS  USPS  Client  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/11/23  
TSK

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Cooler Temp: 3.1 Correction Factor: 0.0 Add/Subtract (°C)

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

Cooler Temp Corrected (°C): 3.1

USDA Regulated Soil (  N/A, water sample)

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

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

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input 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.	
-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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>			
Headspace in VOA Vials (>5.6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92682396

PM: BV

Due Date: 08/25/23

CLIENT: 92- GP-HAM

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

pH Adjustment Log for Preserved Samples

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

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



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

Project #

WO#: 92682396

PM: BV

Due Date: 08/25/23

CLIENT: 92- GP-HAM

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

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

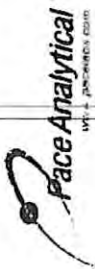
\*\*\*Check all unpreserved Nitrates for chlorine

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

pH Adjustment Log for Preserved Samples

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

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



# CHAIN-OF-CUSTODY / Analytical Request Document

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

<b>Section A</b> Required Client Information: Company: GA Power Address: Atlanta, GA Email To: SCS Contacts Phone: _____ Fax: _____ Requested Due Date/TAT: 10 Day		<b>Section B</b> Required Project Information: Report To: SCS Contacts Copy To: Geosyntec Contacts Purchase Order No.: Hammond AP-2 Project Name: Bonnie Vang Project Number: 10839		<b>Section C</b> Invoice Information: Attention: Southern Co. Company Name: Address: Pace Quote Reference: _____ Pace Project Manager: _____ Pace Profile #: 10839	
<b>REGULATORY AGENCY</b> <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER CCR		Site Location: _____ STATE: GA		Page: 1 of 2	

ITEM #	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW PRODUCT P SOLID/SL OIL OL PIPE WP AS OTHER OT TISSUE TS	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP) (see valid codes to left)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.							
		COMPOSITE	DATE				TIME	Y/N	Chloride, Fluoride, Sulfate	Full App. III and IV metals	Major Ions (Profile 10839-2)	TDS	Boron and Cobalt	Analysis Test	Preservatives	Unpreserved									
1	HAM-INW-01		8/8/2023	1336	WG G	24	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	X	X	X	X	X	X	X	X	X	X	X	001
2	HAM-INW-02		8/9/2023	1310	WG G	21								X	X	X	X	X	X	X	X	X	X	X	002
3	HAM-PT-01		8/9/2023	1213	WG G	21								X	X	X	X	X	X	X	X	X	X	X	003
4	HAM-PT-02		8/9/2023	1423	WG G	22								X	X	X	X	X	X	X	X	X	X	X	004
5	HAM-PT-03		8/9/2023	1047	WG G	20								X	X	X	X	X	X	X	X	X	X	X	005
6	HAM-PT-04		8/9/2023	1422	WG G	21								X	X	X	X	X	X	X	X	X	X	X	006
7	HAM-PT-05		8/9/2023	1738	WG G	22								X	X	X	X	X	X	X	X	X	X	X	007
8	HAM-PT-06		8/9/2023	1548	WG G	21								X	X	X	X	X	X	X	X	X	X	X	008
9	HAM-MW-55		8/9/2023	1822	WG G	24					1														009
10	HAM-MW-56		8/9/2023	1651	WG G	22					1														010
11	HAM-MW-57		8/9/2023	1228	WG G	20					1														011
12	HAM-MW-58		8/9/2023	1034	WG G	19					1														012

<b>ADDITIONAL COMMENTS</b> Task Code: HAM-CCR-CA-20230808 Charles Grant / Geosyntec Ryan William / JHU		<b>RELINQUISHED BY / AFFILIATION</b> DATE: 8/11/2023 1312 TIME: 1555 Signature: Charles Grant		<b>ACCEPTED BY / AFFILIATION</b> DATE: 8/11/2023 1312 TIME: 1312 Signature: Ryan William	
<b>SAMPLER NAME AND SIGNATURE</b> PRINT Name of SAMPLER: An Arny Szwarc, Thomas Kraker, Connor Calkin / Geosyntec Consultants, Inc SIGNATURE of SAMPLER: <i>An Arny Szwarc</i> DATE SIGNED (MM/DD/YYYY): 08/09/2023		<b>TEMP IN °C</b> Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples In tact (Y/N)		<b>SAMPLE CONDITIONS</b>	



# Field Sampling Forms

# Low-Flow Test Report:

Test Date / Time: 7/19/2023 8:36:29 AM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: INW-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 11.2 ft</b> <b>Total Depth: 21.2 ft</b> <b>Initial Depth to Water: 9.95 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 16.2 ft</b> <b>Estimated Total Volume Pumped: 7457.5 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 1.15 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

63-93 deg F cloudy

## 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	+/- 10	+/- 10	+/- 0.3	
7/19/2023 8:36 AM	00:00	5.03 pH	21.06 °C	2,119.7 µS/cm	2.57 mg/L	2.98 NTU	200.2 mV	10.80 ft	150.00 ml/min
7/19/2023 8:40 AM	04:00	5.03 pH	20.28 °C	2,085.9 µS/cm	2.60 mg/L		213.0 mV	10.80 ft	150.00 ml/min
7/19/2023 8:41 AM	04:35	5.05 pH	20.26 °C	2,090.5 µS/cm	2.59 mg/L		211.1 mV	10.80 ft	150.00 ml/min
7/19/2023 8:41 AM	04:43	5.05 pH	20.25 °C	2,089.5 µS/cm	2.58 mg/L	3.26 NTU	212.4 mV	11.10 ft	150.00 ml/min
7/19/2023 8:46 AM	09:43	5.12 pH	20.24 °C	2,100.0 µS/cm	2.40 mg/L	3.70 NTU	153.1 mV	11.10 ft	150.00 ml/min
7/19/2023 8:51 AM	14:43	5.17 pH	20.31 °C	2,113.1 µS/cm	2.01 mg/L	2.25 NTU	187.8 mV	11.10 ft	150.00 ml/min
7/19/2023 8:56 AM	19:43	5.18 pH	20.70 °C	2,167.7 µS/cm	1.01 mg/L	2.24 NTU	135.2 mV	11.10 ft	150.00 ml/min
7/19/2023 9:01 AM	24:43	5.16 pH	20.51 °C	2,191.8 µS/cm	0.66 mg/L	2.56 NTU	107.1 mV	11.10 ft	150.00 ml/min
7/19/2023 9:06 AM	29:43	5.14 pH	20.53 °C	2,215.4 µS/cm	0.67 mg/L	2.81 NTU	85.6 mV	11.10 ft	150.00 ml/min
7/19/2023 9:11 AM	34:43	5.13 pH	20.60 °C	2,245.1 µS/cm	0.38 mg/L	2.02 NTU	76.3 mV	11.10 ft	150.00 ml/min
7/19/2023 9:16 AM	39:43	5.14 pH	20.50 °C	2,265.2 µS/cm	0.51 mg/L	2.36 NTU	60.6 mV	11.10 ft	150.00 ml/min
7/19/2023 9:21 AM	44:43	5.16 pH	20.44 °C	2,275.3 µS/cm	0.60 mg/L	2.24 NTU	51.3 mV	11.10 ft	150.00 ml/min
7/19/2023 9:26 AM	49:43	5.18 pH	20.49 °C	2,297.3 µS/cm	0.51 mg/L	3.05 NTU	37.1 mV	11.10 ft	150.00 ml/min

**Samples**

Sample ID:	Description:
HAM-INW-01	Grab.



# Low-Flow Test Report:

Test Date / Time: 7/14/2023 2:27:39 PM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: INW-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 28 ft</b> <b>Total Depth: 38 ft</b> <b>Initial Depth to Water: 14.5 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 33 ft</b> <b>Estimated Total Volume Pumped: 5000 ml</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: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

73-93 deg F; cloudy

## 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	+/- 10	+/- 10	+/- 0.3	
7/14/2023 2:27 PM	00:00	6.32 pH	23.17 °C	1,741.8 µS/cm	0.18 mg/L	1.48 NTU	-61.8 mV	14.60 ft	200.00 ml/min
7/14/2023 2:32 PM	05:00	6.31 pH	22.78 °C	1,728.3 µS/cm	0.13 mg/L	1.82 NTU	-57.8 mV	14.60 ft	200.00 ml/min
7/14/2023 2:37 PM	10:00	6.30 pH	22.65 °C	1,720.3 µS/cm	0.11 mg/L	2.02 NTU	-61.8 mV	14.60 ft	200.00 ml/min
7/14/2023 2:42 PM	15:00	6.29 pH	22.45 °C	1,721.0 µS/cm	0.09 mg/L	1.98 NTU	-60.0 mV	14.60 ft	200.00 ml/min
7/14/2023 2:47 PM	20:00	6.28 pH	22.60 °C	1,717.1 µS/cm	0.08 mg/L	1.45 NTU	-52.7 mV	14.60 ft	200.00 ml/min
7/14/2023 2:52 PM	25:00	6.27 pH	22.77 °C	1,711.0 µS/cm	0.08 mg/L	1.44 NTU	-52.1 mV	14.60 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-INW-02	Grab.
HAM-AP2-FD-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 7/18/2023 12:54:24 PM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 11.2 ft</b> <b>Total Depth: 21.2 ft</b> <b>Initial Depth to Water: 10.2 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 16.2 ft</b> <b>Estimated Total Volume Pumped: 3750 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 0.2 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

63-93 deg F Sunny

## 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	+/- 10	+/- 10	+/- 0.4	
7/18/2023 12:54 PM	00:00	4.66 pH	24.25 °C	1,950.9 µS/cm	1.50 mg/L	3.97 NTU	129.9 mV	10.40 ft	150.00 ml/min
7/18/2023 12:59 PM	05:00	4.63 pH	22.68 °C	1,946.7 µS/cm	0.66 mg/L	3.32 NTU	129.0 mV	10.40 ft	150.00 ml/min
7/18/2023 1:04 PM	10:00	4.63 pH	22.41 °C	1,951.2 µS/cm	0.50 mg/L	3.59 NTU	160.9 mV	10.40 ft	150.00 ml/min
7/18/2023 1:09 PM	15:00	4.64 pH	22.20 °C	1,946.9 µS/cm	0.49 mg/L	3.49 NTU	129.7 mV	10.40 ft	150.00 ml/min
7/18/2023 1:14 PM	20:00	4.62 pH	21.83 °C	1,955.0 µS/cm	0.47 mg/L	3.29 NTU	166.8 mV	10.40 ft	150.00 ml/min
7/18/2023 1:19 PM	25:00	4.63 pH	22.09 °C	1,953.8 µS/cm	0.46 mg/L	3.21 NTU	131.8 mV	10.40 ft	150.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 7/18/2023 2:04:10 PM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 10.8 ft</b> <b>Total Depth: 20.8 ft</b> <b>Initial Depth to Water: 10.1 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 15.8 ft</b> <b>Estimated Total Volume Pumped: 13176.667 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.1 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

63-93 deg F Sunny

## 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	+/- 10	+/- 10	+/- 0.3	
7/18/2023 2:04 PM	00:00	5.04 pH	27.82 °C	1,893.0 µS/cm	3.95 mg/L	3.88 NTU	146.0 mV	10.20 ft	100.00 ml/min
7/18/2023 2:49 PM	44:54	5.03 pH	36.70 °C	1,803.5 µS/cm	5.29 mg/L	3.91 NTU	159.3 mV	10.20 ft	100.00 ml/min
7/18/2023 2:54 PM	50:00	5.00 pH	26.89 °C	2,018.8 µS/cm	2.36 mg/L	4.68 NTU	148.6 mV	10.20 ft	100.00 ml/min
7/18/2023 2:59 PM	55:00	4.96 pH	30.07 °C	2,077.6 µS/cm	2.20 mg/L	4.90 NTU	125.0 mV	10.20 ft	100.00 ml/min
7/18/2023 3:04 PM	01:00:00	4.94 pH	32.38 °C	2,092.0 µS/cm	3.96 mg/L	3.74 NTU	120.1 mV	10.20 ft	100.00 ml/min
7/18/2023 3:55 PM	01:51:46	5.06 pH	33.37 °C	1,792.6 µS/cm	2.79 mg/L	3.83 NTU	147.8 mV	10.20 ft	100.00 ml/min
7/18/2023 4:00 PM	01:56:46	5.02 pH	30.24 °C	2,100.3 µS/cm	2.07 mg/L	4.50 NTU	127.3 mV	10.20 ft	100.00 ml/min
7/18/2023 4:05 PM	02:01:46	5.05 pH	28.02 °C	2,164.0 µS/cm	1.03 mg/L	4.43 NTU	151.1 mV	10.20 ft	100.00 ml/min
7/18/2023 4:10 PM	02:06:46	4.98 pH	30.39 °C	2,158.2 µS/cm	0.93 mg/L	4.31 NTU	150.3 mV	10.20 ft	100.00 ml/min
7/18/2023 4:15 PM	02:11:46	4.97 pH	31.50 °C	2,156.2 µS/cm	0.99 mg/L	3.98 NTU	148.3 mV	10.20 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-02	Grab.



# Low-Flow Test Report:

Test Date / Time: 7/18/2023 12:03:35 PM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-03</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 11.1 ft</b> <b>Total Depth: 21.1 ft</b> <b>Initial Depth to Water: 10.2 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 16.1 ft</b> <b>Estimated Total Volume Pumped: 5000 ml</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: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

63-93 deg F Sunny

## 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	+/- 10	+/- 10	+/- 0.3	
7/18/2023 12:03 PM	00:00	4.58 pH	23.50 °C	1,955.5 µS/cm	0.62 mg/L	3.35 NTU	186.7 mV	10.30 ft	200.00 ml/min
7/18/2023 12:08 PM	05:00	4.59 pH	21.63 °C	2,005.4 µS/cm	0.23 mg/L	3.59 NTU	202.5 mV	10.30 ft	200.00 ml/min
7/18/2023 12:13 PM	10:00	4.63 pH	21.34 °C	2,019.4 µS/cm	0.17 mg/L	3.29 NTU	118.8 mV	10.30 ft	200.00 ml/min
7/18/2023 12:18 PM	15:00	4.64 pH	21.04 °C	2,020.2 µS/cm	0.13 mg/L	4.73 NTU	127.6 mV	10.30 ft	200.00 ml/min
7/18/2023 12:23 PM	20:00	4.63 pH	20.85 °C	2,041.4 µS/cm	0.12 mg/L	3.92 NTU	98.4 mV	10.30 ft	200.00 ml/min
7/18/2023 12:28 PM	25:00	4.64 pH	21.13 °C	2,031.4 µS/cm	0.11 mg/L	3.74 NTU	110.2 mV	10.30 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-03	Grab.

# Low-Flow Test Report:

Test Date / Time: 7/14/2023 1:33:06 PM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-04</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.9 ft</b> <b>Total Depth: 35.9 ft</b> <b>Initial Depth to Water: 14.1 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.9 ft</b> <b>Estimated Total Volume Pumped: 5000 ml</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: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

73-93 deg F; cloudy

## 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	+/- 10	+/- 10	+/- 0.3	
7/14/2023 1:33 PM	00:00	6.28 pH	29.98 °C	2.06 µS/cm	7.62 mg/L	7.81 NTU	3.3 mV	14.20 ft	200.00 ml/min
7/14/2023 1:38 PM	05:00	6.31 pH	22.77 °C	1,710.6 µS/cm	0.15 mg/L	6.27 NTU	-48.3 mV	14.20 ft	200.00 ml/min
7/14/2023 1:43 PM	10:00	6.31 pH	21.60 °C	1,734.3 µS/cm	0.12 mg/L	4.05 NTU	-54.8 mV	14.20 ft	200.00 ml/min
7/14/2023 1:48 PM	15:00	6.30 pH	21.50 °C	1,735.7 µS/cm	0.11 mg/L	3.95 NTU	-65.1 mV	14.20 ft	200.00 ml/min
7/14/2023 1:53 PM	20:00	6.30 pH	21.91 °C	1,724.9 µS/cm	0.10 mg/L	3.40 NTU	-67.8 mV	14.20 ft	200.00 ml/min
7/14/2023 1:58 PM	25:00	6.30 pH	21.83 °C	1,714.9 µS/cm	0.08 mg/L	2.84 NTU	-70.5 mV	14.20 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-04	Grab.

# Low-Flow Test Report:

Test Date / Time: 7/14/2023 11:30:00 AM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-05</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 26 ft</b> <b>Total Depth: 36 ft</b> <b>Initial Depth to Water: 14.4 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 31 ft</b> <b>Estimated Total Volume Pumped: 17073.334 ml</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: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

73-93 deg F; sunny

## 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	+/- 10	+/- 10	+/- 0.3	
7/14/2023 11:30 AM	00:00	6.16 pH	22.55 °C	1,727.9 µS/cm	0.21 mg/L	14.80 NTU	17.8 mV	14.50 ft	200.00 ml/min
7/14/2023 11:35 AM	05:00	6.16 pH	22.74 °C	1,721.7 µS/cm	0.15 mg/L	13.30 NTU	16.2 mV	14.50 ft	200.00 ml/min
7/14/2023 11:40 AM	10:00	6.16 pH	22.41 °C	1,717.0 µS/cm	0.12 mg/L	12.60 NTU	16.1 mV	14.50 ft	200.00 ml/min
7/14/2023 11:45 AM	15:22	6.15 pH	22.10 °C	1,723.2 µS/cm	0.11 mg/L	13.20 NTU	13.2 mV	14.50 ft	200.00 ml/min
7/14/2023 11:50 AM	20:22	6.16 pH	22.36 °C	1,711.5 µS/cm	0.09 mg/L	11.40 NTU	10.2 mV	14.50 ft	200.00 ml/min
7/14/2023 11:55 AM	25:22	6.16 pH	21.92 °C	1,714.2 µS/cm	0.08 mg/L	11.20 NTU	11.4 mV	14.50 ft	200.00 ml/min
7/14/2023 12:00 PM	30:22	6.15 pH	21.96 °C	1,739.4 µS/cm	0.09 mg/L	12.20 NTU	5.8 mV	14.50 ft	200.00 ml/min
7/14/2023 12:05 PM	35:22	6.14 pH	22.02 °C	1,733.2 µS/cm	0.09 mg/L	13.16 NTU	5.6 mV	14.50 ft	200.00 ml/min
7/14/2023 12:10 PM	40:22	6.14 pH	22.85 °C	1,739.9 µS/cm	0.10 mg/L	12.85 NTU	6.7 mV	14.50 ft	200.00 ml/min
7/14/2023 12:15 PM	45:22	6.14 pH	23.40 °C	1,723.0 µS/cm	0.11 mg/L	12.20 NTU	6.3 mV	14.50 ft	200.00 ml/min
7/14/2023 12:20 PM	50:22	6.14 pH	23.22 °C	1,723.9 µS/cm	0.11 mg/L	11.30 NTU	1.9 mV	14.50 ft	200.00 ml/min
7/14/2023 12:25 PM	55:22	6.14 pH	22.88 °C	1,722.2 µS/cm	0.10 mg/L	9.51 NTU	5.9 mV	14.50 ft	200.00 ml/min
7/14/2023 12:30 PM	01:00:22	6.14 pH	22.81 °C	1,721.5 µS/cm	0.10 mg/L	7.56 NTU	5.3 mV	14.50 ft	200.00 ml/min

7/14/2023 12:35 PM	01:05:22	6.13 pH	22.86 °C	1,743.7 µS/cm	0.10 mg/L	6.63 NTU	3.0 mV	14.50 ft	200.00 ml/min
7/14/2023 12:40 PM	01:10:22	6.13 pH	23.08 °C	1,729.3 µS/cm	0.09 mg/L	6.08 NTU	1.8 mV	14.50 ft	200.00 ml/min
7/14/2023 12:45 PM	01:15:22	6.13 pH	22.80 °C	1,723.1 µS/cm	0.09 mg/L	5.66 NTU	6.4 mV	14.50 ft	200.00 ml/min
7/14/2023 12:50 PM	01:20:22	6.13 pH	22.95 °C	1,729.5 µS/cm	0.09 mg/L	5.40 NTU	3.9 mV	14.50 ft	200.00 ml/min
7/14/2023 12:55 PM	01:25:22	6.13 pH	23.73 °C	1,726.7 µS/cm	0.09 mg/L	4.76 NTU	7.9 mV	14.50 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-05	Grab.



# Low-Flow Test Report:

Test Date / Time: 7/14/2023 10:35:28 AM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-06</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 26.3 ft</b> <b>Total Depth: 36.3 ft</b> <b>Initial Depth to Water: 14.2 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 31.3 ft</b> <b>Estimated Total Volume Pumped: 5343.333 ml</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: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

73-93 deg F; cloudy

## 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	+/- 10	+/- 10	+/- 0.3	
7/14/2023 10:35 AM	00:00	6.09 pH	23.98 °C	1,670.5 µS/cm	0.37 mg/L	19.70 NTU	-17.9 mV	14.30 ft	200.00 ml/min
7/14/2023 10:40 AM	05:00	6.09 pH	23.13 °C	1,686.7 µS/cm	0.21 mg/L	9.67 NTU	-25.2 mV	14.30 ft	200.00 ml/min
7/14/2023 10:45 AM	10:00	6.09 pH	23.36 °C	1,683.9 µS/cm	0.16 mg/L	7.09 NTU	-24.5 mV	14.30 ft	200.00 ml/min
7/14/2023 10:50 AM	15:00	6.10 pH	22.99 °C	1,685.0 µS/cm	0.13 mg/L	4.11 NTU	-21.2 mV	14.30 ft	200.00 ml/min
7/14/2023 10:55 AM	20:00	6.09 pH	22.69 °C	1,682.4 µS/cm	0.12 mg/L	3.64 NTU	-20.1 mV	14.30 ft	200.00 ml/min
7/14/2023 11:00 AM	25:00	6.09 pH	22.95 °C	1,683.0 µS/cm	0.10 mg/L	2.77 NTU	-19.2 mV	14.30 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-06	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 1:01:23 PM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: INW-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.4 ft Total</b> <b>Depth: 23.5 ft</b> <b>Initial Depth to Water: 9.98 ft</b>	<b>Pump Type: peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.5 ft</b> <b>Estimated Total Volume Pumped: 3 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.72 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

5 bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Sunny, 76 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 1:01 PM	00:00	5.77 pH	23.81 °C	2,157.3 µS/cm	0.94 mg/L	2.01 NTU	-61.4 mV	10.70 ft	100.00 ml/min
8/9/2023 1:06 PM	05:00	5.87 pH	23.18 °C	2,141.3 µS/cm	0.47 mg/L	1.88 NTU	-105.9 mV	10.70 ft	100.00 ml/min
8/9/2023 1:11 PM	10:00	5.81 pH	23.29 °C	2,117.7 µS/cm	0.32 mg/L	1.62 NTU	-52.0 mV	10.70 ft	100.00 ml/min
8/9/2023 1:16 PM	15:00	5.84 pH	23.35 °C	2,140.0 µS/cm	0.27 mg/L	0.82 NTU	-59.1 mV	10.70 ft	100.00 ml/min
8/9/2023 1:21 PM	20:00	5.84 pH	23.40 °C	2,150.6 µS/cm	0.24 mg/L	0.52 NTU	-57.5 mV	10.70 ft	100.00 ml/min
8/9/2023 1:26 PM	25:00	5.86 pH	23.67 °C	2,178.8 µS/cm	0.22 mg/L	0.47 NTU	-60.8 mV	10.70 ft	100.00 ml/min
8/9/2023 1:31 PM	30:00	5.80 pH	23.92 °C	2,169.4 µS/cm	0.21 mg/L	0.42 NTU	-51.9 mV	10.70 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-INW-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 12:35:14 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: INW-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.16 ft</b> <b>Total Depth: 25.16 ft</b> <b>Initial Depth to Water: 14.81 m</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.16 ft</b> <b>Estimated Total Volume Pumped: 7.6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.07 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
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## Test Notes:

5 bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Partly cloudy, 75 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
8/9/2023 12:35 PM	00:00	6.41 pH	21.34 °C	1,672.5 µS/cm	0.17 mg/L	0.42 NTU	-73.5 mV	14.84 ft	200.00 ml/min
8/9/2023 12:40 PM	05:00	6.42 pH	20.80 °C	1,667.8 µS/cm	0.13 mg/L	0.00 NTU	-8.6 mV	14.87 ft	200.00 ml/min
8/9/2023 12:45 PM	10:00	6.42 pH	20.79 °C	1,668.5 µS/cm	0.09 mg/L	0.00 NTU	3.0 mV	14.87 ft	200.00 ml/min
8/9/2023 12:50 PM	15:00	6.41 pH	21.06 °C	1,660.0 µS/cm	0.07 mg/L	0.00 NTU	2.9 mV	14.87 ft	200.00 ml/min
8/9/2023 12:55 PM	20:00	6.41 pH	21.05 °C	1,645.2 µS/cm	0.06 mg/L	0.00 NTU	18.6 mV	14.87 ft	200.00 ml/min
8/9/2023 1:00 PM	25:00	6.41 pH	21.06 °C	1,648.3 µS/cm	0.07 mg/L	0.00 NTU	23.1 mV	14.88 ft	200.00 ml/min
8/9/2023 1:05 PM	30:00	6.41 pH	21.02 °C	1,639.6 µS/cm	0.06 mg/L	0.00 NTU	26.3 mV	14.88 ft	200.00 ml/min

## Samples

Sample ID:	Description:
INW-02	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 11:28:35 AM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: PT-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.49 ft</b> <b>Total Depth: 23.49 ft</b> <b>Initial Depth to Water: 10.22 ft</b>	<b>Pump Type: peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.49 ft</b> <b>Estimated Total Volume Pumped: 4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.27 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Sunny, 75 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 11:28 AM	00:00	5.02 pH	22.23 °C	1,975.0 µS/cm	1.42 mg/L	10.82 NTU	122.1 mV	10.42 ft	100.00 ml/min
8/9/2023 11:33 AM	05:00	4.96 pH	21.11 °C	1,981.6 µS/cm	1.76 mg/L	10.29 NTU	74.7 mV	10.47 ft	100.00 ml/min
8/9/2023 11:38 AM	10:00	4.94 pH	20.74 °C	1,980.7 µS/cm	1.66 mg/L	8.50 NTU	89.4 mV	10.49 ft	100.00 ml/min
8/9/2023 11:43 AM	15:00	4.90 pH	20.84 °C	1,968.5 µS/cm	1.41 mg/L	9.03 NTU	88.6 mV	10.49 ft	100.00 ml/min
8/9/2023 11:48 AM	20:00	4.83 pH	21.06 °C	1,952.0 µS/cm	1.51 mg/L	3.92 NTU	87.6 mV	10.49 ft	100.00 ml/min
8/9/2023 11:53 AM	25:00	4.81 pH	21.15 °C	1,947.9 µS/cm	0.50 mg/L	4.52 NTU	88.6 mV	10.49 ft	100.00 ml/min
8/9/2023 11:58 AM	30:00	4.79 pH	21.00 °C	1,951.6 µS/cm	0.28 mg/L	2.73 NTU	90.8 mV	10.49 ft	100.00 ml/min
8/9/2023 12:03 PM	35:00	4.79 pH	20.93 °C	1,948.9 µS/cm	0.27 mg/L	3.25 NTU	65.7 mV	10.49 ft	100.00 ml/min
8/9/2023 12:08 PM	40:00	4.76 pH	21.01 °C	1,959.0 µS/cm	0.26 mg/L	0.89 NTU	91.2 mV	10.49 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 1:50:05 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: PT-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.4 ft</b> <b>Total Depth: 23.4 ft</b> <b>Initial Depth to Water: 10.15 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.4 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.51 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Sunny, 85 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 1:50 PM	00:00	5.23 pH	24.66 °C	2,089.6 µS/cm	0.47 mg/L	1.09 NTU	79.8 mV	10.55 ft	100.00 ml/min
8/9/2023 1:55 PM	05:00	5.26 pH	23.07 °C	2,097.7 µS/cm	0.32 mg/L	1.55 NTU	65.3 mV	10.57 ft	100.00 ml/min
8/9/2023 2:00 PM	10:00	5.19 pH	22.97 °C	2,034.6 µS/cm	0.31 mg/L	0.61 NTU	49.1 mV	10.58 ft	100.00 ml/min
8/9/2023 2:05 PM	15:00	5.16 pH	22.60 °C	2,011.2 µS/cm	0.27 mg/L	0.13 NTU	60.3 mV	10.60 ft	100.00 ml/min
8/9/2023 2:10 PM	20:00	5.13 pH	22.21 °C	2,009.5 µS/cm	0.26 mg/L	0.14 NTU	53.8 mV	10.62 ft	100.00 ml/min
8/9/2023 2:15 PM	25:00	5.09 pH	21.74 °C	2,010.1 µS/cm	0.27 mg/L	0.28 NTU	56.1 mV	10.64 ft	100.00 ml/min
8/9/2023 2:20 PM	30:00	5.06 pH	21.81 °C	1,992.8 µS/cm	0.22 mg/L	0.40 NTU	73.6 mV	10.66 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-02	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 10:02:17 AM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: PT-03</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 10.4 ft</b> <b>Total Depth: 23.62 ft</b> <b>Initial Depth to Water: 10.23 ft</b>	<b>Pump Type: peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 15.4 ft</b> <b>Estimated Total Volume Pumped: 4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.07 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Cloudy, 75 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 10:02 AM	00:00	4.65 pH	20.88 °C	1,880.2 µS/cm	0.75 mg/L	0.90 NTU	178.3 mV	10.30 ft	100.00 ml/min
8/9/2023 10:07 AM	05:00	4.67 pH	20.86 °C	1,919.5 µS/cm	0.46 mg/L	0.87 NTU	128.4 mV	10.30 ft	100.00 ml/min
8/9/2023 10:12 AM	10:00	4.69 pH	20.78 °C	1,933.4 µS/cm	1.58 mg/L	0.63 NTU	112.6 mV	10.30 ft	100.00 ml/min
8/9/2023 10:17 AM	15:00	4.73 pH	20.75 °C	1,945.4 µS/cm	1.57 mg/L	0.72 NTU	152.3 mV	10.30 ft	100.00 ml/min
8/9/2023 10:22 AM	20:00	4.77 pH	20.74 °C	1,945.7 µS/cm	1.51 mg/L	0.67 NTU	94.0 mV	10.30 ft	100.00 ml/min
8/9/2023 10:27 AM	25:00	4.79 pH	20.63 °C	1,950.0 µS/cm	0.48 mg/L	0.64 NTU	107.4 mV	10.30 ft	100.00 ml/min
8/9/2023 10:32 AM	30:00	4.78 pH	20.62 °C	1,954.6 µS/cm	0.26 mg/L	0.68 NTU	97.0 mV	10.30 ft	100.00 ml/min
8/9/2023 10:37 AM	35:00	4.81 pH	20.52 °C	1,951.1 µS/cm	0.24 mg/L	0.61 NTU	58.4 mV	10.30 ft	100.00 ml/min
8/9/2023 10:42 AM	40:00	4.80 pH	20.48 °C	1,953.0 µS/cm	0.23 mg/L	0.70 NTU	54.5 mV	10.30 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-03	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 1:52:17 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: PT-04</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 24.07 ft</b> <b>Total Depth: 34.07 ft</b> <b>Initial Depth to Water: 14.54 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 29.07 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: 0.05 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Partly cloudy, 75 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
8/9/2023 1:52 PM	00:00	6.46 pH	22.05 °C	1,661.2 µS/cm	0.16 mg/L	12.00 NTU	-29.5 mV	14.59 ft	200.00 ml/min
8/9/2023 1:57 PM	05:00	6.42 pH	21.47 °C	1,663.2 µS/cm	0.11 mg/L	11.20 NTU	9.5 mV	14.59 ft	200.00 ml/min
8/9/2023 2:02 PM	10:00	6.42 pH	21.68 °C	1,652.3 µS/cm	0.09 mg/L	7.82 NTU	12.0 mV	14.59 ft	200.00 ml/min
8/9/2023 2:07 PM	15:00	6.42 pH	21.42 °C	1,670.1 µS/cm	0.08 mg/L	3.83 NTU	14.6 mV	14.59 ft	200.00 ml/min
8/9/2023 2:12 PM	20:00	6.43 pH	21.02 °C	1,655.1 µS/cm	0.07 mg/L	3.56 NTU	19.0 mV	14.59 ft	200.00 ml/min
8/9/2023 2:17 PM	25:00	6.43 pH	20.65 °C	1,655.7 µS/cm	0.06 mg/L	0.04 NTU	16.5 mV	14.59 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-04	Grab.
HAM-AP2-FD-07	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 4:59:22 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: PT-05</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.39 ft</b> <b>Total Depth: 35.39 ft</b> <b>Initial Depth to Water: 14.84 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.39 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: 0.07 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Sunny, 79 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	+/- 10	+/- 10	+/- 0.3	
8/9/2023 4:59 PM	00:00	6.37 pH	21.76 °C	1,709.8 µS/cm	0.16 mg/L	36.10 NTU	43.6 mV	14.87 ft	200.00 ml/min
8/9/2023 5:04 PM	05:00	6.37 pH	22.05 °C	1,729.1 µS/cm	0.14 mg/L	24.60 NTU	91.9 mV	14.90 ft	200.00 ml/min
8/9/2023 5:09 PM	10:00	6.37 pH	21.96 °C	1,738.9 µS/cm	0.13 mg/L	18.70 NTU	112.2 mV	14.91 ft	200.00 ml/min
8/9/2023 5:14 PM	15:00	6.37 pH	21.86 °C	1,714.7 µS/cm	0.11 mg/L	17.50 NTU	96.9 mV	14.91 ft	200.00 ml/min
8/9/2023 5:19 PM	20:00	6.37 pH	21.87 °C	1,720.7 µS/cm	0.10 mg/L	13.60 NTU	90.0 mV	14.91 ft	200.00 ml/min
8/9/2023 5:24 PM	25:00	6.37 pH	21.87 °C	1,705.7 µS/cm	0.08 mg/L	15.50 NTU	92.7 mV	14.91 ft	200.00 ml/min
8/9/2023 5:29 PM	30:00	6.37 pH	21.68 °C	1,706.7 µS/cm	0.07 mg/L	9.15 NTU	83.3 mV	14.91 ft	200.00 ml/min
8/9/2023 5:34 PM	35:00	6.36 pH	21.96 °C	1,710.0 µS/cm	0.07 mg/L	4.81 NTU	82.3 mV	14.91 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-05	Grab.



# Low-Flow Test Report:

Test Date / Time: 8/9/2023 3:18:14 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: PT-06</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 26 ft</b> <b>Total Depth: 35.22 ft</b> <b>Initial Depth to Water: 14.68 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 31 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: 883530</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Sunny, 77 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	+/- 10	+/- 10	+/- 0.3	
8/9/2023 3:18 PM	00:00	6.41 pH	24.08 °C	1,596.0 µS/cm	0.16 mg/L	22.70 NTU	34.3 mV	14.76 ft	200.00 ml/min
8/9/2023 3:23 PM	05:00	6.30 pH	22.45 °C	1,679.5 µS/cm	0.10 mg/L	26.90 NTU	76.9 mV	14.73 ft	200.00 ml/min
8/9/2023 3:28 PM	10:00	6.31 pH	21.58 °C	1,638.8 µS/cm	0.06 mg/L	26.60 NTU	95.0 mV	14.75 ft	200.00 ml/min
8/9/2023 3:33 PM	15:00	6.29 pH	21.33 °C	1,636.8 µS/cm	0.04 mg/L	9.62 NTU	92.8 mV	14.75 ft	200.00 ml/min
8/9/2023 3:38 PM	20:00	6.30 pH	21.10 °C	1,620.0 µS/cm	0.03 mg/L	6.62 NTU	99.6 mV	14.78 ft	200.00 ml/min
8/9/2023 3:43 PM	25:00	6.31 pH	21.23 °C	1,612.1 µS/cm	0.02 mg/L	2.30 NTU	99.4 mV	14.78 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-06	Grab.

# Calibration Forms

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Neely

Date: 7/14/23

Time (start): 0730

Time (finish): 0745

smarTroll SN: 884187

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: 73-93°, Cloudy

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	27.25	4490	4508.8	4486.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)			4.00	4.03	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	27.01	7.00	7.36	6.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	-	-	7.00	-	-	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	26.31	10.00	9.73	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	-	-	10.00	-	-	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	25.73	228	222.6	228.1	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	98.43%	100.54%	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.21	0.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.55	0.70	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	11.53	10.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Welly

Date: 7/17/23

Time (start): 0855

Time (finish): 0915

SmartTroll SN: 884187

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: 66-93°, sunny

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	25.52	4490	4440.8	4492.1	+/- 5%	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)			4.00	4.05	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes <input type="radio"/> No	
pH (7)	2216893 11/23	25.45	7.00	7.32	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			-	-	7.00	-	-	+/- 0.1 SU
pH (10)	21320202 12/23	24.03	10.00	9.03	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check			-	-	10.00	-	-	+/- 0.1 SU
ORP (mV)	21390144 11/23	23.02	228	227.0	228.0	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	100.421	100.25	+/- 6% saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.14	0.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	0.70	0.95	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	11.51	10.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: Mana Neely

Date: 7/18/23

Time (start): 0755

Time (finish): 0810

smarTroll SN: 884187

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: 67-93° sunny

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	23.95	4490	4490.7	4490.8	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)			4.00	4.04	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No	
pH (7)	2216893 11/23	23.68	7.00	7.35	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			-	-	7.00	-	-	+/- 0.1 SU
pH (10)	2132002 12/23	23.28	10.00	9.48	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check			-	-	10.00	-	-	+/- 0.1 SU
ORP (mV)	21390144 11/23	22.72	228	226.3	228.1	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	100.00%	100.00%	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.22	0.06	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	0.40	0.94	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	11.38	9.90	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Kelly

Date: 7/19/23

Time (start): 0745

Time (finish): 0800

smarTroll SN: 684187

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: 68-93° cloudy

Facility and Unit: Plant Hammond Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	24.77	4490	4479.0	4485.6	+/- 5 %	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)			4.00	4.03	3.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	<input type="radio"/> Yes <input type="radio"/> No	
pH (7)	22145893 11/23	24.65	7.00	7.38	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			-	-	7.00	-	-	+/- 0.1 SU
pH (10)	21320702 12/23	24.27	10.00	9.64	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check			-	-	10.00	-	-	+/- 0.1 SU
ORP (mV)	21390144 11/23	23.89	228	222.5	228.1	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	98.7	100.017	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.44	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	0.69	0.94	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	11.08	9.99	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: C-CAIN Date: 8/9/23 Time (start): 0815 Time (finish): 0845  
 smarTroll SN: 883553 Turbidity Meter Type: LaMotte 2001 SN: 4121-7623  
 Weather Conditions: Fog 68 Facility and Unit: Plant Hammond Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	22.78	<del>4576.8</del> 4490 4576.8 4490/9/23	4573.5	4490	+/- 5 %	<input checked="" type="checkbox"/> Yes No	
pH (4)			4.0	4.07	4.0	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	// "	—	4.0	4.02	—	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	23.43	7.0	7.05	7.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (7) check	// "	—	7.0	7.0	—	+/- 0.1 SU	Yes No	
pH (10)	22110130 8/23	23.75	10.0	10.05	10	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (10) check	// "	—	10.0	10.03	—	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	23.81	228	227.1	228	+/- 20mV	<input checked="" type="checkbox"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	95.23	100	+/- 6 % saturation	<input checked="" type="checkbox"/> Yes No	
Turbidity 0 NTU			0	0.00	0.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 1 NTU			1	1.43	1.13	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 10 NTU			10	10.75	10	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: A. Szewast

Date: 8/9/2023

Time (start): 1145

Time (finish): 1205

smarTroll SN: 883530

Turbidity Meter Type: LaMotte 2020t

SN: 4739-2623

Weather Conditions: Partly cloudy, 73°F

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	24.50	4490	4250.9	4490.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	11/2023		4.00	4.45	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check						+/- 0.1 SU	Yes No	
pH (7)	2216893 11/2023	24.85	7.00	7.32	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check						+/- 0.1 SU	Yes No	
pH (10)	21320202 12/2023	25.05	10.00	10.54	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check						+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	25.06	228.0	225.9	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100.00 101.24 8-1-2023	101.24	100.0	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0.00	0.00	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	1.08	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.7	9.59	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	



EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kesler

Date: 8/14/23

Time (start): 0800

Time (finish): 0825

smarTroll SN: 850729

Turbidity Meter Type: LeMotte 2020me

SN: 1475-21011

Weather Conditions: Partly 75°

Facility and Unit: Plant Hammond

Project No: GLCS81

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	2275053 11/23	21.91	4490	4562	4490	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	11/23		4	4.04	4.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	↓	29	4	4.03	—	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
pH (7)	2216893 11/23	22.77	7.00 7.00	7.05	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	↓	29	7	6.98	—	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
pH (10)	21380202 11/23	22.62	10.00	10.01	10.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	↓	29	10	9.91	—	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
ORP (mV)	22760025 8/23		228	227.7	228	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	99.08	100	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	.53	0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1	.56	.93	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10	10.35	10.1	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

# APPENDIX C

## Injection Field Forms





# Injection Log

**Project Name:** Plant Hammond AP-2 Corrective Measures    **Date:** 9/6/2023    Page 1 of 1  
**Project Number:** GW65816    **Weather:** Partly cloudy, 90°F  
**Field Personnel:** AS    **Activity:** NaHCO<sub>3</sub> injections

**Location:** MW-33/MW-35

**Start: Date** 9/6/2023 **Time** 1321

**Finish: Date** 9/12/23  
**Time** 1408

Date	Well ID	Start Time (hr:mm)	Stop Time (hr:mm)	Volume Injected (gal)	Injection Pressure (psi)	Flowrate (GPM)	Notes
9-6-2023	1NW-01	1321	1345	8.5	1.0	0.25	Water only, batch 1 from Forklift
	1NW-01	1416	1439	8.0	2.1	0.75	Water only, batch 1, from dike
	1NW-01	1524	1730	120	3.0	0.67	Batch 2,
9-7-2023	1NW-01	0756	0825	15	1.3	0.50	Batch 2, reading
		0957	-	-	4.4	1.0	close valve some to reduce pressure
		1016	-	<del>19</del> <sup>7-7-23</sup>	2.2	1.0	Pressure stabilizes
		1030	1030	32	2.2	1.0	Daylighting, stop flow
		1055	-	-	-	-	Remove ~150 gallons
		1130	-	-	1.3	0.6	
		1137	1137	4	1.3	-	Daylighting, stop flow
		1310	-	-	0.0	0.5	
		1318	-	4	0.0	0.5	Open valve further
		1321	1322	2.5	1.2	1.0	Daylighting, stop flow
		1400	1404	-	0.0	0	Elevated from forklift, hose in well screen
		1410	1420	5	0.0	0.5	Daylighting. Hose positioned at top of casing
		1517	1722	30	0.0	~0.2	Trickle flow. Hose above water table
9-8-2023	1NW-01	0819	-	677 <sup>9-8-23</sup>	-	4 gph	Hose above water table. Trickle flow
		0953	1150	36	-	0.3	Open valve by a bit,
		1224	-	20	-	0.25	Refill tank with Batch 3
		1400	-	17	-	0.2	
9-9-2023	1NW-01	1523	1709	14	-	0.18	
	1NW-01	0907	-	1	-	0.13	Peri pump on. Refill fill w/ batch 4
		0913	-	200	-	0.2	Peri pump off, siphon
9-10-2023	1NW-01	0730	1530	74	-	0.15	
9-10-23		1555	1530 <sup>9-10-23</sup>	10	-	0.10	Refill tote with Batch 5
9-10-23		1755	-	130 <sup>9-10-23</sup>	-	0.15	
9-11-23	1NW-01	0740	-	20	-	0.10	
		1150	-	40	-	0.14	Add 105 gallons
		1630	-	125	-	0.14	
9-12-23	1NW-01	737	1408	55	-	0.14	

# Injection Log

Project Name: Plant Hammond AP-2 CA Date: 9/13-9/10 Page 1 of 3  
 Project Number: GW65816 Weather: Sunny 67-89°F  
 Field Personnel: AS Activity: Nat CO<sub>2</sub> Injections

Location: HGW-18 Area Start: Date 9/9/23 Time 1221 Finish: Date 9-13-2023  
 Time 1559

Date  
9-9-23  
 ↓  
9-10-23

Well ID	Start Time (hr:mm)	Stop Time (hr:mm)	Volume Injected (gal)	Injection Pressure (psi)	Flowrate (GPM)	Notes
1NW-02	1221	—	6	0.0	2	Open valve 1/2 way. Batch 1
	1224	—	22	0.0	2	Fully open valve
	1235	—	40	0.0	1.6	
	1300	—	76	0.0	0.5	
	1545	—	1	0.0	0.1	
	1555	—	—	0.0	0.03	
	—	812	30	—	—	Total injected: 175 gal
1NW-02	0814	821	7	—	1	Batch 1, Hose submerged in well
	0824		4.8	—	1.2	raise tank to restart flow.
	0828		2.4	—	1.2	
	0830		21	—	2.1	
	0840		34.2	—	3.8	
	0849		34.2	—	3.8	
	0858	0859	3.4	—	3.5	Tank empty, Total 100 gal
1NW-02	1045		100	—	5.0	Batch 2
	1105	1150	175	—	4.6	tank empty, Total 275 gal.
	1335		92	—	4.6	Batch 3
	1355		53	—	4.4	
	1407		99	—	4.3	
1NW-02	1430	1442	31	—	4.0	Tote empty, Total 275 gal
	1500		125	—	5.0	Batch 4
	1525		140	—	4.6	
1NW-02	1600	1603	10	—	4.0	Tote empty, Total 275 gal
	1645		90	—	6.0	Batch 5
	1700		90	—	5.0	
1NW-02	1718	1740	95	—	5.0	Tote empty, Total 275 gal

# Injection Log

Project Name: <u>Plant Hammond AP-2 CA</u>	Date: <u>9/11/23-9/12/23</u> Page <u>2</u> of <u>3</u>
Project Number: <u>GW6581G</u>	Weather: <u>Sunny, 67-89°F</u>
Field Personnel: <u>AS</u>	Activity: <u>NaHCO<sub>3</sub> Injections</u>

Location: <u>HGWL-8 Area</u>	Start: Date <u>9/9/23</u> Time <u>1221</u>	Finish: Date <u>9-13-23</u> Time <u>1559</u>
------------------------------	--------------------------------------------	-------------------------------------------------

Well ID	Start Time (hr:mm)	Stop Time (hr:mm)	Volume Injected (gal)	Injection Pressure (psi)	Flowrate (GPM)	Notes	
9-11-23 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	1NW-02	0900	—	—	6.0	Batch 6	
		0918	—	—	5.5		
		0933	—	—	5.2		
		0950	0953	275	—	5.0	
		1139	—	—	—	6.0	Batch 7
		1155	—	—	—	5.5	
		1212	—	—	—	5.0	
		1231	1234	275	—	4.7	
		1433	—	—	—	6.7	21" above ground (bottom of tank)
		1436	—	—	—	6.0	Batch 8
		1443	—	—	—	6.0	44" above ground
		1448	—	—	—	6.5	63" above ground
		1454	—	—	—	6.3	
		1459	—	—	—	6.7	86" above ground, WL 102"
		1503	—	—	—	6.4	
	1512	—	—	—	6.6		
	1513	1518	275	—	6.7	105" above ground	
9-12-23 ↓ ↓ ↓ ↓ ↓ ↓ ↓	1PW-02	0830	—	—	6.0	Ground surface. Batch 9a	
		0848	—	—	5.5		
		0901	922	275	—	5.2	
		0950	—	—	—	6.0	Batch 9B
		1004	—	—	—	5.5	
		1041	1044	275	—	4.7	
		1112	—	—	—	6.0	Batch 10
		1135	—	—	—	5.0	
	1204	1207	275	—	4.6		

# Injection Log

Project Name: Plant Hammond AP-2 CA Date: 9/12/23-9/13/23 Page 3 of 3  
 Project Number: GW65816 Weather: Sunny, 67-87°K  
 Field Personnel: AS Activity: NaHCO<sub>3</sub> Injections

Location: AGW-18 Area

Start: Date 9/12/23 Time 1221

Finish: Date 9-13-23  
Time 1559

Well ID	Start Time (hr:mm)	Stop Time (hr:mm)	Volume Injected (gal)	Injection Pressure (psi)	Flowrate (GPM)	Notes
9-12-23 ↓	WW-02	1300	-	-	5.7	Batch 11
		1334	1356	275	4.8	
		1450	-	-	5.8	Batch 12
		1504	1550	275	5.2	
		1620	-	-	0.5	Batch 13. Start hose at top of PVC
		1625	-	-	0.45	
		1630	-	-	0.6	Lower hose into well below WT, close valve some
		1635	-	-	0.54	
		1651	-	-	0.54	
		1708	-	-	0.33	
		1717	-	-	0.34	~250 gallons remaining
	9-13-23 ↓	WW-02	-	0735	275	0.29
		0920	-	-	1.0	Partially open valve. Batch 14
		0924	-	-	0.2	Partially close valve
		0928	-	-	0.16	
		0930	-	-	6.3	Fully open valve
		0942	-	-	5.6	
		1004	1021	275	<del>6.35.1</del>	
		1047	-	-	5.6	Batch 15
		1116	-	-	5.1	
		1129	1142	275	5.0	
		1200	-	-	5.7	Batch 16
		1245	1257	275	4.7	
		1337	-	-	5.8	Batch 17
		1358	-	-	5.0	
		1419	1435	275	4.6	
	1500	-	-	5.5	Batch 18	
	1518	-	-	5.0		
	1550	1559	275	4.5		



# Pilot Study Laboratory Analytical Results

July 2023



August 10, 2023

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

RE: Project: Hammond AP-2  
Pace Project No.: 92677696

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory between July 17, 2023 and July 19, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

A revised report is being submitted on 8/10/23 to revise the sample ID for 92677696-010. It was entered incorrectly at log in.

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

Sincerely,

Angela Baioni for  
Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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



### CERTIFICATIONS

Project: Hammond AP-2

Pace Project No.: 92677696

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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

Virginia Certification #: 460204

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### REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92677696001	HAM-HGWC-18	Water	07/14/23 09:57	07/17/23 12:30
92677696002	HAM-PT-06	Water	07/14/23 11:05	07/17/23 12:30
92677696003	HAM-PT-05	Water	07/14/23 13:00	07/17/23 12:30
92677696004	HAM-PT-04	Water	07/14/23 14:03	07/17/23 12:30
92677696005	HAM-INW-02	Water	07/14/23 14:57	07/17/23 12:30
92677696006	HAM-AP2-FD-01	Water	07/14/23 00:00	07/17/23 12:30
92677696007	HAM-AP2-FB-01	Water	07/17/23 08:45	07/17/23 12:30
92677696008	HAM-MW-59	Water	07/17/23 16:24	07/19/23 13:53
92677696009	HAM-MW-33	Water	07/18/23 09:47	07/19/23 13:53
92677696010	HAM-MW-35	Water	07/18/23 11:29	07/19/23 13:53
92677696011	HAM-PT-03	Water	07/18/23 12:33	07/19/23 13:53
92677696012	HAM-PT-01	Water	07/18/23 13:24	07/19/23 13:53
92677696013	HAM-PT-02	Water	07/18/23 16:20	07/19/23 13:53
92677696014	HAM-INW-01	Water	07/19/23 09:31	07/19/23 13:53
92677696015	HAM-MW-57	Water	07/19/23 10:40	07/19/23 13:53

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92677696001	HAM-HGWC-18	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696002	HAM-PT-06	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696003	HAM-PT-05	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696004	HAM-PT-04	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696005	HAM-INW-02	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696006	HAM-AP2-FD-01	EPA 6010D	MS	6
		EPA 6020B	CW1	13

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696007	HAM-AP2-FB-01	EPA 6010D	MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696008	HAM-MW-59	EPA 6010D	DRB	1
		EPA 6020B	CW1	1
92677696009	HAM-MW-33	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696010	HAM-MW-35	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696011	HAM-PT-03	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92677696012	HAM-PT-01	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13

### REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: Hammond AP-2  
 Pace Project No.: 92677696

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
<b>92677696013</b>	<b>HAM-PT-02</b>	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
<b>92677696014</b>	<b>HAM-INW-01</b>	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
<b>92677696015</b>	<b>HAM-MW-57</b>	EPA 6010D	MS	1
		EPA 6020B	CW1	1

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 AP-2

Pace Project No.: 92677696

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92677696001</b>	<b>HAM-HGWC-18</b>					
	Performed by	CUSTOME			07/17/23 17:10	
		R				
	pH	4.59	Std. Units		07/17/23 17:10	
EPA 6010D	Manganese	3.6	mg/L	0.040	07/20/23 16:44	
EPA 6010D	Potassium	10.7	mg/L	0.50	07/20/23 16:44	
EPA 6010D	Sodium	11.9	mg/L	1.0	07/20/23 16:44	
EPA 6010D	Magnesium	39.1	mg/L	0.050	07/20/23 16:44	
EPA 6010D	Iron	0.34	mg/L	0.040	07/25/23 16:58	
EPA 6010D	Calcium	394	mg/L	5.0	07/25/23 17:03	
EPA 6020B	Barium	0.023	mg/L	0.0050	07/19/23 19:12	
EPA 6020B	Beryllium	0.0027	mg/L	0.00050	07/19/23 19:12	
EPA 6020B	Boron	7.7	mg/L	0.20	07/21/23 17:49	
EPA 6020B	Cadmium	0.0014	mg/L	0.00050	07/19/23 19:12	
EPA 6020B	Cobalt	0.13	mg/L	0.0050	07/19/23 19:12	
EPA 6020B	Lead	0.0015	mg/L	0.0010	07/19/23 19:12	
EPA 6020B	Lithium	0.010J	mg/L	0.030	07/19/23 19:12	
EPA 6020B	Selenium	0.0063	mg/L	0.0050	07/19/23 19:12	
EPA 7470A	Mercury	0.00020J	mg/L	0.00020	08/01/23 11:29	
SM 2540C-2015	Total Dissolved Solids	1760	mg/L	25.0	07/18/23 15:26	
EPA 300.0 Rev 2.1 1993	Chloride	104	mg/L	12.0	07/19/23 13:52	
EPA 300.0 Rev 2.1 1993	Fluoride	0.28	mg/L	0.10	07/19/23 07:01	
EPA 300.0 Rev 2.1 1993	Sulfate	927	mg/L	12.0	07/19/23 13:52	
<b>92677696002</b>	<b>HAM-PT-06</b>					
	Performed by	CUSTOME			07/17/23 17:10	
		R				
	pH	6.09	Std. Units		07/17/23 17:10	
EPA 6010D	Calcium	319	mg/L	5.0	07/25/23 17:13	
EPA 6010D	Manganese	18.0	mg/L	0.040	07/20/23 16:49	
EPA 6010D	Potassium	6.6	mg/L	0.50	07/20/23 16:49	
EPA 6010D	Sodium	13.6	mg/L	1.0	07/20/23 16:49	
EPA 6010D	Magnesium	25.6	mg/L	0.050	07/20/23 16:49	
EPA 6010D	Iron	6.6	mg/L	0.040	07/25/23 17:08	
EPA 6020B	Barium	0.037	mg/L	0.0050	07/19/23 19:18	
EPA 6020B	Boron	7.8	mg/L	0.20	07/21/23 17:55	
EPA 6020B	Cobalt	0.063	mg/L	0.0050	07/19/23 19:18	
EPA 6020B	Lithium	0.0057J	mg/L	0.030	07/19/23 19:18	
EPA 6020B	Thallium	0.00049J	mg/L	0.0010	07/19/23 19:18	
SM 2540C-2015	Total Dissolved Solids	1330	mg/L	25.0	07/18/23 15:26	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	140	mg/L	5.0	07/20/23 17:51	
SM 2320B-2011	Alkalinity, Total as CaCO3	140	mg/L	5.0	07/20/23 17:51	
EPA 300.0 Rev 2.1 1993	Chloride	156	mg/L	10.0	07/19/23 14:07	
EPA 300.0 Rev 2.1 1993	Sulfate	542	mg/L	10.0	07/19/23 14:07	
<b>92677696003</b>	<b>HAM-PT-05</b>					
	Performed by	CUSTOME			07/17/23 17:11	
		R				
	pH	6.13	Std. Units		07/17/23 17:11	
EPA 6010D	Manganese	11.4	mg/L	0.040	07/20/23 16:54	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92677696

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92677696003</b>	<b>HAM-PT-05</b>					
EPA 6010D	Potassium	4.5	mg/L	0.50	07/20/23 16:54	
EPA 6010D	Sodium	10.6	mg/L	1.0	07/20/23 16:54	
EPA 6010D	Magnesium	26.7	mg/L	0.050	07/20/23 16:54	
EPA 6010D	Iron	1.2	mg/L	0.040	07/25/23 17:18	
EPA 6010D	Calcium	287	mg/L	1.0	07/25/23 17:18	
EPA 6020B	Barium	0.045	mg/L	0.0050	07/19/23 19:24	
EPA 6020B	Boron	7.5	mg/L	0.20	07/21/23 18:00	
EPA 6020B	Cobalt	0.042	mg/L	0.0050	07/19/23 19:24	
EPA 6020B	Lithium	0.0050J	mg/L	0.030	07/19/23 19:24	
SM 2540C-2015	Total Dissolved Solids	1520	mg/L	25.0	07/18/23 15:26	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	148	mg/L	5.0	07/20/23 18:03	
SM 2320B-2011	Alkalinity, Total as CaCO3	148	mg/L	5.0	07/20/23 18:03	
EPA 300.0 Rev 2.1 1993	Chloride	166	mg/L	10.0	07/19/23 14:21	
EPA 300.0 Rev 2.1 1993	Sulfate	564	mg/L	10.0	07/19/23 14:21	
<b>92677696004</b>	<b>HAM-PT-04</b>					
	Performed by	CUSTOME			07/17/23 17:11	
		R				
	pH	6.30	Std. Units		07/17/23 17:11	
EPA 6010D	Iron	16.0	mg/L	0.040	07/25/23 17:38	
EPA 6010D	Calcium	297	mg/L	1.0	07/25/23 17:38	
EPA 6010D	Manganese	17.8	mg/L	0.040	07/20/23 16:59	
EPA 6010D	Potassium	7.2	mg/L	0.50	07/20/23 16:59	
EPA 6010D	Sodium	12.2	mg/L	1.0	07/20/23 16:59	
EPA 6010D	Magnesium	24.1	mg/L	0.050	07/20/23 16:59	
EPA 6020B	Arsenic	0.0077J	mg/L	0.010	07/19/23 19:30	
EPA 6020B	Barium	0.048	mg/L	0.0050	07/19/23 19:30	
EPA 6020B	Boron	7.8	mg/L	0.20	07/21/23 18:06	
EPA 6020B	Cobalt	0.058	mg/L	0.0050	07/19/23 19:30	
EPA 6020B	Lithium	0.0050J	mg/L	0.030	07/19/23 19:30	
SM 2540C-2015	Total Dissolved Solids	1310	mg/L	25.0	07/18/23 15:26	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	155	mg/L	5.0	07/20/23 18:14	
SM 2320B-2011	Alkalinity, Total as CaCO3	155	mg/L	5.0	07/20/23 18:14	
EPA 300.0 Rev 2.1 1993	Chloride	153	mg/L	10.0	07/19/23 14:35	
EPA 300.0 Rev 2.1 1993	Sulfate	535	mg/L	10.0	07/19/23 14:35	
<b>92677696005</b>	<b>HAM-INW-02</b>					
	Performed by	CUSTOME			07/17/23 17:11	
		R				
	pH	6.27	Std. Units		07/17/23 17:11	
EPA 6010D	Calcium	306	mg/L	5.0	07/25/23 17:53	
EPA 6010D	Iron	10.7	mg/L	0.040	07/25/23 17:48	
EPA 6010D	Manganese	16.0	mg/L	0.040	07/20/23 17:14	
EPA 6010D	Potassium	6.0	mg/L	0.50	07/20/23 17:14	
EPA 6010D	Sodium	11.1	mg/L	1.0	07/20/23 17:14	
EPA 6010D	Magnesium	25.8	mg/L	0.050	07/20/23 17:14	
EPA 6020B	Arsenic	0.0057J	mg/L	0.010	07/19/23 19:36	
EPA 6020B	Barium	0.070	mg/L	0.0050	07/19/23 19:36	
EPA 6020B	Boron	7.1	mg/L	0.20	07/21/23 18:12	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92677696

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92677696005</b>	<b>HAM-INW-02</b>					
EPA 6020B	Cobalt	0.060	mg/L	0.0050	07/19/23 19:36	
EPA 6020B	Lithium	0.0057J	mg/L	0.030	07/19/23 19:36	
EPA 6020B	Thallium	0.00037J	mg/L	0.0010	07/19/23 19:36	
SM 2540C-2015	Total Dissolved Solids	1460	mg/L	25.0	07/18/23 15:29	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	159	mg/L	5.0	07/20/23 18:27	
SM 2320B-2011	Alkalinity, Total as CaCO3	159	mg/L	5.0	07/20/23 18:27	
EPA 300.0 Rev 2.1 1993	Chloride	153	mg/L	10.0	07/19/23 14:49	
EPA 300.0 Rev 2.1 1993	Sulfate	532	mg/L	10.0	07/19/23 14:49	
<b>92677696006</b>	<b>HAM-AP2-FD-01</b>					
EPA 6010D	Iron	10.1	mg/L	0.040	07/25/23 17:58	
EPA 6010D	Manganese	15.5	mg/L	0.040	07/20/23 17:19	
EPA 6010D	Potassium	5.8	mg/L	0.50	07/20/23 17:19	
EPA 6010D	Sodium	10.8	mg/L	1.0	07/20/23 17:19	
EPA 6010D	Calcium	299	mg/L	1.0	07/20/23 17:19	
EPA 6010D	Magnesium	25.0	mg/L	0.050	07/20/23 17:19	
EPA 6020B	Arsenic	0.0054J	mg/L	0.010	07/19/23 19:48	
EPA 6020B	Barium	0.069	mg/L	0.0050	07/19/23 19:48	
EPA 6020B	Boron	7.1	mg/L	0.20	07/21/23 18:18	
EPA 6020B	Cobalt	0.059	mg/L	0.0050	07/19/23 19:48	
EPA 6020B	Lithium	0.0056J	mg/L	0.030	07/19/23 19:48	
EPA 6020B	Thallium	0.00037J	mg/L	0.0010	07/19/23 19:48	
SM 2540C-2015	Total Dissolved Solids	1520	mg/L	25.0	07/18/23 15:29	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	159	mg/L	5.0	07/20/23 18:38	
SM 2320B-2011	Alkalinity, Total as CaCO3	159	mg/L	5.0	07/20/23 18:38	
EPA 300.0 Rev 2.1 1993	Chloride	152	mg/L	10.0	07/19/23 15:03	
EPA 300.0 Rev 2.1 1993	Sulfate	531	mg/L	10.0	07/19/23 15:03	
<b>92677696008</b>	<b>HAM-MW-59</b>					
	Performed by	CUSTOMER			07/19/23 15:54	
	pH	4.59	Std. Units		07/19/23 15:54	
EPA 6010D	Boron	9.7	mg/L	0.040	08/01/23 14:52	M1
EPA 6020B	Cobalt	0.16	mg/L	0.0050	07/27/23 15:24	
<b>92677696009</b>	<b>HAM-MW-33</b>					
	Performed by	CUSTOMER			07/19/23 15:54	
	pH	4.48	Std. Units		07/19/23 15:54	
EPA 6010D	Iron	0.22	mg/L	0.040	08/01/23 15:12	
EPA 6010D	Manganese	4.1	mg/L	0.040	08/01/23 15:12	
EPA 6010D	Potassium	9.6	mg/L	0.50	08/01/23 15:12	
EPA 6010D	Sodium	9.3	mg/L	1.0	08/01/23 15:12	
EPA 6010D	Magnesium	38.9	mg/L	0.050	08/01/23 15:12	
EPA 6010D	Calcium	397	mg/L	5.0	08/02/23 12:39	
EPA 6020B	Arsenic	0.0050J	mg/L	0.010	07/27/23 15:30	
EPA 6020B	Barium	0.022	mg/L	0.0050	07/27/23 15:30	
EPA 6020B	Beryllium	0.00096	mg/L	0.00050	07/27/23 15:30	
EPA 6020B	Boron	6.9	mg/L	0.040	07/27/23 15:30	

### REPORT OF LABORATORY ANALYSIS

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**SUMMARY OF DETECTION**

Project: Hammond AP-2

Pace Project No.: 92677696

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92677696009</b>	<b>HAM-MW-33</b>					
EPA 6020B	Cadmium	0.00017J	mg/L	0.00050	07/27/23 15:30	
EPA 6020B	Cobalt	0.060	mg/L	0.0050	07/27/23 15:30	
EPA 6020B	Lead	0.0012	mg/L	0.0010	07/27/23 15:30	
EPA 6020B	Selenium	0.0051	mg/L	0.0050	07/27/23 15:30	
EPA 6020B	Thallium	0.00022J	mg/L	0.0010	07/27/23 15:30	
SM 2540C-2015	Total Dissolved Solids	1850	mg/L	25.0	07/21/23 12:01	
EPA 300.0 Rev 2.1 1993	Chloride	102	mg/L	21.0	07/21/23 13:39	
EPA 300.0 Rev 2.1 1993	Fluoride	0.22	mg/L	0.10	07/20/23 18:59	
EPA 300.0 Rev 2.1 1993	Sulfate	1090	mg/L	21.0	07/21/23 13:39	
<b>92677696010</b>	<b>HAM-MW-35</b>					
	Performed by	CUSTOME			07/19/23 15:55	
		R				
	pH	4.93	Std. Units		07/19/23 15:55	
EPA 6010D	Iron	0.76	mg/L	0.040	08/01/23 15:17	
EPA 6010D	Manganese	9.7	mg/L	0.040	08/01/23 15:17	
EPA 6010D	Potassium	7.1	mg/L	0.50	08/01/23 15:17	
EPA 6010D	Sodium	12.1	mg/L	1.0	08/01/23 15:17	
EPA 6010D	Magnesium	74.1	mg/L	0.050	08/01/23 15:17	
EPA 6010D	Calcium	492	mg/L	5.0	08/02/23 12:44	
EPA 6020B	Arsenic	0.0056J	mg/L	0.010	07/27/23 15:36	
EPA 6020B	Barium	0.022	mg/L	0.0050	07/27/23 15:36	
EPA 6020B	Beryllium	0.00053	mg/L	0.00050	07/27/23 15:36	
EPA 6020B	Boron	9.5	mg/L	0.040	07/27/23 15:36	
EPA 6020B	Cadmium	0.0012	mg/L	0.00050	07/27/23 15:36	
EPA 6020B	Chromium	0.0014J	mg/L	0.0050	07/27/23 15:36	
EPA 6020B	Cobalt	0.087	mg/L	0.0050	07/27/23 15:36	
EPA 6020B	Lead	0.00090J	mg/L	0.0010	07/27/23 15:36	
EPA 6020B	Lithium	0.0035J	mg/L	0.030	07/27/23 15:36	
EPA 6020B	Selenium	0.0052	mg/L	0.0050	07/27/23 15:36	
SM 2540C-2015	Total Dissolved Solids	2340	mg/L	25.0	07/21/23 12:02	1g
EPA 300.0 Rev 2.1 1993	Chloride	191	mg/L	24.0	07/21/23 07:01	
EPA 300.0 Rev 2.1 1993	Fluoride	0.077J	mg/L	0.10	07/20/23 19:15	
EPA 300.0 Rev 2.1 1993	Sulfate	1200	mg/L	24.0	07/21/23 07:01	
<b>92677696011</b>	<b>HAM-PT-03</b>					
	Performed by	CUSTOME			07/19/23 15:55	
		R				
	pH	4.64	Std. Units		07/19/23 15:55	
EPA 6010D	Iron	0.26	mg/L	0.040	08/01/23 15:22	
EPA 6010D	Manganese	8.2	mg/L	0.040	08/01/23 15:22	
EPA 6010D	Potassium	5.4	mg/L	0.50	08/01/23 15:22	
EPA 6010D	Sodium	11.7	mg/L	1.0	08/01/23 15:22	
EPA 6010D	Magnesium	36.9	mg/L	0.050	08/01/23 15:22	
EPA 6010D	Calcium	382	mg/L	5.0	08/03/23 17:02	
EPA 6020B	Antimony	0.0029J	mg/L	0.0030	07/27/23 16:00	
EPA 6020B	Arsenic	0.0076J	mg/L	0.010	07/27/23 16:00	
EPA 6020B	Barium	0.025	mg/L	0.0050	07/27/23 16:00	
EPA 6020B	Beryllium	0.0026	mg/L	0.00050	07/27/23 16:00	

**REPORT OF LABORATORY ANALYSIS**

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92677696

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92677696011</b>	<b>HAM-PT-03</b>					
EPA 6020B	Boron	8.2	mg/L	0.040	07/27/23 16:00	
EPA 6020B	Cadmium	0.00062	mg/L	0.00050	07/27/23 16:00	
EPA 6020B	Chromium	0.0011J	mg/L	0.0050	07/27/23 16:00	
EPA 6020B	Cobalt	0.12	mg/L	0.0050	07/27/23 16:00	
EPA 6020B	Lead	0.0014	mg/L	0.0010	07/27/23 16:00	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	07/27/23 16:00	
EPA 6020B	Selenium	0.011	mg/L	0.0050	07/27/23 16:00	
EPA 6020B	Thallium	0.00021J	mg/L	0.0010	07/27/23 16:00	
SM 2540C-2015	Total Dissolved Solids	2690	mg/L	25.0	07/21/23 12:02	1g
EPA 300.0 Rev 2.1 1993	Chloride	138	mg/L	19.0	07/21/23 07:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.84	mg/L	0.10	07/21/23 01:51	
EPA 300.0 Rev 2.1 1993	Sulfate	948	mg/L	19.0	07/21/23 07:47	M1
<b>92677696012</b>	<b>HAM-PT-01</b>					
	Performed by	CUSTOMER			07/19/23 15:56	
	pH	4.63	Std. Units		07/19/23 15:56	
EPA 6010D	Iron	0.078	mg/L	0.040	08/01/23 15:27	
EPA 6010D	Manganese	9.6	mg/L	0.040	08/01/23 15:27	
EPA 6010D	Potassium	5.2	mg/L	0.50	08/01/23 15:27	
EPA 6010D	Sodium	8.8	mg/L	1.0	08/01/23 15:27	
EPA 6010D	Magnesium	38.2	mg/L	0.050	08/01/23 15:27	
EPA 6010D	Calcium	370	mg/L	5.0	08/02/23 12:54	
EPA 6020B	Arsenic	0.0075J	mg/L	0.010	07/27/23 16:06	
EPA 6020B	Barium	0.046	mg/L	0.0050	07/27/23 16:06	
EPA 6020B	Beryllium	0.0024	mg/L	0.00050	07/27/23 16:06	
EPA 6020B	Boron	8.1	mg/L	0.040	07/27/23 16:06	
EPA 6020B	Cadmium	0.00099	mg/L	0.00050	07/27/23 16:06	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	07/27/23 16:06	
EPA 6020B	Lead	0.00072J	mg/L	0.0010	07/27/23 16:06	
EPA 6020B	Lithium	0.0052J	mg/L	0.030	07/27/23 16:06	
EPA 6020B	Selenium	0.011	mg/L	0.0050	07/27/23 16:06	
EPA 7470A	Mercury	0.00023	mg/L	0.00020	08/01/23 12:09	
SM 2540C-2015	Total Dissolved Solids	1700	mg/L	25.0	07/21/23 12:02	
EPA 300.0 Rev 2.1 1993	Chloride	147	mg/L	11.0	07/21/23 08:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.70	mg/L	0.10	07/21/23 02:38	
EPA 300.0 Rev 2.1 1993	Sulfate	892	mg/L	11.0	07/21/23 08:32	
<b>92677696013</b>	<b>HAM-PT-02</b>					
	Performed by	CUSTOMER			07/19/23 15:56	
	pH	4.97	Std. Units		07/19/23 15:56	
EPA 6010D	Iron	0.44	mg/L	0.040	08/01/23 15:47	
EPA 6010D	Manganese	12.6	mg/L	0.040	08/01/23 15:47	
EPA 6010D	Potassium	5.2	mg/L	0.50	08/01/23 15:47	
EPA 6010D	Sodium	9.3	mg/L	1.0	08/01/23 15:47	
EPA 6010D	Magnesium	44.0	mg/L	0.050	08/01/23 15:47	
EPA 6010D	Calcium	379	mg/L	5.0	08/02/23 12:59	
EPA 6020B	Antimony	0.0013J	mg/L	0.0030	07/27/23 16:58	

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**SUMMARY OF DETECTION**

Project: Hammond AP-2

Pace Project No.: 92677696

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92677696013</b>	<b>HAM-PT-02</b>					
EPA 6020B	Arsenic	0.0063J	mg/L	0.010	07/27/23 16:58	
EPA 6020B	Barium	0.054	mg/L	0.0050	07/27/23 16:58	
EPA 6020B	Beryllium	0.0016	mg/L	0.00050	07/27/23 16:58	
EPA 6020B	Boron	8.3	mg/L	0.040	07/27/23 16:58	
EPA 6020B	Cadmium	0.00091	mg/L	0.00050	07/27/23 16:58	
EPA 6020B	Cobalt	0.13	mg/L	0.0050	07/27/23 16:58	
EPA 6020B	Lead	0.00043J	mg/L	0.0010	07/27/23 16:58	
EPA 6020B	Lithium	0.0069J	mg/L	0.030	07/27/23 16:58	
EPA 6020B	Selenium	0.0075	mg/L	0.0050	07/27/23 16:58	
SM 2540C-2015	Total Dissolved Solids	1830	mg/L	25.0	07/21/23 12:03	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	5.5	mg/L	5.0	07/24/23 13:11	
SM 2320B-2011	Alkalinity, Total as CaCO3	5.5	mg/L	5.0	07/24/23 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	174	mg/L	11.0	07/21/23 08:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.47	mg/L	0.10	07/21/23 02:54	
EPA 300.0 Rev 2.1 1993	Sulfate	938	mg/L	11.0	07/21/23 08:47	
<b>92677696014</b>	<b>HAM-INW-01</b>					
	Performed by	CUSTOME			07/19/23 15:56	
		R				
	pH	5.18	Std. Units		07/19/23 15:56	
EPA 6010D	Iron	2.9	mg/L	0.040	08/01/23 15:53	
EPA 6010D	Manganese	14.4	mg/L	0.040	08/01/23 15:53	
EPA 6010D	Potassium	5.4	mg/L	0.50	08/01/23 15:53	
EPA 6010D	Sodium	10	mg/L	1.0	08/01/23 15:53	
EPA 6010D	Magnesium	52.3	mg/L	0.050	08/01/23 15:53	
EPA 6010D	Calcium	397	mg/L	5.0	08/02/23 13:04	
EPA 6020B	Arsenic	0.0061J	mg/L	0.010	07/27/23 17:04	
EPA 6020B	Barium	0.069	mg/L	0.0050	07/27/23 17:04	
EPA 6020B	Beryllium	0.0010	mg/L	0.00050	07/27/23 17:04	
EPA 6020B	Boron	8.7	mg/L	0.040	07/27/23 17:04	
EPA 6020B	Cadmium	0.00059	mg/L	0.00050	07/27/23 17:04	
EPA 6020B	Cobalt	0.13	mg/L	0.0050	07/27/23 17:04	
EPA 6020B	Lead	0.00037J	mg/L	0.0010	07/27/23 17:04	
EPA 6020B	Lithium	0.0064J	mg/L	0.030	07/27/23 17:04	
EPA 6020B	Selenium	0.0075	mg/L	0.0050	07/27/23 17:04	
SM 2540C-2015	Total Dissolved Solids	2000	mg/L	25.0	07/21/23 12:03	1g
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	14.9	mg/L	5.0	07/24/23 13:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	14.9	mg/L	5.0	07/24/23 13:16	
EPA 300.0 Rev 2.1 1993	Chloride	210	mg/L	19.0	07/21/23 09:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.34	mg/L	0.10	07/21/23 03:56	
EPA 300.0 Rev 2.1 1993	Sulfate	975	mg/L	19.0	07/21/23 09:18	
<b>92677696015</b>	<b>HAM-MW-57</b>					
	Performed by	CUSTOME			07/19/23 15:57	
		R				
	pH	6.45	Std. Units		07/19/23 15:57	
EPA 6010D	Boron	8.5	mg/L	0.040	08/01/23 15:58	
EPA 6020B	Cobalt	0.049	mg/L	0.0050	07/27/23 17:10	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-HGWC-18**      **Lab ID: 92677696001**      Collected: 07/14/23 09:57      Received: 07/17/23 12:30      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		07/17/23 17:10		
pH	<b>4.59</b>	Std. Units			1		07/17/23 17:10		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Manganese	<b>3.6</b>	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:44	7439-96-5	
Potassium	<b>10.7</b>	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:44	7440-09-7	
Sodium	<b>11.9</b>	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:44	7440-23-5	
Magnesium	<b>39.1</b>	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:44	7439-95-4	
Iron	<b>0.34</b>	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 16:58	7439-89-6	
Calcium	<b>394</b>	mg/L	5.0	0.61	5	07/20/23 09:50	07/25/23 17:03	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	0.0012	1	07/18/23 13:46	07/19/23 19:12	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:12	7440-38-2	
Barium	<b>0.023</b>	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:12	7440-39-3	
Beryllium	<b>0.0027</b>	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:12	7440-41-7	
Boron	<b>7.7</b>	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:49	7440-42-8	
Cadmium	<b>0.0014</b>	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:12	7440-47-3	
Cobalt	<b>0.13</b>	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:12	7440-48-4	
Lead	<b>0.0015</b>	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:12	7439-92-1	
Lithium	<b>0.010J</b>	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:12	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:12	7439-98-7	
Selenium	<b>0.0063</b>	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:12	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	<b>0.00020J</b>	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 11:29	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1760</b>	mg/L	25.0	25.0	1		07/18/23 15:26		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:47		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:47		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/20/23 17:47		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-HGWC-18**      **Lab ID: 92677696001**      Collected: 07/14/23 09:57      Received: 07/17/23 12:30      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:43	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>104</b>	mg/L	12.0	7.2	12		07/19/23 13:52	16887-00-6	
Fluoride	<b>0.28</b>	mg/L	0.10	0.050	1		07/19/23 07:01	16984-48-8	
Sulfate	<b>927</b>	mg/L	12.0	6.0	12		07/19/23 13:52	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-PT-06**      **Lab ID: 92677696002**      Collected: 07/14/23 11:05      Received: 07/17/23 12:30      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		07/17/23 17:10		
pH	<b>6.09</b>	Std. Units			1		07/17/23 17:10		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>319</b>	mg/L	5.0	0.61	5	07/20/23 09:50	07/25/23 17:13	7440-70-2	
Manganese	<b>18.0</b>	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:49	7439-96-5	
Potassium	<b>6.6</b>	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:49	7440-09-7	
Sodium	<b>13.6</b>	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:49	7440-23-5	
Magnesium	<b>25.6</b>	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:49	7439-95-4	
Iron	<b>6.6</b>	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 17:08	7439-89-6	
<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	0.0012	1	07/18/23 13:46	07/19/23 19:18	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:18	7440-38-2	
Barium	<b>0.037</b>	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:18	7440-41-7	
Boron	<b>7.8</b>	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 17:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:18	7440-47-3	
Cobalt	<b>0.063</b>	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:18	7439-92-1	
Lithium	<b>0.0057J</b>	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:18	7782-49-2	
Thallium	<b>0.00049J</b>	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:18	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	08/01/23 07:00	08/01/23 11:40	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1330</b>	mg/L	25.0	25.0	1		07/18/23 15:26		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>140</b>	mg/L	5.0	5.0	1		07/20/23 17:51		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 17:51		
Alkalinity, Total as CaCO3	<b>140</b>	mg/L	5.0	5.0	1		07/20/23 17:51		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-06		Lab ID: 92677696002		Collected: 07/14/23 11:05		Received: 07/17/23 12:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:44	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>156</b>	mg/L	10.0	6.0	10		07/19/23 14:07	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 07:16	16984-48-8	
Sulfate	<b>542</b>	mg/L	10.0	5.0	10		07/19/23 14:07	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-PT-05**      **Lab ID: 92677696003**      Collected: 07/14/23 13:00      Received: 07/17/23 12:30      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		07/17/23 17:11		
pH	<b>6.13</b>	Std. Units			1		07/17/23 17:11		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Manganese	<b>11.4</b>	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:54	7439-96-5	
Potassium	<b>4.5</b>	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:54	7440-09-7	
Sodium	<b>10.6</b>	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:54	7440-23-5	
Magnesium	<b>26.7</b>	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:54	7439-95-4	
Iron	<b>1.2</b>	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 17:18	7439-89-6	
Calcium	<b>287</b>	mg/L	1.0	0.12	1	07/20/23 09:50	07/25/23 17:18	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	0.0012	1	07/18/23 13:46	07/19/23 19:24	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:24	7440-38-2	
Barium	<b>0.045</b>	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:24	7440-41-7	
Boron	<b>7.5</b>	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 18:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:24	7440-47-3	
Cobalt	<b>0.042</b>	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:24	7439-92-1	
Lithium	<b>0.0050J</b>	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:24	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:24	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:24	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	08/01/23 07:00	08/01/23 11:43	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1520</b>	mg/L	25.0	25.0	1		07/18/23 15:26		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>148</b>	mg/L	5.0	5.0	1		07/20/23 18:03		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:03		
Alkalinity, Total as CaCO3	<b>148</b>	mg/L	5.0	5.0	1		07/20/23 18:03		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-05		Lab ID: 92677696003		Collected: 07/14/23 13:00		Received: 07/17/23 12:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:44	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>166</b>	mg/L	10.0	6.0	10		07/19/23 14:21	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 07:30	16984-48-8	
Sulfate	<b>564</b>	mg/L	10.0	5.0	10		07/19/23 14:21	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: HAM-PT-04</b>									
<b>Lab ID: 92677696004</b>									
Collected: 07/14/23 14:03 Received: 07/17/23 12:30 Matrix: Water									
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		07/17/23 17:11		
pH	<b>6.30</b>	Std. Units			1		07/17/23 17:11		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>16.0</b>	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 17:38	7439-89-6	
Calcium	<b>297</b>	mg/L	1.0	0.12	1	07/20/23 09:50	07/25/23 17:38	7440-70-2	
Manganese	<b>17.8</b>	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 16:59	7439-96-5	
Potassium	<b>7.2</b>	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 16:59	7440-09-7	
Sodium	<b>12.2</b>	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 16:59	7440-23-5	
Magnesium	<b>24.1</b>	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 16:59	7439-95-4	
<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	0.0012	1	07/18/23 13:46	07/19/23 19:30	7440-36-0	
Arsenic	<b>0.0077J</b>	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:30	7440-38-2	
Barium	<b>0.048</b>	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:30	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:30	7440-41-7	
Boron	<b>7.8</b>	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 18:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:30	7440-47-3	
Cobalt	<b>0.058</b>	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:30	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:30	7439-92-1	
Lithium	<b>0.0050J</b>	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:30	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	08/01/23 07:00	08/01/23 11:45	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1310</b>	mg/L	25.0	25.0	1		07/18/23 15:26		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>155</b>	mg/L	5.0	5.0	1		07/20/23 18:14		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:14		
Alkalinity, Total as CaCO3	<b>155</b>	mg/L	5.0	5.0	1		07/20/23 18:14		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-PT-04**      **Lab ID: 92677696004**      Collected: 07/14/23 14:03      Received: 07/17/23 12:30      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:44	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>153</b>	mg/L	10.0	6.0	10		07/19/23 14:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 07:44	16984-48-8	
Sulfate	<b>535</b>	mg/L	10.0	5.0	10		07/19/23 14:35	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-INW-02 Lab ID: 92677696005 Collected: 07/14/23 14:57 Received: 07/17/23 12:30 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		07/17/23 17:11		
pH	<b>6.27</b>	Std. Units			1		07/17/23 17:11		

#### 6010D ATL ICP

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

Calcium	<b>306</b>	mg/L	5.0	0.61	5	07/20/23 09:50	07/25/23 17:53	7440-70-2	
Iron	<b>10.7</b>	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 17:48	7439-89-6	
Manganese	<b>16.0</b>	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 17:14	7439-96-5	
Potassium	<b>6.0</b>	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 17:14	7440-09-7	
Sodium	<b>11.1</b>	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 17:14	7440-23-5	
Magnesium	<b>25.8</b>	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 17:14	7439-95-4	

#### 6020 MET ICPMS

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

Antimony	ND	mg/L	0.0030	0.0012	1	07/18/23 13:46	07/19/23 19:36	7440-36-0	
Arsenic	<b>0.0057J</b>	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:36	7440-38-2	
Barium	<b>0.070</b>	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:36	7440-41-7	
Boron	<b>7.1</b>	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 18:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:36	7440-47-3	
Cobalt	<b>0.060</b>	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:36	7439-92-1	
Lithium	<b>0.0057J</b>	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:36	7782-49-2	
Thallium	<b>0.00037J</b>	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:36	7440-28-0	

#### 7470 Mercury

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

Mercury	ND	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 11:48	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>1460</b>	mg/L	25.0	25.0	1		07/18/23 15:29		
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#### 2320B Alkalinity

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	<b>159</b>	mg/L	5.0	5.0	1		07/20/23 18:27		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:27		
Alkalinity, Total as CaCO3	<b>159</b>	mg/L	5.0	5.0	1		07/20/23 18:27		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-INW-02		Lab ID: 92677696005		Collected: 07/14/23 14:57		Received: 07/17/23 12:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:45	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>153</b>	mg/L	10.0	6.0	10		07/19/23 14:49	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 07:59	16984-48-8	
Sulfate	<b>532</b>	mg/L	10.0	5.0	10		07/19/23 14:49	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-AP2-FD-01		Lab ID: 92677696006		Collected: 07/14/23 00:00		Received: 07/17/23 12:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	10.1	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 17:58	7439-89-6	
Manganese	15.5	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 17:19	7439-96-5	
Potassium	5.8	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 17:19	7440-09-7	
Sodium	10.8	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 17:19	7440-23-5	
Calcium	299	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 17:19	7440-70-2	
Magnesium	25.0	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 17:19	7439-95-4	
<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	0.0012	1	07/18/23 13:46	07/19/23 19:48	7440-36-0	
Arsenic	0.0054J	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 19:48	7440-38-2	
Barium	0.069	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 19:48	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 19:48	7440-41-7	
Boron	7.1	mg/L	0.20	0.043	5	07/18/23 13:46	07/21/23 18:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 19:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 19:48	7440-47-3	
Cobalt	0.059	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 19:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	07/19/23 19:48	7439-92-1	
Lithium	0.0056J	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 19:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 19:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 19:48	7782-49-2	
Thallium	0.00037J	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 19:48	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	08/01/23 07:00	08/01/23 11:56	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1520	mg/L	25.0	25.0	1		07/18/23 15:29		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	159	mg/L	5.0	5.0	1		07/20/23 18:38		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:38		
Alkalinity, Total as CaCO3	159	mg/L	5.0	5.0	1		07/20/23 18:38		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 03:46	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	152	mg/L	10.0	6.0	10		07/19/23 15:03	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-AP2-FD-01 Lab ID: 92677696006 Collected: 07/14/23 00:00 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 08:13	16984-48-8	
Sulfate	531	mg/L	10.0	5.0	10		07/19/23 15:03	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-AP2-FB-01 Lab ID: 92677696007 Collected: 07/17/23 08:45 Received: 07/17/23 12:30 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									
Iron	ND	mg/L	0.040	0.025	1	07/20/23 09:50	07/25/23 18:03	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	07/20/23 09:50	07/20/23 17:24	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	07/20/23 09:50	07/20/23 17:24	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	07/20/23 09:50	07/20/23 17:24	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	07/20/23 09:50	07/20/23 17:24	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	07/20/23 09:50	07/20/23 17:24	7439-95-4	
<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	0.0012	1	07/18/23 13:46	07/19/23 20:06	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	07/18/23 13:46	07/19/23 20:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	07/18/23 13:46	07/19/23 20:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	07/18/23 13:46	07/19/23 20:06	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	07/18/23 13:46	08/04/23 12:45	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	07/18/23 13:46	07/19/23 20:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/18/23 13:46	07/19/23 20:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	07/18/23 13:46	07/19/23 20:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	07/18/23 13:46	08/04/23 12:45	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	07/18/23 13:46	07/19/23 20:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/18/23 13:46	07/19/23 20:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	07/18/23 13:46	07/19/23 20:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/18/23 13:46	07/19/23 20:06	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	08/01/23 07:00	08/01/23 11:58	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	25.0	25.0	1		07/18/23 15:31		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/20/23 18:50		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/20/23 18:50		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:01	18496-25-8	
<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		07/19/23 08:27	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-AP2-FB-01 Lab ID: 92677696007 Collected: 07/17/23 08:45 Received: 07/17/23 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		07/19/23 08:27	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		07/19/23 08:27	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-MW-59		Lab ID: 92677696008		Collected: 07/17/23 16:24		Received: 07/19/23 13:53		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		07/19/23 15:54		
pH	<b>4.59</b>	Std. Units			1		07/19/23 15:54		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	<b>9.7</b>	mg/L	0.040	0.027	1	07/21/23 11:15	08/01/23 14:52	7440-42-8	M1
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Cobalt	<b>0.16</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 15:24	7440-48-4	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-MW-33		Lab ID: 92677696009		Collected: 07/18/23 09:47		Received: 07/19/23 13:53		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		07/19/23 15:54		
pH	<b>4.48</b>	Std. Units			1		07/19/23 15:54		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.22</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:12	7439-89-6	
Manganese	<b>4.1</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:12	7439-96-5	
Potassium	<b>9.6</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:12	7440-09-7	
Sodium	<b>9.3</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:12	7440-23-5	
Magnesium	<b>38.9</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:12	7439-95-4	
Calcium	<b>397</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/02/23 12:39	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	0.0012	1	07/21/23 13:26	07/27/23 15:30	7440-36-0	
Arsenic	<b>0.0050J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 15:30	7440-38-2	
Barium	<b>0.022</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 15:30	7440-39-3	
Beryllium	<b>0.00096</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 15:30	7440-41-7	
Boron	<b>6.9</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 15:30	7440-42-8	
Cadmium	<b>0.00017J</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 15:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 15:30	7440-47-3	
Cobalt	<b>0.060</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 15:30	7440-48-4	
Lead	<b>0.0012</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 15:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 15:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 15:30	7439-98-7	
Selenium	<b>0.0051</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 15:30	7782-49-2	
Thallium	<b>0.00022J</b>	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 15:30	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	08/01/23 07:00	08/01/23 12:01	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1850</b>	mg/L	25.0	25.0	1		07/21/23 12:01		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 12:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 12:42		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/24/23 12:42		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-MW-33 Lab ID: 92677696009 Collected: 07/18/23 09:47 Received: 07/19/23 13:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:03	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>102</b>	mg/L	21.0	12.6	21		07/21/23 13:39	16887-00-6	
Fluoride	<b>0.22</b>	mg/L	0.10	0.050	1		07/20/23 18:59	16984-48-8	
Sulfate	<b>1090</b>	mg/L	21.0	10.5	21		07/21/23 13:39	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-MW-35**      **Lab ID: 92677696010**      Collected: 07/18/23 11:29      Received: 07/19/23 13:53      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		07/19/23 15:55		
pH	<b>4.93</b>	Std. Units			1		07/19/23 15:55		

**6010D ATL ICP**

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

Iron	<b>0.76</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:17	7439-89-6	
Manganese	<b>9.7</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:17	7439-96-5	
Potassium	<b>7.1</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:17	7440-09-7	
Sodium	<b>12.1</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:17	7440-23-5	
Magnesium	<b>74.1</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:17	7439-95-4	
Calcium	<b>492</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/02/23 12:44	7440-70-2	

**6020 MET ICPMS**

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

Antimony	ND	mg/L	0.0030	0.0012	1	07/21/23 13:26	07/27/23 15:36	7440-36-0	
Arsenic	<b>0.0056J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 15:36	7440-38-2	
Barium	<b>0.022</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 15:36	7440-39-3	
Beryllium	<b>0.00053</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 15:36	7440-41-7	
Boron	<b>9.5</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 15:36	7440-42-8	
Cadmium	<b>0.0012</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 15:36	7440-43-9	
Chromium	<b>0.0014J</b>	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 15:36	7440-47-3	
Cobalt	<b>0.087</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 15:36	7440-48-4	
Lead	<b>0.00090J</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 15:36	7439-92-1	
Lithium	<b>0.0035J</b>	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 15:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 15:36	7439-98-7	
Selenium	<b>0.0052</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 15:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 15:36	7440-28-0	

**7470 Mercury**

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

Mercury	ND	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 12:04	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>2340</b>	mg/L	25.0	25.0	1		07/21/23 12:02		1g
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**2320B Alkalinity**

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 12:56		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 12:56		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/24/23 12:56		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-MW-35		Lab ID: 92677696010		Collected: 07/18/23 11:29		Received: 07/19/23 13:53		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:03	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>191</b>	mg/L	24.0	14.4	24		07/21/23 07:01	16887-00-6	
Fluoride	<b>0.077J</b>	mg/L	0.10	0.050	1		07/20/23 19:15	16984-48-8	
Sulfate	<b>1200</b>	mg/L	24.0	12.0	24		07/21/23 07:01	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-03 Lab ID: 92677696011 Collected: 07/18/23 12:33 Received: 07/19/23 13:53 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		07/19/23 15:55		
pH	<b>4.64</b>	Std. Units			1		07/19/23 15:55		

#### 6010D ATL ICP

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

Iron	<b>0.26</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:22	7439-89-6	
Manganese	<b>8.2</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:22	7439-96-5	
Potassium	<b>5.4</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:22	7440-09-7	
Sodium	<b>11.7</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:22	7440-23-5	
Magnesium	<b>36.9</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:22	7439-95-4	
Calcium	<b>382</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/03/23 17:02	7440-70-2	

#### 6020 MET ICPMS

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

Antimony	<b>0.0029J</b>	mg/L	0.0030	0.0012	1	07/21/23 13:26	07/27/23 16:00	7440-36-0	
Arsenic	<b>0.0076J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 16:00	7440-38-2	
Barium	<b>0.025</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 16:00	7440-39-3	
Beryllium	<b>0.0026</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 16:00	7440-41-7	
Boron	<b>8.2</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 16:00	7440-42-8	
Cadmium	<b>0.00062</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 16:00	7440-43-9	
Chromium	<b>0.0011J</b>	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 16:00	7440-47-3	
Cobalt	<b>0.12</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 16:00	7440-48-4	
Lead	<b>0.0014</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 16:00	7439-92-1	
Lithium	<b>0.0031J</b>	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 16:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 16:00	7439-98-7	
Selenium	<b>0.011</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 16:00	7782-49-2	
Thallium	<b>0.00021J</b>	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 16:00	7440-28-0	

#### 7470 Mercury

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

Mercury	ND	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 12:06	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>2690</b>	mg/L	25.0	25.0	1		07/21/23 12:02		1g
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#### 2320B Alkalinity

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:01		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:01		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/24/23 13:01		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-03		Lab ID: 92677696011		Collected: 07/18/23 12:33		Received: 07/19/23 13:53		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:04	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>138</b>	mg/L	19.0	11.4	19		07/21/23 07:47	16887-00-6	
Fluoride	<b>0.84</b>	mg/L	0.10	0.050	1		07/21/23 01:51	16984-48-8	
Sulfate	<b>948</b>	mg/L	19.0	9.5	19		07/21/23 07:47	14808-79-8	M1

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-PT-01**      **Lab ID: 92677696012**      Collected: 07/18/23 13:24      Received: 07/19/23 13:53      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		07/19/23 15:56		
pH	<b>4.63</b>	Std. Units			1		07/19/23 15:56		

**6010D ATL ICP**

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

Iron	<b>0.078</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:27	7439-89-6	
Manganese	<b>9.6</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:27	7439-96-5	
Potassium	<b>5.2</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:27	7440-09-7	
Sodium	<b>8.8</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:27	7440-23-5	
Magnesium	<b>38.2</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:27	7439-95-4	
Calcium	<b>370</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/02/23 12:54	7440-70-2	

**6020 MET ICPMS**

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

Antimony	ND	mg/L	0.0030	0.0012	1	07/21/23 13:26	07/27/23 16:06	7440-36-0	
Arsenic	<b>0.0075J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 16:06	7440-38-2	
Barium	<b>0.046</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 16:06	7440-39-3	
Beryllium	<b>0.0024</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 16:06	7440-41-7	
Boron	<b>8.1</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 16:06	7440-42-8	
Cadmium	<b>0.00099</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 16:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 16:06	7440-47-3	
Cobalt	<b>0.11</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 16:06	7440-48-4	
Lead	<b>0.00072J</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 16:06	7439-92-1	
Lithium	<b>0.0052J</b>	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 16:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 16:06	7439-98-7	
Selenium	<b>0.011</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 16:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 16:06	7440-28-0	

**7470 Mercury**

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

Mercury	<b>0.00023</b>	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 12:09	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>1700</b>	mg/L	25.0	25.0	1		07/21/23 12:02		
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**2320B Alkalinity**

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:06		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:06		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		07/24/23 13:06		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-01 Lab ID: 92677696012 Collected: 07/18/23 13:24 Received: 07/19/23 13:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:04	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	147	mg/L	11.0	6.6	11		07/21/23 08:32	16887-00-6	
Fluoride	0.70	mg/L	0.10	0.050	1		07/21/23 02:38	16984-48-8	
Sulfate	892	mg/L	11.0	5.5	11		07/21/23 08:32	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-02 Lab ID: 92677696013 Collected: 07/18/23 16:20 Received: 07/19/23 13:53 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		07/19/23 15:56		
pH	<b>4.97</b>	Std. Units			1		07/19/23 15:56		

#### 6010D ATL ICP

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

Iron	<b>0.44</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:47	7439-89-6	
Manganese	<b>12.6</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:47	7439-96-5	
Potassium	<b>5.2</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:47	7440-09-7	
Sodium	<b>9.3</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:47	7440-23-5	
Magnesium	<b>44.0</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:47	7439-95-4	
Calcium	<b>379</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/02/23 12:59	7440-70-2	

#### 6020 MET ICPMS

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

Antimony	<b>0.0013J</b>	mg/L	0.0030	0.0012	1	07/21/23 13:26	07/27/23 16:58	7440-36-0	
Arsenic	<b>0.0063J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 16:58	7440-38-2	
Barium	<b>0.054</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 16:58	7440-39-3	
Beryllium	<b>0.0016</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 16:58	7440-41-7	
Boron	<b>8.3</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 16:58	7440-42-8	
Cadmium	<b>0.00091</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 16:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 16:58	7440-47-3	
Cobalt	<b>0.13</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 16:58	7440-48-4	
Lead	<b>0.00043J</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 16:58	7439-92-1	
Lithium	<b>0.0069J</b>	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 16:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 16:58	7439-98-7	
Selenium	<b>0.0075</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 16:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 16:58	7440-28-0	

#### 7470 Mercury

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

Mercury	ND	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 12:12	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>1830</b>	mg/L	25.0	25.0	1		07/21/23 12:03		
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#### 2320B Alkalinity

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	<b>5.5</b>	mg/L	5.0	5.0	1		07/24/23 13:11		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:11		
Alkalinity, Total as CaCO3	<b>5.5</b>	mg/L	5.0	5.0	1		07/24/23 13:11		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-PT-02 Lab ID: 92677696013 Collected: 07/18/23 16:20 Received: 07/19/23 13:53 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:06	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	174	mg/L	11.0	6.6	11		07/21/23 08:47	16887-00-6	
Fluoride	0.47	mg/L	0.10	0.050	1		07/21/23 02:54	16984-48-8	
Sulfate	938	mg/L	11.0	5.5	11		07/21/23 08:47	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

**Sample: HAM-INW-01**      **Lab ID: 92677696014**      Collected: 07/19/23 09:31      Received: 07/19/23 13:53      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		07/19/23 15:56		
pH	<b>5.18</b>	Std. Units			1		07/19/23 15:56		

**6010D ATL ICP**

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

Iron	<b>2.9</b>	mg/L	0.040	0.025	1	07/21/23 11:15	08/01/23 15:53	7439-89-6	
Manganese	<b>14.4</b>	mg/L	0.040	0.011	1	07/21/23 11:15	08/01/23 15:53	7439-96-5	
Potassium	<b>5.4</b>	mg/L	0.50	0.15	1	07/21/23 11:15	08/01/23 15:53	7440-09-7	
Sodium	<b>10</b>	mg/L	1.0	0.58	1	07/21/23 11:15	08/01/23 15:53	7440-23-5	
Magnesium	<b>52.3</b>	mg/L	0.050	0.012	1	07/21/23 11:15	08/01/23 15:53	7439-95-4	
Calcium	<b>397</b>	mg/L	5.0	0.61	5	07/21/23 11:15	08/02/23 13:04	7440-70-2	

**6020 MET ICPMS**

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

Antimony	ND	mg/L	0.0030	0.0012	1	07/21/23 13:26	07/27/23 17:04	7440-36-0	
Arsenic	<b>0.0061J</b>	mg/L	0.010	0.0037	1	07/21/23 13:26	07/27/23 17:04	7440-38-2	
Barium	<b>0.069</b>	mg/L	0.0050	0.00067	1	07/21/23 13:26	07/27/23 17:04	7440-39-3	
Beryllium	<b>0.0010</b>	mg/L	0.00050	0.000054	1	07/21/23 13:26	07/27/23 17:04	7440-41-7	
Boron	<b>8.7</b>	mg/L	0.040	0.0086	1	07/21/23 13:26	07/27/23 17:04	7440-42-8	
Cadmium	<b>0.00059</b>	mg/L	0.00050	0.00011	1	07/21/23 13:26	07/27/23 17:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	07/21/23 13:26	07/27/23 17:04	7440-47-3	
Cobalt	<b>0.13</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 17:04	7440-48-4	
Lead	<b>0.00037J</b>	mg/L	0.0010	0.00012	1	07/21/23 13:26	07/27/23 17:04	7439-92-1	
Lithium	<b>0.0064J</b>	mg/L	0.030	0.00073	1	07/21/23 13:26	07/27/23 17:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	07/21/23 13:26	07/27/23 17:04	7439-98-7	
Selenium	<b>0.0075</b>	mg/L	0.0050	0.0014	1	07/21/23 13:26	07/27/23 17:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	07/21/23 13:26	07/27/23 17:04	7440-28-0	

**7470 Mercury**

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

Mercury	ND	mg/L	0.00020	0.00013	1	08/01/23 07:00	08/01/23 12:14	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>2000</b>	mg/L	25.0	25.0	1		07/21/23 12:03		1g
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**2320B Alkalinity**

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity,Bicarbonate (CaCO3)	<b>14.9</b>	mg/L	5.0	5.0	1		07/24/23 13:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		07/24/23 13:16		
Alkalinity, Total as CaCO3	<b>14.9</b>	mg/L	5.0	5.0	1		07/24/23 13:16		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92677696

Sample: HAM-INW-01		Lab ID: 92677696014		Collected: 07/19/23 09:31		Received: 07/19/23 13:53		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		07/20/23 04:06	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>210</b>	mg/L	19.0	11.4	19		07/21/23 09:18	16887-00-6	
Fluoride	<b>0.34</b>	mg/L	0.10	0.050	1		07/21/23 03:56	16984-48-8	
Sulfate	<b>975</b>	mg/L	19.0	9.5	19		07/21/23 09:18	14808-79-8	

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**ANALYTICAL RESULTS**

Project: Hammond AP-2

Pace Project No.: 92677696

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: HAM-MW-57</b>									
<b>Lab ID: 92677696015</b>									
Collected: 07/19/23 10:40									
Received: 07/19/23 13:53									
Matrix: Water									
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		07/19/23 15:57		
pH	<b>6.45</b>	Std. Units			1		07/19/23 15:57		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	<b>8.5</b>	mg/L	0.040	0.027	1	07/21/23 11:15	08/01/23 15:58	7440-42-8	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Cobalt	<b>0.049</b>	mg/L	0.0050	0.00039	1	07/21/23 13:26	07/27/23 17:10	7440-48-4	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	787863	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007		

METHOD BLANK:	4084625	Matrix:	Water
Associated Lab Samples:	92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	07/20/23 15:30	
Iron	mg/L	ND	0.040	0.025	07/25/23 15:43	
Magnesium	mg/L	ND	0.050	0.012	07/20/23 15:30	
Manganese	mg/L	ND	0.040	0.011	07/20/23 15:30	
Potassium	mg/L	ND	0.50	0.15	07/20/23 15:30	
Sodium	mg/L	ND	1.0	0.58	07/20/23 15:30	

LABORATORY CONTROL SAMPLE: 4084626						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.92J	92	80-120	
Iron	mg/L	1	0.99	99	80-120	
Magnesium	mg/L	1	0.93	93	80-120	
Manganese	mg/L	1	0.94	94	80-120	
Potassium	mg/L	1	0.88	88	80-120	
Sodium	mg/L	1	0.84J	84	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4085060 4085061													
Parameter	Units	92677694001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Calcium	mg/L	107	1	1	109	104	196	-279	75-125	4	20	M1	
Iron	mg/L	0.27	1	1	1.3	1.3	99	105	75-125	5	20		
Magnesium	mg/L	14.9	1	1	16.2	15.6	128	74	75-125	3	20	M1	
Manganese	mg/L	0.28	1	1	1.2	1.3	96	100	75-125	3	20		
Potassium	mg/L	6.9	1	1	8.1	7.8	118	90	75-125	3	20		
Sodium	mg/L	8.8	1	1	9.9	9.5	111	73	75-125	4	20	M1	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	788329	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92677696008, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014, 92677696015		

METHOD BLANK:	4086684	Matrix:	Water
Associated Lab Samples:	92677696008, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014, 92677696015		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.027	08/01/23 14:43	
Calcium	mg/L	ND	1.0	0.12	08/01/23 14:43	
Iron	mg/L	ND	0.040	0.025	08/02/23 16:01	
Magnesium	mg/L	ND	0.050	0.012	08/01/23 14:43	
Manganese	mg/L	ND	0.040	0.011	08/01/23 14:43	
Potassium	mg/L	ND	0.50	0.15	08/01/23 14:43	
Sodium	mg/L	ND	1.0	0.58	08/01/23 14:43	

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.99	99	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.0	103	80-120	
Manganese	mg/L	1	1.0	104	80-120	
Potassium	mg/L	1	1.0	101	80-120	
Sodium	mg/L	1	0.98J	98	80-120	

Parameter	Units	4086751		4086752		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Boron	mg/L	9.7	1	10.6	1	95	136	75-125	4	20	M1
Calcium	mg/L		1	512	1	-572	606	75-125	2	20	M1
Iron	mg/L		1	3.0	1	96	100	75-125	1	20	
Magnesium	mg/L		1	46.7	1	11	135	75-125	3	20	M1
Manganese	mg/L		1	11.2	1	84	122	75-125	3	20	
Potassium	mg/L		1	7.7	1	76	101	75-125	3	20	
Sodium	mg/L		1	16.7	1	84	120	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	787489	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

METHOD BLANK: 4082463 Matrix: Water  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	07/19/23 17:43	
Arsenic	mg/L	ND	0.010	0.0037	07/19/23 17:43	
Barium	mg/L	ND	0.0050	0.00067	07/19/23 17:43	
Beryllium	mg/L	ND	0.00050	0.000054	07/19/23 17:43	
Boron	mg/L	ND	0.040	0.0086	07/21/23 16:25	
Cadmium	mg/L	ND	0.00050	0.00011	07/19/23 17:43	
Chromium	mg/L	ND	0.0050	0.0011	07/19/23 17:43	
Cobalt	mg/L	ND	0.0050	0.00039	07/19/23 17:43	
Lead	mg/L	ND	0.0010	0.00012	07/19/23 17:43	
Lithium	mg/L	ND	0.030	0.00073	07/19/23 17:43	
Molybdenum	mg/L	ND	0.010	0.00074	07/19/23 17:43	
Selenium	mg/L	ND	0.0050	0.0014	07/19/23 17:43	
Thallium	mg/L	ND	0.0010	0.00018	07/19/23 17:43	

LABORATORY CONTROL SAMPLE: 4082464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.1	110	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4082465 4082466

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92677694001 Result	Spike Conc.	Spike Conc.	Result						
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	109	110	75-125	1	20
Arsenic	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

Parameter	Units	4082465		4082466		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92677694001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.047	0.1	0.1	0.16	0.16	114	113	75-125	1	20		
Beryllium	mg/L	0.000073J	0.1	0.1	0.095	0.096	95	96	75-125	1	20		
Boron	mg/L	2.0	1	1	3.1	2.9	108	94	75-125	5	20		
Cadmium	mg/L	0.00031J	0.1	0.1	0.10	0.10	102	104	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20		
Cobalt	mg/L	0.0015J	0.1	0.1	0.10	0.099	99	97	75-125	1	20		
Lead	mg/L	0.00013J	0.1	0.1	0.10	0.10	100	100	75-125	1	20		
Lithium	mg/L	0.0015J	0.1	0.1	0.099	0.099	97	98	75-125	0	20		
Molybdenum	mg/L	0.30	0.1	0.1	0.42	0.42	121	123	75-125	1	20		
Selenium	mg/L	ND	0.1	0.1	0.11	0.11	106	106	75-125	0	20		
Thallium	mg/L	0.00026J	0.1	0.1	0.097	0.096	97	96	75-125	1	20		

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### QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 788417 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92677696008, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014, 92677696015

METHOD BLANK: 4086984 Matrix: Water  
 Associated Lab Samples: 92677696008, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014, 92677696015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	07/27/23 15:12	
Arsenic	mg/L	ND	0.010	0.0037	07/27/23 15:12	
Barium	mg/L	ND	0.0050	0.00067	07/27/23 15:12	
Beryllium	mg/L	ND	0.00050	0.000054	07/27/23 15:12	
Boron	mg/L	ND	0.040	0.0086	07/27/23 15:12	
Cadmium	mg/L	ND	0.00050	0.00011	07/27/23 15:12	
Chromium	mg/L	ND	0.0050	0.0011	07/27/23 15:12	
Cobalt	mg/L	ND	0.0050	0.00039	07/27/23 15:12	
Lead	mg/L	ND	0.0010	0.00012	07/27/23 15:12	
Lithium	mg/L	ND	0.030	0.00073	07/27/23 15:12	
Molybdenum	mg/L	ND	0.010	0.00074	07/27/23 15:12	
Selenium	mg/L	ND	0.0050	0.0014	07/27/23 15:12	
Thallium	mg/L	ND	0.0010	0.00018	07/27/23 15:12	

LABORATORY CONTROL SAMPLE: 4086985

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	114	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Boron	mg/L	1	1.1	108	80-120	
Cadmium	mg/L	0.1	0.10	105	80-120	
Chromium	mg/L	0.1	0.11	105	80-120	
Cobalt	mg/L	0.1	0.11	105	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.11	111	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4087071 4087072

Parameter	Units	92677696010 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.12	0.11	117	112	75-125	4	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4087071 4087072												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92677696010 Result	Spike Conc.	Spike Conc.	MS Result							
Arsenic	mg/L	0.0056J	0.1	0.1	0.12	0.11	110	107	75-125	3	20	
Barium	mg/L	0.022	0.1	0.1	0.13	0.12	104	100	75-125	3	20	
Beryllium	mg/L	0.00053	0.1	0.1	0.093	0.092	92	91	75-125	1	20	
Boron	mg/L	9.5	1	1	10.4	10.2	87	71	75-125	2	20	
Cadmium	mg/L	0.0012	0.1	0.1	0.10	0.10	101	99	75-125	2	20	
Chromium	mg/L	0.0014J	0.1	0.1	0.10	0.10	103	100	75-125	3	20	
Cobalt	mg/L	0.087	0.1	0.1	0.19	0.18	100	98	75-125	1	20	
Lead	mg/L	0.00090J	0.1	0.1	0.094	0.091	93	91	75-125	3	20	
Lithium	mg/L	0.0035J	0.1	0.1	0.10	0.10	97	96	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	107	104	75-125	2	20	
Selenium	mg/L	0.0052	0.1	0.1	0.12	0.12	116	113	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.090	92	90	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	790376	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

METHOD BLANK: 4096218 Matrix: Water

Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/01/23 11:24	

LABORATORY CONTROL SAMPLE: 4096219

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: 4096220 4096221

Parameter	Units	92677696001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00020J	0.0025	0.0025	0.0023	0.0023	84	83	75-125	1	20	

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QUALITY CONTROL DATA

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	787441	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: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

METHOD BLANK: 4082157 Matrix: Water

Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	07/18/23 15:23	

LABORATORY CONTROL SAMPLE: 4082158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	409	102	80-120	

SAMPLE DUPLICATE: 4082159

Parameter	Units	92677694001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	513	511	0	10	

SAMPLE DUPLICATE: 4082160

Parameter	Units	92677696005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1460	1570	8	10	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	788206	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:	92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014		

METHOD BLANK:	4086319	Matrix:	Water
Associated Lab Samples:	92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	07/21/23 11:58	

LABORATORY CONTROL SAMPLE: 4086320						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	412	103	80-120	

SAMPLE DUPLICATE: 4086321						
Parameter	Units	92678098001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	139	106	27	10	D6

SAMPLE DUPLICATE: 4086322						
Parameter	Units	92678314001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2420	8220	109	10	D6

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 788121 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

METHOD BLANK: 4085797 Matrix: Water  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	07/20/23 16:09	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	07/20/23 16:09	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	07/20/23 16:09	

LABORATORY CONTROL SAMPLE: 4085798

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

LABORATORY CONTROL SAMPLE: 4085799

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.7	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4085800 4085801

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92677753005	Spike Conc.	Spike Conc.	Result								
Alkalinity, Total as CaCO3	mg/L	121	50	50	180	180	118	118	80-120	0	25		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4085802 4085803

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92677753006	Spike Conc.	Spike Conc.	Result								
Alkalinity, Total as CaCO3	mg/L	76.8	50	50	129	131	103	108	80-120	2	25		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 788708 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

METHOD BLANK: 4087983 Matrix: Water  
 Associated Lab Samples: 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	07/24/23 11:40	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	07/24/23 11:40	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	07/24/23 11:40	

LABORATORY CONTROL SAMPLE: 4087984

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.1	102	80-120	

LABORATORY CONTROL SAMPLE: 4087985

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4087986 4087987

Parameter	Units	4087986		4087987		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92678264010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO3	mg/L	7.2	50	50	57.9	57.8	101	101	80-120	0	25 H1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4087988 4087989

Parameter	Units	4087988		4087989		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92678043001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO3	mg/L	32.2	50	50	82.7	84.0	101	104	80-120	2	25

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 787902 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006

METHOD BLANK: 4084741 Matrix: Water  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	07/20/23 03:38	

LABORATORY CONTROL SAMPLE: 4084742

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.49	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084743 4084744

Parameter	Units	92677694001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	Spike Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec				
Sulfide	mg/L	ND	0.5	0.5	0.47	0.47	93	93	80-120	0	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084745 4084746

Parameter	Units	92677696005		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	Spike Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec				
Sulfide	mg/L	ND	0.5	0.5	0.48	0.46	94	90	80-120	5	10		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 787903 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92677696007, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

METHOD BLANK: 4084747 Matrix: Water  
 Associated Lab Samples: 92677696007, 92677696009, 92677696010, 92677696011, 92677696012, 92677696013, 92677696014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	07/20/23 03:57	

LABORATORY CONTROL SAMPLE: 4084748

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.49	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084749 4084750

Parameter	Units	92678161006		4084750		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Sulfide	mg/L	ND	0.5	0.5	0.53	0.54	105	108	80-120	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084751 4084752

Parameter	Units	92677696012		4084752		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Sulfide	mg/L	ND	0.5	0.5	0.43	0.47	84	93	80-120	10	10	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

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QC Batch: 787377 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: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

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METHOD BLANK: 4081859 Matrix: Water  
 Associated Lab Samples: 92677696001, 92677696002, 92677696003, 92677696004, 92677696005, 92677696006, 92677696007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	07/19/23 05:21	
Fluoride	mg/L	ND	0.10	0.050	07/19/23 05:21	
Sulfate	mg/L	ND	1.0	0.50	07/19/23 05:21	

LABORATORY CONTROL SAMPLE: 4081860

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	2.4	98	90-110	
Sulfate	mg/L	50	49.8	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4081861 4081862

Parameter	Units	92677694008		4081861		4081862		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec						
Chloride	mg/L	17.8	50	50	69.7	70.1	104	105	90-110	1	10		
Fluoride	mg/L	0.32	2.5	2.5	2.8	2.8	98	99	90-110	1	10		
Sulfate	mg/L	393	50	50	422	418	58	49	90-110	1	10	M1	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch:	787928	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: 92677696009, 92677696010

METHOD BLANK: 4084797 Matrix: Water

Associated Lab Samples: 92677696009, 92677696010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	07/20/23 11:29	
Fluoride	mg/L	ND	0.10	0.050	07/20/23 11:29	
Sulfate	mg/L	ND	1.0	0.50	07/20/23 11:29	

LABORATORY CONTROL SAMPLE: 4084798

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.7	105	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	53.2	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084799 4084800

Parameter	Units	92678109003		MS		MSD		% Rec	% Rec	% Rec	% Rec	Limits	RPD	Max	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result								
Chloride	mg/L	12.9	50	50	66.6	67.3	107	109	90-110	1	10				
Fluoride	mg/L	ND	2.5	2.5	2.7	2.8	107	109	90-110	1	10				
Sulfate	mg/L	84.7	50	50	128	129	87	89	90-110	1	10	M1			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084801 4084802

Parameter	Units	92677725002		MS		MSD		% Rec	% Rec	% Rec	% Rec	Limits	RPD	Max	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result								
Chloride	mg/L	22.3	50	50	76.5	77.2	108	110	90-110	1	10				
Fluoride	mg/L	0.31	2.5	2.5	3.6	3.7	131	134	90-110	2	10	M1			
Sulfate	mg/L	ND	50	50	54.9	55.6	109	111	90-110	1	10	M1			

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92677696

QC Batch: 787930 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: 92677696011, 92677696012, 92677696013, 92677696014

METHOD BLANK: 4084807 Matrix: Water  
 Associated Lab Samples: 92677696011, 92677696012, 92677696013, 92677696014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	07/21/23 12:06	
Fluoride	mg/L	ND	0.10	0.050	07/21/23 12:06	
Sulfate	mg/L	ND	1.0	0.50	07/21/23 12:06	

LABORATORY CONTROL SAMPLE: 4084808

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.2	102	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4084809 4084810

Parameter	Units	92677696011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	138	50	50	185	187	94	97	90-110	1	10	
Fluoride	mg/L	0.84	2.5	2.5	3.5	3.6	105	109	90-110	3	10	
Sulfate	mg/L	948	50	50	991	1000	86	109	90-110	1	10	M1

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## QUALIFIERS

Project: Hammond AP-2

Pace Project No.: 92677696

### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

1g "Sample residue exceeded method SM 2540C recommended 200 mg."

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

H1 Analysis conducted outside the EPA method holding time.

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

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92677696001	HAM-HGWC-18				
92677696002	HAM-PT-06				
92677696003	HAM-PT-05				
92677696004	HAM-PT-04				
92677696005	HAM-INW-02				
92677696008	HAM-MW-59				
92677696009	HAM-MW-33				
92677696010	HAM-MW-35				
92677696011	HAM-PT-03				
92677696012	HAM-PT-01				
92677696013	HAM-PT-02				
92677696014	HAM-INW-01				
92677696015	HAM-MW-57				
92677696001	HAM-HGWC-18	EPA 3010A	787863	EPA 6010D	788067
92677696002	HAM-PT-06	EPA 3010A	787863	EPA 6010D	788067
92677696003	HAM-PT-05	EPA 3010A	787863	EPA 6010D	788067
92677696004	HAM-PT-04	EPA 3010A	787863	EPA 6010D	788067
92677696005	HAM-INW-02	EPA 3010A	787863	EPA 6010D	788067
92677696006	HAM-AP2-FD-01	EPA 3010A	787863	EPA 6010D	788067
92677696007	HAM-AP2-FB-01	EPA 3010A	787863	EPA 6010D	788067
92677696008	HAM-MW-59	EPA 3010A	788329	EPA 6010D	788467
92677696009	HAM-MW-33	EPA 3010A	788329	EPA 6010D	788467
92677696010	HAM-MW-35	EPA 3010A	788329	EPA 6010D	788467
92677696011	HAM-PT-03	EPA 3010A	788329	EPA 6010D	788467
92677696012	HAM-PT-01	EPA 3010A	788329	EPA 6010D	788467
92677696013	HAM-PT-02	EPA 3010A	788329	EPA 6010D	788467
92677696014	HAM-INW-01	EPA 3010A	788329	EPA 6010D	788467
92677696015	HAM-MW-57	EPA 3010A	788329	EPA 6010D	788467
92677696001	HAM-HGWC-18	EPA 3005A	787489	EPA 6020B	787561
92677696002	HAM-PT-06	EPA 3005A	787489	EPA 6020B	787561
92677696003	HAM-PT-05	EPA 3005A	787489	EPA 6020B	787561
92677696004	HAM-PT-04	EPA 3005A	787489	EPA 6020B	787561
92677696005	HAM-INW-02	EPA 3005A	787489	EPA 6020B	787561
92677696006	HAM-AP2-FD-01	EPA 3005A	787489	EPA 6020B	787561
92677696007	HAM-AP2-FB-01	EPA 3005A	787489	EPA 6020B	787561
92677696008	HAM-MW-59	EPA 3005A	788417	EPA 6020B	788528
92677696009	HAM-MW-33	EPA 3005A	788417	EPA 6020B	788528
92677696010	HAM-MW-35	EPA 3005A	788417	EPA 6020B	788528
92677696011	HAM-PT-03	EPA 3005A	788417	EPA 6020B	788528
92677696012	HAM-PT-01	EPA 3005A	788417	EPA 6020B	788528
92677696013	HAM-PT-02	EPA 3005A	788417	EPA 6020B	788528
92677696014	HAM-INW-01	EPA 3005A	788417	EPA 6020B	788528
92677696015	HAM-MW-57	EPA 3005A	788417	EPA 6020B	788528
92677696001	HAM-HGWC-18	EPA 7470A	790376	EPA 7470A	790494
92677696002	HAM-PT-06	EPA 7470A	790376	EPA 7470A	790494
92677696003	HAM-PT-05	EPA 7470A	790376	EPA 7470A	790494

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92677696004	HAM-PT-04	EPA 7470A	790376	EPA 7470A	790494
92677696005	HAM-INW-02	EPA 7470A	790376	EPA 7470A	790494
92677696006	HAM-AP2-FD-01	EPA 7470A	790376	EPA 7470A	790494
92677696007	HAM-AP2-FB-01	EPA 7470A	790376	EPA 7470A	790494
92677696009	HAM-MW-33	EPA 7470A	790376	EPA 7470A	790494
92677696010	HAM-MW-35	EPA 7470A	790376	EPA 7470A	790494
92677696011	HAM-PT-03	EPA 7470A	790376	EPA 7470A	790494
92677696012	HAM-PT-01	EPA 7470A	790376	EPA 7470A	790494
92677696013	HAM-PT-02	EPA 7470A	790376	EPA 7470A	790494
92677696014	HAM-INW-01	EPA 7470A	790376	EPA 7470A	790494
92677696001	HAM-HGWC-18	SM 2540C-2015	787441		
92677696002	HAM-PT-06	SM 2540C-2015	787441		
92677696003	HAM-PT-05	SM 2540C-2015	787441		
92677696004	HAM-PT-04	SM 2540C-2015	787441		
92677696005	HAM-INW-02	SM 2540C-2015	787441		
92677696006	HAM-AP2-FD-01	SM 2540C-2015	787441		
92677696007	HAM-AP2-FB-01	SM 2540C-2015	787441		
92677696009	HAM-MW-33	SM 2540C-2015	788206		
92677696010	HAM-MW-35	SM 2540C-2015	788206		
92677696011	HAM-PT-03	SM 2540C-2015	788206		
92677696012	HAM-PT-01	SM 2540C-2015	788206		
92677696013	HAM-PT-02	SM 2540C-2015	788206		
92677696014	HAM-INW-01	SM 2540C-2015	788206		
92677696001	HAM-HGWC-18	SM 2320B-2011	788121		
92677696002	HAM-PT-06	SM 2320B-2011	788121		
92677696003	HAM-PT-05	SM 2320B-2011	788121		
92677696004	HAM-PT-04	SM 2320B-2011	788121		
92677696005	HAM-INW-02	SM 2320B-2011	788121		
92677696006	HAM-AP2-FD-01	SM 2320B-2011	788121		
92677696007	HAM-AP2-FB-01	SM 2320B-2011	788121		
92677696009	HAM-MW-33	SM 2320B-2011	788708		
92677696010	HAM-MW-35	SM 2320B-2011	788708		
92677696011	HAM-PT-03	SM 2320B-2011	788708		
92677696012	HAM-PT-01	SM 2320B-2011	788708		
92677696013	HAM-PT-02	SM 2320B-2011	788708		
92677696014	HAM-INW-01	SM 2320B-2011	788708		
92677696001	HAM-HGWC-18	SM 4500-S2D-2011	787902		
92677696002	HAM-PT-06	SM 4500-S2D-2011	787902		
92677696003	HAM-PT-05	SM 4500-S2D-2011	787902		
92677696004	HAM-PT-04	SM 4500-S2D-2011	787902		
92677696005	HAM-INW-02	SM 4500-S2D-2011	787902		
92677696006	HAM-AP2-FD-01	SM 4500-S2D-2011	787902		
92677696007	HAM-AP2-FB-01	SM 4500-S2D-2011	787903		
92677696009	HAM-MW-33	SM 4500-S2D-2011	787903		
92677696010	HAM-MW-35	SM 4500-S2D-2011	787903		
92677696011	HAM-PT-03	SM 4500-S2D-2011	787903		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92677696

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92677696012	HAM-PT-01	SM 4500-S2D-2011	787903		
92677696013	HAM-PT-02	SM 4500-S2D-2011	787903		
92677696014	HAM-INW-01	SM 4500-S2D-2011	787903		
92677696001	HAM-HGWC-18	EPA 300.0 Rev 2.1 1993	787377		
92677696002	HAM-PT-06	EPA 300.0 Rev 2.1 1993	787377		
92677696003	HAM-PT-05	EPA 300.0 Rev 2.1 1993	787377		
92677696004	HAM-PT-04	EPA 300.0 Rev 2.1 1993	787377		
92677696005	HAM-INW-02	EPA 300.0 Rev 2.1 1993	787377		
92677696006	HAM-AP2-FD-01	EPA 300.0 Rev 2.1 1993	787377		
92677696007	HAM-AP2-FB-01	EPA 300.0 Rev 2.1 1993	787377		
92677696009	HAM-MW-33	EPA 300.0 Rev 2.1 1993	787928		
92677696010	HAM-MW-35	EPA 300.0 Rev 2.1 1993	787928		
92677696011	HAM-PT-03	EPA 300.0 Rev 2.1 1993	787930		
92677696012	HAM-PT-01	EPA 300.0 Rev 2.1 1993	787930		
92677696013	HAM-PT-02	EPA 300.0 Rev 2.1 1993	787930		
92677696014	HAM-INW-01	EPA 300.0 Rev 2.1 1993	787930		

### REPORT OF LABORATORY ANALYSIS

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DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92677696**



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

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 7-19-23 AY

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 214 Type of Ice:  Wet  Blue  None

Cooler Temp: 6.5 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): 6.5

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 type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WG</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 type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92677696

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

Project #

PH: BV

Due Date: 07/31/23

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

CLIENT: 92- GP-HAM

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

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1																												
2		21																										
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12																												

pH Adjustment Log for Preserved Samples

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

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







DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92677696

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other:

PM: BV Due Date: 07/31/23 CLIENT: 92- GP-HAM

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 9-19-23

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

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

Cooler Temp: 7.6 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): 7.6

USDA Regulated Soil (  N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92677696

PM: BV

Due Date: 07/31/23

CLIENT: 92- GP-HAM

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP9U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP9R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1		2	1																									
2		2	1																									
3		2	1																									
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9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

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

Section A Client Information: **GA Power** Atlanta, GA  
 Section B Required Project Information: **Report To: SCS Contacts**  
 Section C Invoice Information: **Attention: Southern Co.**

Section B Required Project Information:  
 Report To: **Geosyntec Contacts**  
 Task Code: **HAM-COR-CA-20230713**  
 Copy To: **Geosyntec Contacts**  
 Purchase Order No.:  
 Project Name: **PIANO HAMMOND AP-2**  
 Project Number:  
 Address:  
 PACE Project Reference: **Bonnie Vang**  
 PACE Profile #: **10839**  
 Requested Analysis Filtered (Y/N):  
 REGULATORY AGENCY:  NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER **COE**  
 Site Location: **GA**  
 STATE: **GA**

Section D Required Client Information	Valid Matrix Codes	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test			Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.				
				COMPOSITE	COMPOSITE			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Full App. III and IV metals			Major Ions (10839-2)	Boron and Cobalt		
HAM-MW-59	DOMESTIC WATER CW	WG G	G	DATE	TIME	DATE	TIME															
HAM-MW-33	WASTEWATER WW	WG G	G	7/18/20	10:44			X														
HAM-MW-35	WASTEWATER WW	WG G	G	7/18/20	09:47			X														
HAM-DT-03	SCOUR/SLOPE	WG G	G	7/18/20	11:19			X														
HAM-DT-01	SCOUR/SLOPE	WG G	G	7/18/20	11:55			X														
HAM-DT-02	SCOUR/SLOPE	WG G	G	7/18/20	13:24			X														
HAM-MW-01	WASTEWATER WW	WG G	G	7/18/20	10:20			X														
HAM-MW-01	WASTEWATER WW	WG G	G	7/19/20	09:51			X														
HAM-MW-57	WASTEWATER WW	WG G	G	7/19/20	10:40			X														

ADDITIONAL COMMENTS: **Alomanevely / Geosyntec 7/19/20 1355**

RELINQUISHED BY / AFFILIATION: **Alomanevely / Geosyntec** DATE: **7/19/20** TIME: **1355**

ACCEPTED BY / AFFILIATION: **[Signature]** DATE: **7/19/20** TIME: **1355**

SAMPLER NAME AND SIGNATURE: **PIANO NEVIL**

PRINT Name of SAMPLER: **PIANO NEVIL**

SIGNATURE of SAMPLER: **[Signature]**

DATE Signed (MM/DD/YYYY): **07/19/20**

/ Geosyntec Consultants, Inc.

Temp in °C: \_\_\_\_\_

Received on Ice (Y/N): \_\_\_\_\_

Custody Sealed Cooler (Y/N): \_\_\_\_\_

Samples Intact (Y/N): \_\_\_\_\_

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

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

August 2023



August 25, 2023

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

RE: Project: Hammond AP-2-(CCR-CA)  
Pace Project No.: 92682396

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on August 11, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

Bonnie Vang  
bonnie.vang@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

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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

Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92682396001	HAM-INW-01	Water	08/09/23 13:36	08/11/23 13:12
92682396002	HAM-INW-02	Water	08/09/23 13:10	08/11/23 13:12
92682396003	HAM-PT-01	Water	08/09/23 12:13	08/11/23 13:12
92682396004	HAM-PT-02	Water	08/09/23 14:23	08/11/23 13:12
92682396005	HAM-PT-03	Water	08/09/23 10:47	08/11/23 13:12
92682396006	HAM-PT-04	Water	08/09/23 14:22	08/11/23 13:12
92682396007	HAM-PT-05	Water	08/09/23 17:39	08/11/23 13:12
92682396008	HAM-PT-06	Water	08/09/23 15:48	08/11/23 13:12
92682396009	HAM-MW-55	Water	08/09/23 18:22	08/11/23 13:12
92682396010	HAM-MW-56	Water	08/09/23 16:51	08/11/23 13:12
92682396011	HAM-MW-57	Water	08/09/23 12:28	08/11/23 13:12
92682396012	HAM-MW-58	Water	08/09/23 10:34	08/11/23 13:12
92682396013	HAM-MW-59	Water	08/09/23 16:51	08/11/23 13:12
92682396014	HAM-AP2-FD-07	Water	08/09/23 00:00	08/11/23 13:12
92682396015	HAM-AP2-FB-07	Water	08/09/23 18:10	08/11/23 13:12

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92682396001	HAM-INW-01	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396002	HAM-INW-02	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396003	HAM-PT-01	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396004	HAM-PT-02	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396005	HAM-PT-03	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396006	HAM-PT-04	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396007	HAM-PT-05	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396008	HAM-PT-06	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396009	HAM-MW-55	EPA 6020B	CW1	2
92682396010	HAM-MW-56	EPA 6020B	CW1	2
92682396011	HAM-MW-57	EPA 6020B	CW1	2
92682396012	HAM-MW-58	EPA 6020B	CW1	2
92682396013	HAM-MW-59	EPA 6020B	CW1	2
92682396014	HAM-AP2-FD-07	EPA 6010D	DRB, MS	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92682396015	HAM-AP2-FB-07	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2-(CCR-CA)  
Pace Project No.: 92682396

---

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	CDC	3

---

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

### REPORT OF LABORATORY ANALYSIS

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**SUMMARY OF DETECTION**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92682396001</b>	<b>HAM-INW-01</b>					
EPA 6010D	Calcium	409	mg/L	5.0	08/23/23 05:18	
EPA 6010D	Iron	12.3	mg/L	0.040	08/18/23 20:03	
EPA 6010D	Manganese	20.7	mg/L	0.040	08/18/23 20:03	
EPA 6010D	Potassium	6.2	mg/L	0.50	08/18/23 20:03	
EPA 6010D	Sodium	12.5	mg/L	1.0	08/18/23 20:03	
EPA 6010D	Magnesium	58.4	mg/L	0.050	08/18/23 20:03	
EPA 6020B	Barium	0.053	mg/L	0.0050	08/18/23 19:14	
EPA 6020B	Beryllium	0.00059	mg/L	0.00050	08/18/23 19:14	
EPA 6020B	Boron	8.0	mg/L	0.40	08/21/23 15:51	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	08/18/23 19:14	
EPA 6020B	Lithium	0.0036J	mg/L	0.030	08/18/23 19:14	
EPA 6020B	Selenium	0.011	mg/L	0.0050	08/18/23 19:14	
SM 2540C-2015	Total Dissolved Solids	1890	mg/L	25.0	08/15/23 16:53	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	46.5	mg/L	5.0	08/16/23 15:19	
SM 2320B-2011	Alkalinity, Total as CaCO3	46.5	mg/L	5.0	08/16/23 15:19	
EPA 300.0 Rev 2.1 1993	Chloride	207	mg/L	16.0	08/16/23 05:14	
EPA 300.0 Rev 2.1 1993	Fluoride	0.19	mg/L	0.10	08/15/23 17:22	
EPA 300.0 Rev 2.1 1993	Sulfate	763	mg/L	16.0	08/16/23 05:14	
<b>92682396002</b>	<b>HAM-INW-02</b>					
EPA 6010D	Calcium	306	mg/L	5.0	08/23/23 05:34	
EPA 6010D	Iron	9.4	mg/L	0.040	08/18/23 20:08	
EPA 6010D	Manganese	13.3	mg/L	0.040	08/18/23 20:08	
EPA 6010D	Potassium	6.6	mg/L	0.50	08/18/23 20:08	
EPA 6010D	Sodium	12.9	mg/L	1.0	08/18/23 20:08	
EPA 6010D	Magnesium	27.0	mg/L	0.050	08/18/23 20:08	
EPA 6020B	Arsenic	0.0054J	mg/L	0.010	08/18/23 19:18	
EPA 6020B	Barium	0.042	mg/L	0.0050	08/18/23 19:18	
EPA 6020B	Boron	6.3	mg/L	0.40	08/21/23 15:57	
EPA 6020B	Cobalt	0.050	mg/L	0.0050	08/18/23 19:18	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	08/18/23 19:18	
EPA 6020B	Thallium	0.00045J	mg/L	0.0010	08/18/23 19:18	
SM 2540C-2015	Total Dissolved Solids	1350	mg/L	25.0	08/15/23 16:55	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	166	mg/L	5.0	08/16/23 15:26	
SM 2320B-2011	Alkalinity, Total as CaCO3	166	mg/L	5.0	08/16/23 15:26	
EPA 300.0 Rev 2.1 1993	Chloride	135	mg/L	10.0	08/16/23 05:28	
EPA 300.0 Rev 2.1 1993	Sulfate	457	mg/L	10.0	08/16/23 05:28	
<b>92682396003</b>	<b>HAM-PT-01</b>					
EPA 6010D	Calcium	326	mg/L	5.0	08/23/23 05:39	
EPA 6010D	Manganese	10.3	mg/L	0.040	08/18/23 20:14	
EPA 6010D	Potassium	6.5	mg/L	0.50	08/18/23 20:14	
EPA 6010D	Sodium	10.6	mg/L	1.0	08/18/23 20:14	
EPA 6010D	Magnesium	39.0	mg/L	0.050	08/18/23 20:14	
EPA 6020B	Arsenic	0.0052J	mg/L	0.010	08/18/23 19:21	
EPA 6020B	Barium	0.037	mg/L	0.0050	08/18/23 19:21	
EPA 6020B	Beryllium	0.0021	mg/L	0.00050	08/18/23 19:21	
EPA 6020B	Boron	7.9	mg/L	0.20	08/21/23 16:03	

**REPORT OF LABORATORY ANALYSIS**

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### SUMMARY OF DETECTION

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92682396003</b>	<b>HAM-PT-01</b>					
EPA 6020B	Cadmium	0.0010	mg/L	0.00050	08/18/23 19:21	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	08/18/23 19:21	
EPA 6020B	Lithium	0.0039J	mg/L	0.030	08/18/23 19:21	
EPA 6020B	Selenium	0.020	mg/L	0.0050	08/18/23 19:21	
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/15/23 16:25	
SM 2540C-2015	Total Dissolved Solids	1820	mg/L	25.0	08/15/23 16:55	
EPA 300.0 Rev 2.1 1993	Chloride	141	mg/L	16.0	08/16/23 06:11	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.56	mg/L	0.10	08/15/23 17:51	
EPA 300.0 Rev 2.1 1993	Sulfate	762	mg/L	16.0	08/16/23 06:11	M1
<b>92682396004</b>	<b>HAM-PT-02</b>					
EPA 6010D	Iron	0.39	mg/L	0.040	08/18/23 20:19	
EPA 6010D	Manganese	11.5	mg/L	0.040	08/18/23 20:19	
EPA 6010D	Potassium	6.5	mg/L	0.50	08/18/23 20:19	
EPA 6010D	Sodium	9.8	mg/L	1.0	08/18/23 20:19	
EPA 6010D	Magnesium	37.2	mg/L	0.050	08/18/23 20:19	
EPA 6010D	Calcium	276	mg/L	5.0	08/23/23 05:44	
EPA 6020B	Arsenic	0.0051J	mg/L	0.010	08/18/23 19:33	
EPA 6020B	Barium	0.045	mg/L	0.0050	08/18/23 19:33	
EPA 6020B	Beryllium	0.0022	mg/L	0.00050	08/18/23 19:33	
EPA 6020B	Boron	8.4	mg/L	0.20	08/21/23 16:08	
EPA 6020B	Cadmium	0.00092	mg/L	0.00050	08/18/23 19:33	
EPA 6020B	Cobalt	0.13	mg/L	0.0050	08/18/23 19:33	
EPA 6020B	Lead	0.00071J	mg/L	0.0050	08/21/23 16:08	D3
EPA 6020B	Lithium	0.0043J	mg/L	0.030	08/18/23 19:33	
EPA 6020B	Selenium	0.021	mg/L	0.0050	08/18/23 19:33	
SM 2540C-2015	Total Dissolved Solids	1800	mg/L	25.0	08/15/23 16:55	
EPA 300.0 Rev 2.1 1993	Chloride	138	mg/L	17.0	08/16/23 06:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.67	mg/L	0.10	08/15/23 19:03	
EPA 300.0 Rev 2.1 1993	Sulfate	767	mg/L	17.0	08/16/23 06:54	
<b>92682396005</b>	<b>HAM-PT-03</b>					
EPA 6010D	Iron	0.59	mg/L	0.040	08/18/23 20:24	
EPA 6010D	Manganese	7.5	mg/L	0.040	08/18/23 20:24	
EPA 6010D	Potassium	6.6	mg/L	0.50	08/18/23 20:24	
EPA 6010D	Sodium	14.7	mg/L	1.0	08/18/23 20:24	
EPA 6010D	Magnesium	35.1	mg/L	0.050	08/18/23 20:24	
EPA 6010D	Calcium	360	mg/L	5.0	08/23/23 20:31	
EPA 6020B	Arsenic	0.0056J	mg/L	0.010	08/18/23 19:40	
EPA 6020B	Barium	0.021	mg/L	0.0050	08/18/23 19:40	
EPA 6020B	Beryllium	0.0024	mg/L	0.00050	08/18/23 19:40	
EPA 6020B	Boron	8.7	mg/L	0.20	08/21/23 16:14	
EPA 6020B	Cadmium	0.00055	mg/L	0.00050	08/18/23 19:40	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	08/18/23 19:40	
EPA 6020B	Lead	0.0020J	mg/L	0.0050	08/21/23 16:14	D3
EPA 6020B	Lithium	0.0023J	mg/L	0.030	08/18/23 19:40	
EPA 6020B	Selenium	0.021	mg/L	0.0050	08/18/23 19:40	
SM 2540C-2015	Total Dissolved Solids	1750	mg/L	25.0	08/15/23 16:55	

### REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92682396005</b>	<b>HAM-PT-03</b>					
EPA 300.0 Rev 2.1 1993	Chloride	113	mg/L	17.0	08/16/23 07:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.77	mg/L	0.10	08/15/23 19:18	
EPA 300.0 Rev 2.1 1993	Sulfate	778	mg/L	17.0	08/16/23 07:08	
<b>92682396006</b>	<b>HAM-PT-04</b>					
EPA 6010D	Calcium	287	mg/L	5.0	08/23/23 20:41	
EPA 6010D	Iron	13.2	mg/L	0.040	08/18/23 20:29	
EPA 6010D	Manganese	17.0	mg/L	0.040	08/18/23 20:29	
EPA 6010D	Potassium	7.6	mg/L	0.50	08/18/23 20:29	
EPA 6010D	Sodium	11.4	mg/L	1.0	08/18/23 20:29	
EPA 6010D	Magnesium	24.3	mg/L	0.050	08/18/23 20:29	
EPA 6020B	Arsenic	0.0081J	mg/L	0.010	08/18/23 19:44	
EPA 6020B	Barium	0.039	mg/L	0.0050	08/18/23 19:44	
EPA 6020B	Boron	7.8	mg/L	0.40	08/21/23 16:20	
EPA 6020B	Cobalt	0.056	mg/L	0.0050	08/18/23 19:44	
EPA 6020B	Lithium	0.0047J	mg/L	0.030	08/18/23 19:44	
EPA 6020B	Thallium	0.00027J	mg/L	0.0010	08/18/23 19:44	
SM 2540C-2015	Total Dissolved Solids	1320	mg/L	25.0	08/15/23 16:55	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	168	mg/L	5.0	08/16/23 14:27	
SM 2320B-2011	Alkalinity, Total as CaCO3	168	mg/L	5.0	08/16/23 14:27	
SM 4500-S2D-2011	Sulfide	0.031J	mg/L	0.10	08/15/23 06:27	
EPA 300.0 Rev 2.1 1993	Chloride	132	mg/L	10.0	08/16/23 07:22	
EPA 300.0 Rev 2.1 1993	Sulfate	458	mg/L	10.0	08/16/23 07:22	
<b>92682396007</b>	<b>HAM-PT-05</b>					
EPA 6010D	Calcium	370	mg/L	5.0	08/23/23 06:00	
EPA 6010D	Iron	1.6	mg/L	0.040	08/18/23 20:34	
EPA 6010D	Manganese	10.7	mg/L	0.040	08/18/23 20:34	
EPA 6010D	Potassium	5.0	mg/L	0.50	08/18/23 20:34	
EPA 6010D	Sodium	11.8	mg/L	1.0	08/18/23 20:34	
EPA 6010D	Magnesium	26.5	mg/L	0.050	08/18/23 20:34	
EPA 6020B	Barium	0.040	mg/L	0.0050	08/18/23 19:47	
EPA 6020B	Boron	7.2	mg/L	0.40	08/21/23 16:39	
EPA 6020B	Cobalt	0.039	mg/L	0.0050	08/18/23 19:47	
EPA 6020B	Lithium	0.0049J	mg/L	0.030	08/18/23 19:47	
SM 2540C-2015	Total Dissolved Solids	1480	mg/L	25.0	08/15/23 16:55	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	150	mg/L	5.0	08/16/23 14:39	
SM 2320B-2011	Alkalinity, Total as CaCO3	150	mg/L	5.0	08/16/23 14:39	
EPA 300.0 Rev 2.1 1993	Chloride	145	mg/L	10.0	08/16/23 07:36	
EPA 300.0 Rev 2.1 1993	Sulfate	479	mg/L	10.0	08/16/23 07:36	
<b>92682396008</b>	<b>HAM-PT-06</b>					
EPA 6010D	Calcium	300	mg/L	5.0	08/23/23 06:05	
EPA 6010D	Iron	5.8	mg/L	0.040	08/18/23 20:48	
EPA 6010D	Manganese	17.4	mg/L	0.040	08/18/23 20:48	
EPA 6010D	Potassium	7.3	mg/L	0.50	08/18/23 20:48	
EPA 6010D	Sodium	15.3	mg/L	1.0	08/18/23 20:48	
EPA 6010D	Magnesium	26.1	mg/L	0.050	08/18/23 20:48	
EPA 6020B	Barium	0.032	mg/L	0.0050	08/18/23 19:51	

## REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92682396008</b>	<b>HAM-PT-06</b>					
EPA 6020B	Boron	7.2	mg/L	0.40	08/21/23 16:45	
EPA 6020B	Cadmium	0.00025J	mg/L	0.00050	08/18/23 19:51	
EPA 6020B	Cobalt	0.058	mg/L	0.0050	08/18/23 19:51	
EPA 6020B	Lithium	0.0055J	mg/L	0.030	08/18/23 19:51	
EPA 6020B	Thallium	0.00064J	mg/L	0.0010	08/18/23 19:51	
SM 2540C-2015	Total Dissolved Solids	1420	mg/L	25.0	08/15/23 16:55	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	144	mg/L	5.0	08/16/23 14:51	
SM 2320B-2011	Alkalinity, Total as CaCO3	144	mg/L	5.0	08/16/23 14:51	
EPA 300.0 Rev 2.1 1993	Chloride	140	mg/L	10.0	08/16/23 07:50	
EPA 300.0 Rev 2.1 1993	Sulfate	473	mg/L	10.0	08/16/23 07:50	
<b>92682396009</b>	<b>HAM-MW-55</b>					
EPA 6020B	Boron	3.1	mg/L	0.40	08/23/23 18:31	
EPA 6020B	Cobalt	0.0044J	mg/L	0.0050	08/22/23 15:12	
<b>92682396010</b>	<b>HAM-MW-56</b>					
EPA 6020B	Boron	10.1	mg/L	0.40	08/23/23 18:37	M1
EPA 6020B	Cobalt	0.21	mg/L	0.0050	08/22/23 15:16	
<b>92682396011</b>	<b>HAM-MW-57</b>					
EPA 6020B	Boron	8.5	mg/L	0.40	08/23/23 18:55	
EPA 6020B	Cobalt	0.030	mg/L	0.0050	08/22/23 15:31	
<b>92682396012</b>	<b>HAM-MW-58</b>					
EPA 6020B	Boron	4.0	mg/L	0.40	08/23/23 19:01	
EPA 6020B	Cobalt	0.098	mg/L	0.0050	08/22/23 15:34	
<b>92682396013</b>	<b>HAM-MW-59</b>					
EPA 6020B	Boron	9.5	mg/L	0.40	08/23/23 19:07	
EPA 6020B	Cobalt	0.16	mg/L	0.0050	08/22/23 15:38	
<b>92682396014</b>	<b>HAM-AP2-FD-07</b>					
EPA 6010D	Iron	13.9	mg/L	0.040	08/18/23 20:53	
EPA 6010D	Manganese	17.7	mg/L	0.040	08/18/23 20:53	
EPA 6010D	Potassium	8.0	mg/L	0.50	08/18/23 20:53	
EPA 6010D	Sodium	12.2	mg/L	1.0	08/18/23 20:53	
EPA 6010D	Magnesium	25.3	mg/L	0.050	08/18/23 20:53	
EPA 6010D	Calcium	310	mg/L	5.0	08/23/23 06:10	
EPA 6020B	Arsenic	0.0088J	mg/L	0.010	08/22/23 16:24	
EPA 6020B	Barium	0.041	mg/L	0.0050	08/22/23 16:24	
EPA 6020B	Boron	7.7	mg/L	0.40	08/23/23 19:13	
EPA 6020B	Cobalt	0.058	mg/L	0.0050	08/22/23 16:24	
EPA 6020B	Lithium	0.0047J	mg/L	0.030	08/22/23 16:24	
EPA 6020B	Thallium	0.00024J	mg/L	0.0010	08/22/23 16:24	
SM 2540C-2015	Total Dissolved Solids	1460	mg/L	25.0	08/15/23 16:56	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	170	mg/L	5.0	08/16/23 15:03	
SM 2320B-2011	Alkalinity, Total as CaCO3	170	mg/L	5.0	08/16/23 15:03	
SM 4500-S2D-2011	Sulfide	0.032J	mg/L	0.10	08/15/23 06:28	
EPA 300.0 Rev 2.1 1993	Chloride	132	mg/L	10.0	08/16/23 08:05	
EPA 300.0 Rev 2.1 1993	Sulfate	454	mg/L	10.0	08/16/23 08:05	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-INW-01		Lab ID: 92682396001		Collected: 08/09/23 13:36		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	409	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 05:18	7440-70-2	
Iron	12.3	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:03	7439-89-6	
Manganese	20.7	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:03	7439-96-5	
Potassium	6.2	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:03	7440-09-7	
Sodium	12.5	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:03	7440-23-5	
Magnesium	58.4	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:03	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:14	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:14	7440-38-2	
Barium	0.053	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:14	7440-39-3	
Beryllium	0.00059	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:14	7440-41-7	
Boron	8.0	mg/L	0.40	0.086	10	08/16/23 10:27	08/21/23 15:51	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:14	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:14	7440-47-3	
Cobalt	0.11	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:14	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 19:14	7439-92-1	
Lithium	0.0036J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:14	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:14	7439-98-7	
Selenium	0.011	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:14	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 19:14	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	08/15/23 11:30	08/15/23 16:20	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1890	mg/L	25.0	25.0	1		08/15/23 16:53		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	46.5	mg/L	5.0	5.0	1		08/16/23 15:19		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:19		
Alkalinity, Total as CaCO3	46.5	mg/L	5.0	5.0	1		08/16/23 15:19		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:21	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	207	mg/L	16.0	9.6	16		08/16/23 05:14	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-INW-01 Lab ID: 92682396001 Collected: 08/09/23 13:36 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.19	mg/L	0.10	0.050	1		08/15/23 17:22	16984-48-8	
Sulfate	763	mg/L	16.0	8.0	16		08/16/23 05:14	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

**Sample: HAM-INW-02**      **Lab ID: 92682396002**      Collected: 08/09/23 13:10      Received: 08/11/23 13:12      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>306</b>	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 05:34	7440-70-2	
Iron	<b>9.4</b>	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:08	7439-89-6	
Manganese	<b>13.3</b>	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:08	7439-96-5	
Potassium	<b>6.6</b>	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:08	7440-09-7	
Sodium	<b>12.9</b>	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:08	7440-23-5	
Magnesium	<b>27.0</b>	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:08	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:18	7440-36-0	
Arsenic	<b>0.0054J</b>	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:18	7440-38-2	
Barium	<b>0.042</b>	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:18	7440-41-7	
Boron	<b>6.3</b>	mg/L	0.40	0.086	10	08/16/23 10:27	08/21/23 15:57	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:18	7440-47-3	
Cobalt	<b>0.050</b>	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 19:18	7439-92-1	
Lithium	<b>0.0038J</b>	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:18	7782-49-2	
Thallium	<b>0.00045J</b>	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 19:18	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	08/15/23 11:30	08/15/23 16:22	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1350</b>	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>166</b>	mg/L	5.0	5.0	1		08/16/23 15:26		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:26		
Alkalinity, Total as CaCO3	<b>166</b>	mg/L	5.0	5.0	1		08/16/23 15:26		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:22	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>135</b>	mg/L	10.0	6.0	10		08/16/23 05:28	16887-00-6	

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**ANALYTICAL RESULTS**

Project: Hammond AP-2-(CCR-CA)  
 Pace Project No.: 92682396

Sample: HAM-INW-02		Lab ID: 92682396002		Collected: 08/09/23 13:10		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 17:37	16984-48-8	
Sulfate	457	mg/L	10.0	5.0	10		08/16/23 05:28	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-01		Lab ID: 92682396003		Collected: 08/09/23 12:13		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	<b>326</b>	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 05:39	7440-70-2	
Iron	ND	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:14	7439-89-6	
Manganese	<b>10.3</b>	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:14	7439-96-5	
Potassium	<b>6.5</b>	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:14	7440-09-7	
Sodium	<b>10.6</b>	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:14	7440-23-5	
Magnesium	<b>39.0</b>	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:14	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:21	7440-36-0	
Arsenic	<b>0.0052J</b>	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:21	7440-38-2	
Barium	<b>0.037</b>	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:21	7440-39-3	
Beryllium	<b>0.0021</b>	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:21	7440-41-7	
Boron	<b>7.9</b>	mg/L	0.20	0.043	5	08/16/23 10:27	08/21/23 16:03	7440-42-8	
Cadmium	<b>0.0010</b>	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:21	7440-47-3	
Cobalt	<b>0.11</b>	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:21	7440-48-4	
Lead	ND	mg/L	0.0050	0.00060	5	08/16/23 10:27	08/21/23 16:03	7439-92-1	D3
Lithium	<b>0.0039J</b>	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:21	7439-98-7	
Selenium	<b>0.020</b>	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:21	7782-49-2	
Thallium	ND	mg/L	0.0050	0.00090	5	08/16/23 10:27	08/21/23 16:03	7440-28-0	D3
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	<b>0.00014J</b>	mg/L	0.00020	0.00013	1	08/15/23 11:30	08/15/23 16:25	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	<b>1820</b>	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:37		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:37		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/16/23 15:37		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:22	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>141</b>	mg/L	16.0	9.6	16		08/16/23 06:11	16887-00-6	M1

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### ANALYTICAL RESULTS

Project: Hammond AP-2(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-01 Lab ID: 92682396003 Collected: 08/09/23 12:13 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**  
 Analytical Method: EPA 300.0 Rev 2.1 1993  
 Pace Analytical Services - Asheville

Fluoride	<b>0.56</b>	mg/L	0.10	0.050	1		08/15/23 17:51	16984-48-8	
Sulfate	<b>762</b>	mg/L	16.0	8.0	16		08/16/23 06:11	14808-79-8	M1

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## ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-02		Lab ID: 92682396004		Collected: 08/09/23 14:23		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	0.39	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:19	7439-89-6	
Manganese	11.5	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:19	7439-96-5	
Potassium	6.5	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:19	7440-09-7	
Sodium	9.8	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:19	7440-23-5	
Magnesium	37.2	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:19	7439-95-4	
Calcium	276	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 05:44	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	0.0012	1	08/16/23 10:27	08/18/23 19:33	7440-36-0	
Arsenic	0.0051J	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:33	7440-38-2	
Barium	0.045	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:33	7440-39-3	
Beryllium	0.0022	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:33	7440-41-7	
Boron	8.4	mg/L	0.20	0.043	5	08/16/23 10:27	08/21/23 16:08	7440-42-8	
Cadmium	0.00092	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:33	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:33	7440-47-3	
Cobalt	0.13	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:33	7440-48-4	
Lead	0.00071J	mg/L	0.0050	0.00060	5	08/16/23 10:27	08/21/23 16:08	7439-92-1	D3
Lithium	0.0043J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:33	7439-98-7	
Selenium	0.021	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:33	7782-49-2	
Thallium	ND	mg/L	0.0050	0.00090	5	08/16/23 10:27	08/21/23 16:08	7440-28-0	D3
<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	08/15/23 11:30	08/15/23 16:28	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1800	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:53		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:53		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/16/23 15:53		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:23	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	138	mg/L	17.0	10.2	17		08/16/23 06:54	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2 (CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-02 Lab ID: 92682396004 Collected: 08/09/23 14:23 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.67</b>	mg/L	0.10	0.050	1		08/15/23 19:03	16984-48-8	
Sulfate	<b>767</b>	mg/L	17.0	8.5	17		08/16/23 06:54	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-03		Lab ID: 92682396005		Collected: 08/09/23 10:47		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	0.59	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:24	7439-89-6	
Manganese	7.5	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:24	7439-96-5	
Potassium	6.6	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:24	7440-09-7	
Sodium	14.7	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:24	7440-23-5	
Magnesium	35.1	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:24	7439-95-4	
Calcium	360	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 20:31	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	0.0012	1	08/16/23 10:27	08/18/23 19:40	7440-36-0	
Arsenic	0.0056J	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:40	7440-38-2	
Barium	0.021	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:40	7440-39-3	
Beryllium	0.0024	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:40	7440-41-7	
Boron	8.7	mg/L	0.20	0.043	5	08/16/23 10:27	08/21/23 16:14	7440-42-8	
Cadmium	0.00055	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:40	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:40	7440-47-3	
Cobalt	0.11	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:40	7440-48-4	
Lead	0.0020J	mg/L	0.0050	0.00060	5	08/16/23 10:27	08/21/23 16:14	7439-92-1	D3
Lithium	0.0023J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:40	7439-98-7	
Selenium	0.021	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:40	7782-49-2	
Thallium	ND	mg/L	0.0050	0.00090	5	08/16/23 10:27	08/21/23 16:14	7440-28-0	D3
<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	08/15/23 11:30	08/15/23 16:35	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1750	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 16:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 16:16		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/16/23 16:16		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:25	18496-25-8	R1
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	113	mg/L	17.0	10.2	17		08/16/23 07:08	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-03 Lab ID: 92682396005 Collected: 08/09/23 10:47 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.77</b>	mg/L	0.10	0.050	1		08/15/23 19:18	16984-48-8	
Sulfate	<b>778</b>	mg/L	17.0	8.5	17		08/16/23 07:08	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

**Sample: HAM-PT-04**      **Lab ID: 92682396006**      Collected: 08/09/23 14:22      Received: 08/11/23 13:12      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>287</b>	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 20:41	7440-70-2	
Iron	<b>13.2</b>	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:29	7439-89-6	
Manganese	<b>17.0</b>	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:29	7439-96-5	
Potassium	<b>7.6</b>	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:29	7440-09-7	
Sodium	<b>11.4</b>	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:29	7440-23-5	
Magnesium	<b>24.3</b>	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:29	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:44	7440-36-0	
Arsenic	<b>0.0081J</b>	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:44	7440-38-2	
Barium	<b>0.039</b>	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:44	7440-41-7	
Boron	<b>7.8</b>	mg/L	0.40	0.086	10	08/16/23 10:27	08/21/23 16:20	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:44	7440-47-3	
Cobalt	<b>0.056</b>	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 19:44	7439-92-1	
Lithium	<b>0.0047J</b>	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:44	7782-49-2	
Thallium	<b>0.00027J</b>	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 19:44	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	08/15/23 11:30	08/15/23 16:38	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>1320</b>	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>168</b>	mg/L	5.0	5.0	1		08/16/23 14:27		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 14:27		
Alkalinity, Total as CaCO3	<b>168</b>	mg/L	5.0	5.0	1		08/16/23 14:27		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	<b>0.031J</b>	mg/L	0.10	0.022	1		08/15/23 06:27	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>132</b>	mg/L	10.0	6.0	10		08/16/23 07:22	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-04 Lab ID: 92682396006 Collected: 08/09/23 14:22 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 19:32	16984-48-8	
Sulfate	458	mg/L	10.0	5.0	10		08/16/23 07:22	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-05		Lab ID: 92682396007		Collected: 08/09/23 17:39		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	370	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 06:00	7440-70-2	
Iron	1.6	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:34	7439-89-6	
Manganese	10.7	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:34	7439-96-5	
Potassium	5.0	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:34	7440-09-7	
Sodium	11.8	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:34	7440-23-5	
Magnesium	26.5	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:34	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:47	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:47	7440-38-2	
Barium	0.040	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:47	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:47	7440-41-7	
Boron	7.2	mg/L	0.40	0.086	10	08/16/23 10:27	08/21/23 16:39	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:47	7440-47-3	
Cobalt	0.039	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 19:47	7439-92-1	
Lithium	0.0049J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 19:47	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	08/15/23 11:30	08/15/23 16:41	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1480	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	150	mg/L	5.0	5.0	1		08/16/23 14:39		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 14:39		
Alkalinity, Total as CaCO3	150	mg/L	5.0	5.0	1		08/16/23 14:39		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:27	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	145	mg/L	10.0	6.0	10		08/16/23 07:36	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-05 Lab ID: 92682396007 Collected: 08/09/23 17:39 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 19:47	16984-48-8	
Sulfate	479	mg/L	10.0	5.0	10		08/16/23 07:36	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-PT-06		Lab ID: 92682396008		Collected: 08/09/23 15:48		Received: 08/11/23 13:12		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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	300	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 06:05	7440-70-2	
Iron	5.8	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:48	7439-89-6	
Manganese	17.4	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:48	7439-96-5	
Potassium	7.3	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:48	7440-09-7	
Sodium	15.3	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:48	7440-23-5	
Magnesium	26.1	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:48	7439-95-4	
<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	0.0012	1	08/16/23 10:27	08/18/23 19:51	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 10:27	08/18/23 19:51	7440-38-2	
Barium	0.032	mg/L	0.0050	0.00067	1	08/16/23 10:27	08/18/23 19:51	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 10:27	08/18/23 19:51	7440-41-7	
Boron	7.2	mg/L	0.40	0.086	10	08/16/23 10:27	08/21/23 16:45	7440-42-8	
Cadmium	0.00025J	mg/L	0.00050	0.00011	1	08/16/23 10:27	08/18/23 19:51	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 10:27	08/18/23 19:51	7440-47-3	
Cobalt	0.058	mg/L	0.0050	0.00039	1	08/16/23 10:27	08/18/23 19:51	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 10:27	08/18/23 19:51	7439-92-1	
Lithium	0.0055J	mg/L	0.030	0.00073	1	08/16/23 10:27	08/18/23 19:51	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 10:27	08/18/23 19:51	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 10:27	08/18/23 19:51	7782-49-2	
Thallium	0.00064J	mg/L	0.0010	0.00018	1	08/16/23 10:27	08/18/23 19:51	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	08/15/23 11:30	08/15/23 16:43	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1420	mg/L	25.0	25.0	1		08/15/23 16:55		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	144	mg/L	5.0	5.0	1		08/16/23 14:51		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 14:51		
Alkalinity, Total as CaCO3	144	mg/L	5.0	5.0	1		08/16/23 14:51		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:27	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	140	mg/L	10.0	6.0	10		08/16/23 07:50	16887-00-6	

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**ANALYTICAL RESULTS**

Project: Hammond AP-2-(CCR-CA)  
 Pace Project No.: 92682396

Sample: HAM-PT-06		Lab ID: 92682396008		Collected: 08/09/23 15:48	Received: 08/11/23 13:12	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 20:01	16984-48-8	
Sulfate	<b>473</b>	mg/L	10.0	5.0	10		08/16/23 07:50	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-MW-55 Lab ID: 92682396009 Collected: 08/09/23 18:22 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	3.1	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 18:31	7440-42-8	
Cobalt	0.0044J	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 15:12	7440-48-4	

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**ANALYTICAL RESULTS**

Project: Hammond AP-2 (CCR-CA)  
 Pace Project No.: 92682396

<b>Sample: HAM-MW-56</b>		<b>Lab ID: 92682396010</b>	Collected: 08/09/23 16:51	Received: 08/11/23 13:12	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual

**6020 MET ICPMS**

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

Boron	<b>10.1</b>	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 18:37	7440-42-8	M1
Cobalt	<b>0.21</b>	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 15:16	7440-48-4	

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### ANALYTICAL RESULTS

Project: Hammond AP-2 (CCR-CA)

Pace Project No.: 92682396

Sample: HAM-MW-57 Lab ID: 92682396011 Collected: 08/09/23 12:28 Received: 08/11/23 13:12 Matrix: Water

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

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

Boron	<b>8.5</b>	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 18:55	7440-42-8	
Cobalt	<b>0.030</b>	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 15:31	7440-48-4	

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### ANALYTICAL RESULTS

Project: Hammond AP-2 (CCR-CA)

Pace Project No.: 92682396

Sample: HAM-MW-58 Lab ID: 92682396012 Collected: 08/09/23 10:34 Received: 08/11/23 13:12 Matrix: Water

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

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

Boron	<b>4.0</b>	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:01	7440-42-8	
Cobalt	<b>0.098</b>	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 15:34	7440-48-4	

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### ANALYTICAL RESULTS

Project: Hammond AP-2 (CCR-CA)

Pace Project No.: 92682396

**Sample: HAM-MW-59**      **Lab ID: 92682396013**      Collected: 08/09/23 16:51      Received: 08/11/23 13:12      Matrix: Water

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

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

Boron	<b>9.5</b>	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:07	7440-42-8	
Cobalt	<b>0.16</b>	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 15:38	7440-48-4	

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## ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-AP2-FD-07 Lab ID: 92682396014 Collected: 08/09/23 00:00 Received: 08/11/23 13:12 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									
Iron	13.9	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:53	7439-89-6	
Manganese	17.7	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:53	7439-96-5	
Potassium	8.0	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:53	7440-09-7	
Sodium	12.2	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:53	7440-23-5	
Magnesium	25.3	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:53	7439-95-4	
Calcium	310	mg/L	5.0	0.61	5	08/18/23 10:36	08/23/23 06:10	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	0.0012	1	08/16/23 14:27	08/22/23 16:24	7440-36-0	
Arsenic	0.0088J	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:24	7440-38-2	
Barium	0.041	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:24	7440-41-7	
Boron	7.7	mg/L	0.40	0.086	10	08/16/23 14:27	08/23/23 19:13	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:24	7440-47-3	
Cobalt	0.058	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:24	7439-92-1	
Lithium	0.0047J	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:24	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:24	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:24	7782-49-2	
Thallium	0.00024J	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:24	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	08/17/23 13:00	08/17/23 18:09	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1460	mg/L	25.0	25.0	1		08/15/23 16:56		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	170	mg/L	5.0	5.0	1		08/16/23 15:03		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:03		
Alkalinity, Total as CaCO3	170	mg/L	5.0	5.0	1		08/16/23 15:03		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	0.032J	mg/L	0.10	0.022	1		08/15/23 06:28	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	132	mg/L	10.0	6.0	10		08/16/23 08:05	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-AP2-FD-07 Lab ID: 92682396014 Collected: 08/09/23 00:00 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 20:16	16984-48-8	
Sulfate	454	mg/L	10.0	5.0	10		08/16/23 08:05	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-AP2-FB-07 Lab ID: 92682396015 Collected: 08/09/23 18:10 Received: 08/11/23 13:12 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									
Iron	ND	mg/L	0.040	0.025	1	08/18/23 10:36	08/18/23 20:58	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	08/18/23 10:36	08/18/23 20:58	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	08/18/23 10:36	08/18/23 20:58	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	08/18/23 10:36	08/18/23 20:58	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	08/18/23 10:36	08/18/23 20:58	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	08/18/23 10:36	08/18/23 20:58	7439-95-4	
<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	0.0012	1	08/16/23 14:27	08/22/23 16:28	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	08/16/23 14:27	08/22/23 16:28	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/16/23 14:27	08/22/23 16:28	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/16/23 14:27	08/22/23 16:28	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/16/23 14:27	08/23/23 13:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/16/23 14:27	08/22/23 16:28	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/16/23 14:27	08/22/23 16:28	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/16/23 14:27	08/22/23 16:28	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/16/23 14:27	08/22/23 16:28	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/16/23 14:27	08/22/23 16:28	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/16/23 14:27	08/22/23 16:28	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/16/23 14:27	08/22/23 16:28	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/16/23 14:27	08/22/23 16:28	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	0.00013	1	08/17/23 13:00	08/17/23 18:20	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	25.0	25.0	1		08/15/23 16:56		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		08/16/23 15:15		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		08/16/23 15:15		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		08/15/23 06:28	18496-25-8	
<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		08/15/23 20:30	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Sample: HAM-AP2-FB-07 Lab ID: 92682396015 Collected: 08/09/23 18:10 Received: 08/11/23 13:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		08/15/23 20:30	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/15/23 20:30	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793618 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

METHOD BLANK: 4112489 Matrix: Water  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/18/23 19:00	
Iron	mg/L	ND	0.040	0.025	08/18/23 19:00	
Magnesium	mg/L	ND	0.050	0.012	08/18/23 19:00	
Manganese	mg/L	ND	0.040	0.011	08/18/23 19:00	
Potassium	mg/L	ND	0.50	0.15	08/18/23 19:00	
Sodium	mg/L	ND	1.0	0.58	08/18/23 19:00	

LABORATORY CONTROL SAMPLE: 4112490

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	108	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.0	101	80-120	
Manganese	mg/L	1	0.99	99	80-120	
Potassium	mg/L	1	1.1	106	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112491 4112492

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92682392001 Result	Spike Conc.	Spike Conc.	Conc.								
Calcium	mg/L	8.4	1	1	8.8	9.3	35	92	75-125	6	20	M1	
Iron	mg/L	ND	1	1	1.0	1.0	100	100	75-125	0	20		
Magnesium	mg/L	3.4	1	1	4.1	4.3	72	92	75-125	5	20	M1	
Manganese	mg/L	ND	1	1	0.98	0.99	97	98	75-125	1	20		
Potassium	mg/L	0.32J	1	1	1.3	1.5	102	113	75-125	8	20		
Sodium	mg/L	9.5	1	1	10	10.5	44	103	75-125	6	20	M1	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793883 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008

METHOD BLANK: 4113580 Matrix: Water  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/18/23 18:03	
Arsenic	mg/L	ND	0.010	0.0037	08/18/23 18:03	
Barium	mg/L	ND	0.0050	0.00067	08/18/23 18:03	
Beryllium	mg/L	ND	0.00050	0.000054	08/18/23 18:03	
Boron	mg/L	ND	0.040	0.0086	08/18/23 18:03	
Cadmium	mg/L	ND	0.00050	0.00011	08/18/23 18:03	
Chromium	mg/L	ND	0.0050	0.0011	08/18/23 18:03	
Cobalt	mg/L	ND	0.0050	0.00039	08/18/23 18:03	
Lead	mg/L	ND	0.0010	0.00012	08/18/23 18:03	
Lithium	mg/L	ND	0.030	0.00073	08/18/23 18:03	
Molybdenum	mg/L	ND	0.010	0.00074	08/18/23 18:03	
Selenium	mg/L	ND	0.0050	0.0014	08/18/23 18:03	
Thallium	mg/L	ND	0.0010	0.00018	08/18/23 18:03	

LABORATORY CONTROL SAMPLE: 4113581

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.094	94	80-120	
Beryllium	mg/L	0.1	0.11	108	80-120	
Boron	mg/L	1	1.1	108	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.11	107	80-120	
Lithium	mg/L	0.1	0.11	113	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.11	107	80-120	
Thallium	mg/L	0.1	0.10	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113582 4113583

Parameter	Units	92681883002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result	MSD Spike Conc.						
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	105	100	75-125	5	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113582 4113583												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92681883002 Result	Spike Conc.	Spike Conc.	MS Result							
Arsenic	mg/L	ND	0.1	0.1	0.11	0.10	106	100	75-125	6	20	
Barium	mg/L	0.032	0.1	0.1	0.14	0.13	109	103	75-125	4	20	
Beryllium	mg/L	ND	0.1	0.1	0.097	0.092	97	92	75-125	5	20	
Boron	mg/L	0.18	1	1	1.2	1.2	102	98	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.096	100	95	75-125	4	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20	
Lead	mg/L	ND	0.1	0.1	0.11	0.10	109	104	75-125	5	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20	
Molybdenum	mg/L	0.0039J	0.1	0.1	0.11	0.10	102	99	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	110	104	75-125	6	20	
Thallium	mg/L	ND	0.1	0.1	0.11	0.10	108	103	75-125	5	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch:	794002	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92682396009, 92682396010, 92682396011, 92682396012, 92682396013, 92682396014, 92682396015

METHOD BLANK: 4114214 Matrix: Water

Associated Lab Samples: 92682396009, 92682396010, 92682396011, 92682396012, 92682396013, 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.0043	0.0030	0.0012	08/22/23 15:04	
Arsenic	mg/L	ND	0.010	0.0037	08/22/23 15:04	
Barium	mg/L	ND	0.0050	0.00067	08/22/23 15:04	
Beryllium	mg/L	ND	0.00050	0.000054	08/22/23 15:04	
Boron	mg/L	ND	0.040	0.0086	08/22/23 15:04	
Cadmium	mg/L	ND	0.00050	0.00011	08/22/23 15:04	
Chromium	mg/L	ND	0.0050	0.0011	08/22/23 15:04	
Cobalt	mg/L	ND	0.0050	0.00039	08/22/23 15:04	
Lead	mg/L	ND	0.0010	0.00012	08/22/23 15:04	
Lithium	mg/L	ND	0.030	0.00073	08/22/23 15:04	
Molybdenum	mg/L	ND	0.010	0.00074	08/22/23 15:04	
Selenium	mg/L	ND	0.0050	0.0014	08/22/23 15:04	
Thallium	mg/L	ND	0.0010	0.00018	08/22/23 15:04	

LABORATORY CONTROL SAMPLE: 4114215

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	112	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.11	110	80-120	
Boron	mg/L	1	1.1	110	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	105	80-120	
Lithium	mg/L	0.1	0.11	110	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.11	105	80-120	
Thallium	mg/L	0.1	0.11	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4114216 4114217

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92682396010	Spike Conc.	Spike Conc.	Result						
Antimony	mg/L	0.0014J	0.1	0.1	0.11	0.10	107	101	75-125	6	20
Arsenic	mg/L	0.0040J	0.1	0.1	0.12	0.11	112	104	75-125	7	20

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### QUALITY CONTROL DATA

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

Parameter	Units	4114216		4114217		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92682396010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Barium	mg/L	0.042	0.1	0.1	0.16	0.15	118	108	75-125	6	20	
Beryllium	mg/L	0.00071	0.1	0.1	0.090	0.085	89	84	75-125	6	20	
Boron	mg/L	10.1	1	1	10.9	10.7	77	57	75-125	2	20	M1
Cadmium	mg/L	0.00059	0.1	0.1	0.099	0.094	98	94	75-125	5	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.097	104	97	75-125	7	20	
Cobalt	mg/L	0.21	0.1	0.1	0.31	0.29	102	83	75-125	6	20	
Lead	mg/L	0.00013J	0.1	0.1	0.067	0.064	67	64	75-125	5	20	M1
Lithium	mg/L	0.0024J	0.1	0.1	0.097	0.092	95	89	75-125	6	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.10	109	104	75-125	5	20	
Selenium	mg/L	0.013	0.1	0.1	0.13	0.13	122	113	75-125	8	20	
Thallium	mg/L	0.00021J	0.1	0.1	0.069	0.066	68	65	75-125	5	20	M1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793573 Analysis Method: EPA 7470A  
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008

METHOD BLANK: 4112218 Matrix: Water  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/15/23 15:25	

LABORATORY CONTROL SAMPLE: 4112219

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112220 4112221

Parameter	Units	92681883001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0023	0.0021	88	81	75-125	8	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 794228

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92682396014, 92682396015

METHOD BLANK: 4115390

Matrix: Water

Associated Lab Samples: 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/17/23 17:06	

LABORATORY CONTROL SAMPLE: 4115391

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4115392 4115393

Parameter	Units	4115392		4115393		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	92682396014 ND	0.0025	0.0025	0.0026	0.0024	100	96	75-125	4	20

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QUALITY CONTROL DATA

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793700 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: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

METHOD BLANK: 4112841 Matrix: Water  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/15/23 16:52	

LABORATORY CONTROL SAMPLE: 4112842

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	446	112	80-120	

SAMPLE DUPLICATE: 4112843

Parameter	Units	92682396001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1890	1910	1	10	

SAMPLE DUPLICATE: 4112844

Parameter	Units	92682397001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	771	760	1	10	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793717 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005

METHOD BLANK: 4112919 Matrix: Water  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004, 92682396005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/16/23 12:53	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/16/23 12:53	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/16/23 12:53	

LABORATORY CONTROL SAMPLE: 4112920

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112922 4112923

Parameter	Units	92682396004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	52.3	52.9	98	99	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112924 4112925

Parameter	Units	92682396005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	45.8	45.7	89	89	80-120	0	25	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)  
 Pace Project No.: 92682396

QC Batch: 793896 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

METHOD BLANK: 4113632 Matrix: Water  
 Associated Lab Samples: 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	08/16/23 13:58	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	08/16/23 13:58	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	08/16/23 13:58	

LABORATORY CONTROL SAMPLE: 4113633

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

LABORATORY CONTROL SAMPLE: 4113634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	55.0	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113635 4113636

Parameter	Units	92682175001		92682175002		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Spike Conc.								
Alkalinity, Total as CaCO3	mg/L	464	50	50	487	487	47	46	80-120	0	25	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4113637 4113638

Parameter	Units	92682175002		92682175001		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Spike Conc.								
Alkalinity, Total as CaCO3	mg/L	12.5	50	50	65.7	65.4	106	106	80-120	0	25		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch:	793499	Analysis Method:	SM 4500-S2D-2011
QC Batch Method:	SM 4500-S2D-2011	Analysis Description:	4500S2D Sulfide Water
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92682396001, 92682396002, 92682396003, 92682396004		

METHOD BLANK: 4111952 Matrix: Water  
 Associated Lab Samples: 92682396001, 92682396002, 92682396003, 92682396004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	08/15/23 06:10	

LABORATORY CONTROL SAMPLE: 4111953

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.50	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111954 4111955

Parameter	Units	92681883001		4111954		4111955		% Rec Limits	RPD	Max RPD	Qual		
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS % Rec	MSD % Rec						
Sulfide	mg/L	0.16	0.5	0.68	0.5	0.59	0.5	102	84	80-120	14	10	R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111956 4111957

Parameter	Units	92681885005		4111956		4111957		% Rec Limits	RPD	Max RPD	Qual		
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS % Rec	MSD % Rec						
Sulfide	mg/L	0.14	0.5	0.53	0.5	0.60	0.5	79	93	80-120	12	10	M1,R1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch: 793500 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

METHOD BLANK: 4111958 Matrix: Water  
 Associated Lab Samples: 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	08/15/23 06:24	

LABORATORY CONTROL SAMPLE: 4111959

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.50	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111960 4111961

Parameter	Units	92682396005		4111961		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	ND	0.5	0.50	0.45	99	89	80-120	11	10	R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4111962 4111963

Parameter	Units	92682397007		4111963		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfide	mg/L	ND	0.5	0.53	0.55	104	108	80-120	4	10	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

QC Batch:	793550	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:	92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015		

METHOD BLANK:	4112126	Matrix:	Water
Associated Lab Samples:	92682396001, 92682396002, 92682396003, 92682396004, 92682396005, 92682396006, 92682396007, 92682396008, 92682396014, 92682396015		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/15/23 12:46	
Fluoride	mg/L	ND	0.10	0.050	08/15/23 12:46	
Sulfate	mg/L	ND	1.0	0.50	08/15/23 12:46	

LABORATORY CONTROL SAMPLE: 4112127						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.4	97	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	47.4	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112128												4112129	
Parameter	Units	92682198001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	ND	50	50	48.0	48.3	95	96	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	94	95	90-110	1	10		
Sulfate	mg/L	ND	50	50	47.3	47.6	93	94	90-110	1	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4112130												4112131	
Parameter	Units	92682396003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	141	50	50	179	180	77	78	90-110	0	10	M1	
Fluoride	mg/L	0.56	2.5	2.5	3.1	3.2	102	104	90-110	2	10		
Sulfate	mg/L	762	50	50	787	789	50	53	90-110	0	10	M1	

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## QUALIFIERS

Project: Hammond AP-2-(CCR-CA)

Pace Project No.: 92682396

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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

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

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 AP-2-(CCR-CA)

Pace Project No.: 92682396

Table with 6 columns: Lab ID, Sample ID, QC Batch Method, QC Batch, Analytical Method, Analytical Batch. It lists various sample IDs and their corresponding QC and analytical data.

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Hammond AP-2-(CCR-CA)  
 Pace Project No.: 92682396

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92682396002	HAM-INW-02	SM 2320B-2011	793717		
92682396003	HAM-PT-01	SM 2320B-2011	793717		
92682396004	HAM-PT-02	SM 2320B-2011	793717		
92682396005	HAM-PT-03	SM 2320B-2011	793717		
92682396006	HAM-PT-04	SM 2320B-2011	793896		
92682396007	HAM-PT-05	SM 2320B-2011	793896		
92682396008	HAM-PT-06	SM 2320B-2011	793896		
92682396014	HAM-AP2-FD-07	SM 2320B-2011	793896		
92682396015	HAM-AP2-FB-07	SM 2320B-2011	793896		
92682396001	HAM-INW-01	SM 4500-S2D-2011	793499		
92682396002	HAM-INW-02	SM 4500-S2D-2011	793499		
92682396003	HAM-PT-01	SM 4500-S2D-2011	793499		
92682396004	HAM-PT-02	SM 4500-S2D-2011	793499		
92682396005	HAM-PT-03	SM 4500-S2D-2011	793500		
92682396006	HAM-PT-04	SM 4500-S2D-2011	793500		
92682396007	HAM-PT-05	SM 4500-S2D-2011	793500		
92682396008	HAM-PT-06	SM 4500-S2D-2011	793500		
92682396014	HAM-AP2-FD-07	SM 4500-S2D-2011	793500		
92682396015	HAM-AP2-FB-07	SM 4500-S2D-2011	793500		
92682396001	HAM-INW-01	EPA 300.0 Rev 2.1 1993	793550		
92682396002	HAM-INW-02	EPA 300.0 Rev 2.1 1993	793550		
92682396003	HAM-PT-01	EPA 300.0 Rev 2.1 1993	793550		
92682396004	HAM-PT-02	EPA 300.0 Rev 2.1 1993	793550		
92682396005	HAM-PT-03	EPA 300.0 Rev 2.1 1993	793550		
92682396006	HAM-PT-04	EPA 300.0 Rev 2.1 1993	793550		
92682396007	HAM-PT-05	EPA 300.0 Rev 2.1 1993	793550		
92682396008	HAM-PT-06	EPA 300.0 Rev 2.1 1993	793550		
92682396014	HAM-AP2-FD-07	EPA 300.0 Rev 2.1 1993	793550		
92682396015	HAM-AP2-FB-07	EPA 300.0 Rev 2.1 1993	793550		

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DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: B A Power

Project #:

WO#: 92682396



Courier:  Fed Ex  UPS  USPS  Client  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 8/11/23  
TSK

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:  IR Gun ID: 230

Type of Ice:  Wet  Blue  None

Cooler Temp: 3.1 Correction Factor: 0.0 Add/Subtract (°C)

Temp should be above freezing to 6°C

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

Cooler Temp Corrected (°C): 3.1

USDA Regulated Soil (  N/A, water sample)

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

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

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input 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.
-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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
-Includes Date/Time/ID/Analysis Matrix:	<u>W</u>		
Headspace in VOA Vials (>5.6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

Project #

WO#: 92682396

PM: BV

Due Date: 08/25/23

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

CLIENT: 92- GP-HAM

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

\*\*\*Check all unpreserved Nitrates for chlorine

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

pH Adjustment Log for Preserved Samples

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

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



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

WO#: 92682396

PM: BV

Due Date: 08/25/23

CLIENT: 92- GP-HAM

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

pH Adjustment Log for Preserved Samples

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

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





September 2023



October 25, 2023

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

RE: Project: Week 1- Hammond-AP-2 CA  
Pace Project No.: 92689426

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on September 21, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

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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

Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92689426001	HAM-AP2-EB-01	Water	09/19/23 11:46	09/21/23 10:10
92689426002	HAM-AP2-FB-01	Water	09/19/23 11:35	09/21/23 10:10
92689426003	HAM-AP2-FD-01	Water	09/19/23 00:00	09/21/23 10:10
92689426004	HAM-PT-01	Water	09/19/23 18:22	09/21/23 10:10
92689426005	HAM-PT-02	Water	09/19/23 15:41	09/21/23 10:10
92689426006	HAM-PT-03	Water	09/19/23 07:40	09/21/23 10:10
92689426007	HAM-PT-04	Water	09/19/23 10:26	09/21/23 10:10
92689426008	HAM-PT-05	Water	09/19/23 13:30	09/21/23 10:10
92689426009	HAM-PT-06	Water	09/19/23 11:25	09/21/23 10:10

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92689426001	HAM-AP2-EB-01	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92689426002	HAM-AP2-FB-01	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92689426003	HAM-AP2-FD-01	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92689426004	HAM-PT-01	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92689426005	HAM-PT-02	EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92689426006	HAM-PT-03	EPA 6010D	DRB	6
		EPA 6020B	CW1	13

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92689426007	HAM-PT-04	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
92689426008	HAM-PT-05	SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	YEG	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
		92689426009	HAM-PT-06	EPA 6010D
EPA 6020B	CW1			13
EPA 7470A	VB			1
SM 2540C-2015	DL1			1
SM 2320B-2011	YEG			3
SM 4500-S2D-2011	JP1			1
EPA 300.0 Rev 2.1 1993	JCM			3

PASI-A = Pace Analytical Services - Asheville

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

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92689426003</b>	<b>HAM-AP2-FD-01</b>					
EPA 6010D	Iron	3.0	mg/L	0.040	10/17/23 19:36	
EPA 6010D	Manganese	6.1	mg/L	0.040	10/17/23 19:36	
EPA 6010D	Potassium	9.0	mg/L	0.50	10/17/23 19:36	
EPA 6010D	Magnesium	13.9	mg/L	0.050	10/17/23 19:36	
EPA 6010D	Sodium	570	mg/L	5.0	10/17/23 19:42	
EPA 6010D	Calcium	151	mg/L	5.0	10/17/23 19:42	
EPA 6020B	Arsenic	0.0093J	mg/L	0.010	10/03/23 18:26	
EPA 6020B	Barium	0.073	mg/L	0.0050	09/29/23 20:10	
EPA 6020B	Boron	4.4	mg/L	0.040	10/03/23 18:26	
EPA 6020B	Cobalt	0.018	mg/L	0.0050	10/03/23 18:26	
EPA 6020B	Lithium	0.0055J	mg/L	0.030	10/03/23 18:26	
EPA 6020B	Molybdenum	0.0040J	mg/L	0.010	09/29/23 20:10	
EPA 6020B	Thallium	0.00064J	mg/L	0.0010	09/29/23 20:10	
SM 2540C-2015	Total Dissolved Solids	2220	mg/L	50.0	09/26/23 11:34	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1450	mg/L	5.0	09/26/23 18:21	
SM 2320B-2011	Alkalinity, Total as CaCO3	1450	mg/L	5.0	09/26/23 18:21	
EPA 300.0 Rev 2.1 1993	Chloride	111	mg/L	9.0	09/24/23 23:47	
EPA 300.0 Rev 2.1 1993	Fluoride	0.13	mg/L	0.10	09/23/23 21:57	
EPA 300.0 Rev 2.1 1993	Sulfate	457	mg/L	9.0	09/24/23 23:47	
<b>92689426004</b>	<b>HAM-PT-01</b>					
EPA 6010D	Iron	0.18	mg/L	0.040	10/17/23 19:47	
EPA 6010D	Manganese	0.085	mg/L	0.040	10/17/23 19:47	
EPA 6010D	Potassium	4.2	mg/L	0.50	10/17/23 19:47	
EPA 6010D	Calcium	19.6	mg/L	1.0	10/17/23 19:47	
EPA 6010D	Magnesium	11.5	mg/L	0.050	10/17/23 19:47	
EPA 6010D	Sodium	2560	mg/L	20.0	10/17/23 19:52	
EPA 6020B	Antimony	0.0019J	mg/L	0.0030	10/03/23 18:30	
EPA 6020B	Barium	0.061	mg/L	0.0050	10/03/23 18:30	
EPA 6020B	Boron	0.29	mg/L	0.040	10/03/23 18:30	
EPA 6020B	Chromium	0.0012J	mg/L	0.0050	10/03/23 18:30	
EPA 6020B	Cobalt	0.0011J	mg/L	0.0050	10/03/23 18:30	
EPA 6020B	Lead	0.00022J	mg/L	0.0010	10/02/23 18:26	
EPA 6020B	Molybdenum	0.0024J	mg/L	0.010	10/03/23 18:30	
EPA 6020B	Selenium	0.0014J	mg/L	0.0050	10/03/23 18:30	
SM 2540C-2015	Total Dissolved Solids	5800	mg/L	500	09/26/23 11:34	D6
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	5400	mg/L	5.0	09/29/23 15:54	
SM 2320B-2011	Alkalinity, Total as CaCO3	5400	mg/L	5.0	09/29/23 15:54	
EPA 300.0 Rev 2.1 1993	Sulfate	152	mg/L	3.0	09/25/23 00:01	M1
<b>92689426005</b>	<b>HAM-PT-02</b>					
EPA 6010D	Sodium	2170	mg/L	20.0	10/17/23 20:13	
EPA 6010D	Iron	0.030J	mg/L	0.040	10/17/23 19:57	
EPA 6010D	Manganese	1.8	mg/L	0.040	10/17/23 19:57	
EPA 6010D	Potassium	5.6	mg/L	0.50	10/17/23 19:57	
EPA 6010D	Calcium	54.1	mg/L	1.0	10/17/23 19:57	
EPA 6010D	Magnesium	15.1	mg/L	0.050	10/17/23 19:57	
EPA 6020B	Barium	0.078	mg/L	0.0050	09/29/23 20:18	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92689426005</b>	<b>HAM-PT-02</b>					
EPA 6020B	Boron	1.1	mg/L	0.040	10/03/23 18:34	
EPA 6020B	Cobalt	0.0081	mg/L	0.0050	10/03/23 18:34	
EPA 6020B	Lithium	0.00098J	mg/L	0.030	10/03/23 18:34	
EPA 6020B	Molybdenum	0.0029J	mg/L	0.010	09/29/23 20:18	
EPA 6020B	Selenium	0.0017J	mg/L	0.0050	10/03/23 18:34	
SM 2540C-2015	Total Dissolved Solids	3880	mg/L	500	09/26/23 11:36	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	4380	mg/L	5.0	09/27/23 18:38	
SM 2320B-2011	Alkalinity, Total as CaCO3	4380	mg/L	5.0	09/27/23 18:38	
EPA 300.0 Rev 2.1 1993	Chloride	9.8	mg/L	1.0	09/24/23 20:40	
EPA 300.0 Rev 2.1 1993	Fluoride	0.17	mg/L	0.10	09/24/23 20:40	
EPA 300.0 Rev 2.1 1993	Sulfate	260	mg/L	5.0	09/25/23 00:43	
<b>92689426006</b>	<b>HAM-PT-03</b>					
EPA 6010D	Calcium	367	mg/L	5.0	10/17/23 20:24	
EPA 6010D	Iron	0.88	mg/L	0.040	10/17/23 20:18	
EPA 6010D	Manganese	6.3	mg/L	0.040	10/17/23 20:18	
EPA 6010D	Potassium	6.2	mg/L	0.50	10/17/23 20:18	
EPA 6010D	Sodium	125	mg/L	1.0	10/17/23 20:18	
EPA 6010D	Magnesium	36.0	mg/L	0.050	10/17/23 20:18	
EPA 6020B	Barium	0.031	mg/L	0.0050	10/02/23 18:30	
EPA 6020B	Beryllium	0.00019J	mg/L	0.00050	10/02/23 18:30	
EPA 6020B	Boron	6.9	mg/L	0.40	10/03/23 18:38	
EPA 6020B	Cobalt	0.030	mg/L	0.0050	10/02/23 18:30	
EPA 6020B	Lead	0.00037J	mg/L	0.0010	10/02/23 18:30	
EPA 6020B	Lithium	0.00088J	mg/L	0.030	10/02/23 18:30	
EPA 6020B	Selenium	0.0026J	mg/L	0.0050	10/02/23 18:30	
SM 2540C-2015	Total Dissolved Solids	1950	mg/L	50.0	09/26/23 11:37	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	232	mg/L	5.0	09/27/23 19:10	
SM 2320B-2011	Alkalinity, Total as CaCO3	232	mg/L	5.0	09/27/23 19:10	
EPA 300.0 Rev 2.1 1993	Chloride	229	mg/L	16.0	09/25/23 01:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.37	mg/L	0.10	09/24/23 20:55	
EPA 300.0 Rev 2.1 1993	Sulfate	788	mg/L	16.0	09/25/23 01:54	
<b>92689426007</b>	<b>HAM-PT-04</b>					
EPA 6010D	Iron	2.9	mg/L	0.040	10/17/23 20:29	
EPA 6010D	Manganese	6.6	mg/L	0.040	10/17/23 20:29	
EPA 6010D	Potassium	12.1	mg/L	0.50	10/17/23 20:29	
EPA 6010D	Magnesium	14.2	mg/L	0.050	10/17/23 20:29	
EPA 6010D	Calcium	169	mg/L	5.0	10/17/23 20:34	
EPA 6010D	Sodium	586	mg/L	10.0	10/23/23 21:01	
EPA 6020B	Arsenic	0.0092J	mg/L	0.010	10/03/23 18:42	
EPA 6020B	Barium	0.072	mg/L	0.0050	09/29/23 20:35	
EPA 6020B	Boron	4.2	mg/L	0.040	10/03/23 18:42	
EPA 6020B	Cobalt	0.018	mg/L	0.0050	10/03/23 18:42	
EPA 6020B	Lithium	0.0055J	mg/L	0.030	10/03/23 18:42	
EPA 6020B	Molybdenum	0.0040J	mg/L	0.010	09/29/23 20:35	
EPA 6020B	Thallium	0.00063J	mg/L	0.0010	09/29/23 20:35	
SM 2540C-2015	Total Dissolved Solids	2280	mg/L	50.0	09/26/23 11:37	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92689426007</b>	<b>HAM-PT-04</b>					
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1400	mg/L	5.0	09/27/23 19:18	
SM 2320B-2011	Alkalinity, Total as CaCO3	1400	mg/L	5.0	09/27/23 19:18	
EPA 300.0 Rev 2.1 1993	Chloride	107	mg/L	9.0	09/25/23 02:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	09/24/23 21:09	
EPA 300.0 Rev 2.1 1993	Sulfate	442	mg/L	9.0	09/25/23 02:08	
<b>92689426008</b>	<b>HAM-PT-05</b>					
EPA 6010D	Iron	0.34	mg/L	0.040	10/17/23 20:39	
EPA 6010D	Manganese	2.7	mg/L	0.040	10/17/23 20:39	
EPA 6010D	Potassium	8.1	mg/L	0.50	10/17/23 20:39	
EPA 6010D	Magnesium	16.0	mg/L	0.050	10/17/23 20:39	
EPA 6010D	Sodium	716	mg/L	5.0	10/17/23 20:45	
EPA 6010D	Calcium	87.4	mg/L	5.0	10/17/23 20:45	
EPA 6020B	Barium	0.066	mg/L	0.0050	09/29/23 20:39	
EPA 6020B	Boron	2.5	mg/L	0.040	10/03/23 18:46	
EPA 6020B	Cadmium	0.00030J	mg/L	0.00050	09/29/23 20:39	
EPA 6020B	Cobalt	0.0099	mg/L	0.0050	10/03/23 18:46	
EPA 6020B	Lead	0.00015J	mg/L	0.0010	09/29/23 20:39	
EPA 6020B	Lithium	0.0057J	mg/L	0.030	10/03/23 18:46	
EPA 6020B	Molybdenum	0.0034J	mg/L	0.010	09/29/23 20:39	
SM 2540C-2015	Total Dissolved Solids	3010	mg/L	50.0	09/26/23 11:37	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	2760	mg/L	5.0	09/27/23 19:30	
SM 2320B-2011	Alkalinity, Total as CaCO3	2760	mg/L	5.0	09/27/23 19:30	
EPA 300.0 Rev 2.1 1993	Chloride	49.5	mg/L	1.0	09/24/23 21:23	
EPA 300.0 Rev 2.1 1993	Fluoride	0.082J	mg/L	0.10	09/24/23 21:23	
EPA 300.0 Rev 2.1 1993	Sulfate	230	mg/L	5.0	09/25/23 02:22	
<b>92689426009</b>	<b>HAM-PT-06</b>					
EPA 6010D	Sodium	682	mg/L	5.0	10/17/23 20:55	
EPA 6010D	Calcium	226	mg/L	5.0	10/17/23 20:55	
EPA 6010D	Iron	1.2	mg/L	0.040	10/17/23 20:50	
EPA 6010D	Manganese	11.5	mg/L	0.040	10/17/23 20:50	
EPA 6010D	Potassium	11.0	mg/L	0.50	10/17/23 20:50	
EPA 6010D	Magnesium	17.1	mg/L	0.050	10/17/23 20:50	
EPA 6020B	Barium	0.052	mg/L	0.0050	10/04/23 19:10	
EPA 6020B	Boron	5.8	mg/L	0.20	10/05/23 13:29	M1
EPA 6020B	Cadmium	0.00045J	mg/L	0.00050	10/04/23 19:10	
EPA 6020B	Cobalt	0.029	mg/L	0.025	10/05/23 13:29	
EPA 6020B	Lithium	0.0079J	mg/L	0.15	10/05/23 13:29	D3
EPA 6020B	Molybdenum	0.0024J	mg/L	0.010	10/04/23 19:10	
EPA 6020B	Thallium	0.0010	mg/L	0.0010	10/04/23 19:10	
SM 2540C-2015	Total Dissolved Solids	2120	mg/L	50.0	09/26/23 11:37	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1270	mg/L	5.0	09/27/23 19:47	
SM 2320B-2011	Alkalinity, Total as CaCO3	1270	mg/L	5.0	09/27/23 19:47	
EPA 300.0 Rev 2.1 1993	Chloride	99.0	mg/L	10.0	09/25/23 02:36	
EPA 300.0 Rev 2.1 1993	Fluoride	0.065J	mg/L	0.10	09/24/23 21:37	
EPA 300.0 Rev 2.1 1993	Sulfate	460	mg/L	10.0	09/25/23 02:36	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-AP2-EB-01		Lab ID: 92689426001		Collected: 09/19/23 11:46		Received: 09/21/23 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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									
Iron	ND	mg/L	0.040	0.025	1	10/06/23 13:34	10/17/23 19:16	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	10/06/23 13:34	10/12/23 15:45	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	10/06/23 13:34	10/12/23 15:45	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	10/06/23 13:34	10/12/23 15:45	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	10/06/23 13:34	10/12/23 15:45	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	10/06/23 13:34	10/12/23 15:45	7439-95-4	
<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	0.0012	1	09/29/23 12:07	10/02/23 18:13	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	09/29/23 12:07	10/02/23 18:13	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/29/23 12:07	10/02/23 18:13	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/29/23 12:07	10/02/23 18:13	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/29/23 12:07	10/02/23 18:13	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/29/23 12:07	10/02/23 18:13	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/29/23 12:07	10/02/23 18:13	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/29/23 12:07	10/02/23 18:13	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/29/23 12:07	10/02/23 18:13	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/29/23 12:07	10/02/23 18:13	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/29/23 12:07	10/02/23 18:13	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/29/23 12:07	10/02/23 18:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/29/23 12:07	10/02/23 18:13	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	09/28/23 13:00	09/28/23 17:34	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	25.0	25.0	1		09/26/23 11:34		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/26/23 16:37		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/26/23 16:37		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/26/23 16:37		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		09/26/23 00:23	18496-25-8	
<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		09/23/23 21:28	16887-00-6	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-AP2-EB-01 Lab ID: 92689426001 Collected: 09/19/23 11:46 Received: 09/21/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	ND	mg/L	0.10	0.050	1		09/23/23 21:28	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/23/23 21:28	14808-79-8	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

**Sample:** HAM-AP2-FB-01      **Lab ID:** 92689426002      Collected: 09/19/23 11:35      Received: 09/21/23 10:10      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									
Iron	ND	mg/L	0.040	0.025	1	10/06/23 13:34	10/17/23 19:31	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	10/06/23 13:34	10/17/23 19:31	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	10/06/23 13:34	10/17/23 19:31	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	10/06/23 13:34	10/17/23 19:31	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	10/06/23 13:34	10/17/23 19:31	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	10/06/23 13:34	10/17/23 19:31	7439-95-4	
<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	0.0012	1	09/29/23 12:07	09/29/23 20:06	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	09/29/23 12:07	09/29/23 20:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/29/23 12:07	09/29/23 20:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/29/23 12:07	09/29/23 20:06	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/29/23 12:07	09/29/23 20:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/29/23 12:07	09/29/23 20:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/29/23 12:07	09/29/23 20:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/29/23 12:07	09/29/23 20:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/29/23 12:07	09/29/23 20:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/29/23 12:07	09/29/23 20:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/29/23 12:07	09/29/23 20:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/29/23 12:07	09/29/23 20:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/29/23 12:07	09/29/23 20:06	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	09/28/23 13:00	09/28/23 17:36	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	25.0	25.0	1		09/26/23 11:34		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/26/23 16:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/26/23 16:42		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/26/23 16:42		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		09/26/23 00:24	18496-25-8	
<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		09/23/23 21:42	16887-00-6	

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**ANALYTICAL RESULTS**

Project: Week 1- Hammond-AP-2 CA  
 Pace Project No.: 92689426

Sample: HAM-AP2-FB-01		Lab ID: 92689426002		Collected: 09/19/23 11:35		Received: 09/21/23 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		09/23/23 21:42	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/23/23 21:42	14808-79-8	

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## ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-AP2-FD-01		Lab ID: 92689426003		Collected: 09/19/23 00:00		Received: 09/21/23 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	3.0	mg/L	0.040	0.025	1	10/06/23 13:34	10/17/23 19:36	7439-89-6	
Manganese	6.1	mg/L	0.040	0.011	1	10/06/23 13:34	10/17/23 19:36	7439-96-5	
Potassium	9.0	mg/L	0.50	0.15	1	10/06/23 13:34	10/17/23 19:36	7440-09-7	
Magnesium	13.9	mg/L	0.050	0.012	1	10/06/23 13:34	10/17/23 19:36	7439-95-4	
Sodium	570	mg/L	5.0	2.9	5	10/06/23 13:34	10/17/23 19:42	7440-23-5	
Calcium	151	mg/L	5.0	0.61	5	10/06/23 13:34	10/17/23 19:42	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	0.0012	1	09/29/23 12:07	09/29/23 20:10	7440-36-0	
Arsenic	0.0093J	mg/L	0.010	0.0037	1	09/29/23 12:07	10/03/23 18:26	7440-38-2	
Barium	0.073	mg/L	0.0050	0.00067	1	09/29/23 12:07	09/29/23 20:10	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/29/23 12:07	10/03/23 18:26	7440-41-7	
Boron	4.4	mg/L	0.040	0.0086	1	09/29/23 12:07	10/03/23 18:26	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/29/23 12:07	09/29/23 20:10	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/29/23 12:07	10/03/23 18:26	7440-47-3	
Cobalt	0.018	mg/L	0.0050	0.00039	1	09/29/23 12:07	10/03/23 18:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/29/23 12:07	09/29/23 20:10	7439-92-1	
Lithium	0.0055J	mg/L	0.030	0.00073	1	09/29/23 12:07	10/03/23 18:26	7439-93-2	
Molybdenum	0.0040J	mg/L	0.010	0.00074	1	09/29/23 12:07	09/29/23 20:10	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/29/23 12:07	10/03/23 18:26	7782-49-2	
Thallium	0.00064J	mg/L	0.0010	0.00018	1	09/29/23 12:07	09/29/23 20:10	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	09/28/23 13:00	09/28/23 17:39	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	2220	mg/L	50.0	50.0	1		09/26/23 11:34		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	1450	mg/L	5.0	5.0	1		09/26/23 18:21		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/26/23 18:21		
Alkalinity, Total as CaCO3	1450	mg/L	5.0	5.0	1		09/26/23 18:21		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		09/26/23 00:25	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	111	mg/L	9.0	5.4	9		09/24/23 23:47	16887-00-6	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-AP2-FD-01 Lab ID: 92689426003 Collected: 09/19/23 00:00 Received: 09/21/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.13</b>	mg/L	0.10	0.050	1		09/23/23 21:57	16984-48-8	
Sulfate	<b>457</b>	mg/L	9.0	4.5	9		09/24/23 23:47	14808-79-8	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-PT-01		Lab ID: 92689426004		Collected: 09/19/23 18:22		Received: 09/21/23 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	0.18	mg/L	0.040	0.025	1	10/06/23 13:34	10/17/23 19:47	7439-89-6	
Manganese	0.085	mg/L	0.040	0.011	1	10/06/23 13:34	10/17/23 19:47	7439-96-5	
Potassium	4.2	mg/L	0.50	0.15	1	10/06/23 13:34	10/17/23 19:47	7440-09-7	
Calcium	19.6	mg/L	1.0	0.12	1	10/06/23 13:34	10/17/23 19:47	7440-70-2	
Magnesium	11.5	mg/L	0.050	0.012	1	10/06/23 13:34	10/17/23 19:47	7439-95-4	
Sodium	2560	mg/L	20.0	11.7	20	10/06/23 13:34	10/17/23 19:52	7440-23-5	
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	0.0019J	mg/L	0.0030	0.0012	1	09/29/23 12:07	10/03/23 18:30	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	09/29/23 12:07	10/03/23 18:30	7440-38-2	
Barium	0.061	mg/L	0.0050	0.00067	1	09/29/23 12:07	10/03/23 18:30	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/29/23 12:07	10/03/23 18:30	7440-41-7	
Boron	0.29	mg/L	0.040	0.0086	1	09/29/23 12:07	10/03/23 18:30	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/29/23 12:07	10/03/23 18:30	7440-43-9	
Chromium	0.0012J	mg/L	0.0050	0.0011	1	09/29/23 12:07	10/03/23 18:30	7440-47-3	
Cobalt	0.0011J	mg/L	0.0050	0.00039	1	09/29/23 12:07	10/03/23 18:30	7440-48-4	
Lead	0.00022J	mg/L	0.0010	0.00012	1	09/29/23 12:07	10/02/23 18:26	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/29/23 12:07	10/03/23 18:30	7439-93-2	
Molybdenum	0.0024J	mg/L	0.010	0.00074	1	09/29/23 12:07	10/03/23 18:30	7439-98-7	
Selenium	0.0014J	mg/L	0.0050	0.0014	1	09/29/23 12:07	10/03/23 18:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/29/23 12:07	10/02/23 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	0.00013	1	09/28/23 13:00	09/28/23 17:42	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	5800	mg/L	500	500	1		09/26/23 11:34		D6
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	5400	mg/L	5.0	5.0	1		09/29/23 15:54		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/29/23 15:54		
Alkalinity, Total as CaCO3	5400	mg/L	5.0	5.0	1		09/29/23 15:54		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		09/26/23 00:25	18496-25-8	
<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		09/24/23 19:57	16887-00-6	M1

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

**Sample: HAM-PT-01**      **Lab ID: 92689426004**      Collected: 09/19/23 18:22      Received: 09/21/23 10:10      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**      Analytical Method: EPA 300.0 Rev 2.1 1993  
 Pace Analytical Services - Asheville

Fluoride	ND	mg/L	0.10	0.050	1		09/24/23 19:57	16984-48-8	M1
Sulfate	<b>152</b>	mg/L	3.0	1.5	3		09/25/23 00:01	14808-79-8	M1

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## ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-PT-02		Lab ID: 92689426005		Collected: 09/19/23 15:41		Received: 09/21/23 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Sodium	2170	mg/L	20.0	11.7	20	10/06/23 13:34	10/17/23 20:13	7440-23-5	
Iron	0.030J	mg/L	0.040	0.025	1	10/06/23 13:34	10/17/23 19:57	7439-89-6	
Manganese	1.8	mg/L	0.040	0.011	1	10/06/23 13:34	10/17/23 19:57	7439-96-5	
Potassium	5.6	mg/L	0.50	0.15	1	10/06/23 13:34	10/17/23 19:57	7440-09-7	
Calcium	54.1	mg/L	1.0	0.12	1	10/06/23 13:34	10/17/23 19:57	7440-70-2	
Magnesium	15.1	mg/L	0.050	0.012	1	10/06/23 13:34	10/17/23 19:57	7439-95-4	
<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	0.0012	1	09/29/23 12:07	09/29/23 20:18	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	09/29/23 12:07	10/03/23 18:34	7440-38-2	
Barium	0.078	mg/L	0.0050	0.00067	1	09/29/23 12:07	09/29/23 20:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/29/23 12:07	10/03/23 18:34	7440-41-7	
Boron	1.1	mg/L	0.040	0.0086	1	09/29/23 12:07	10/03/23 18:34	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/29/23 12:07	10/03/23 18:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/29/23 12:07	10/03/23 18:34	7440-47-3	
Cobalt	0.0081	mg/L	0.0050	0.00039	1	09/29/23 12:07	10/03/23 18:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/29/23 12:07	09/29/23 20:18	7439-92-1	
Lithium	0.00098J	mg/L	0.030	0.00073	1	09/29/23 12:07	10/03/23 18:34	7439-93-2	
Molybdenum	0.0029J	mg/L	0.010	0.00074	1	09/29/23 12:07	09/29/23 20:18	7439-98-7	
Selenium	0.0017J	mg/L	0.0050	0.0014	1	09/29/23 12:07	10/03/23 18:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/29/23 12:07	09/29/23 20:18	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	09/28/23 13:00	09/28/23 17:49	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	3880	mg/L	500	500	1		09/26/23 11:36		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	4380	mg/L	5.0	5.0	1		09/27/23 18:38		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/27/23 18:38		
Alkalinity, Total as CaCO3	4380	mg/L	5.0	5.0	1		09/27/23 18:38		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		09/26/23 00:25	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	9.8	mg/L	1.0	0.60	1		09/24/23 20:40	16887-00-6	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-PT-02 Lab ID: 92689426005 Collected: 09/19/23 15:41 Received: 09/21/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.17</b>	mg/L	0.10	0.050	1		09/24/23 20:40	16984-48-8	
Sulfate	<b>260</b>	mg/L	5.0	2.5	5		09/25/23 00:43	14808-79-8	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-PT-03	Lab ID: 92689426006	Collected: 09/19/23 07:40	Received: 09/21/23 10:10	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	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	367	mg/L	5.0	0.61	5	10/06/23 13:34	10/17/23 20:24	7440-70-2	
Iron	0.88	mg/L	0.040	0.025	1	10/06/23 13:34	10/17/23 20:18	7439-89-6	
Manganese	6.3	mg/L	0.040	0.011	1	10/06/23 13:34	10/17/23 20:18	7439-96-5	
Potassium	6.2	mg/L	0.50	0.15	1	10/06/23 13:34	10/17/23 20:18	7440-09-7	
Sodium	125	mg/L	1.0	0.58	1	10/06/23 13:34	10/17/23 20:18	7440-23-5	
Magnesium	36.0	mg/L	0.050	0.012	1	10/06/23 13:34	10/17/23 20:18	7439-95-4	
<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	0.0012	1	09/29/23 12:07	10/02/23 18:30	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	09/29/23 12:07	10/02/23 18:30	7440-38-2	
Barium	0.031	mg/L	0.0050	0.00067	1	09/29/23 12:07	10/02/23 18:30	7440-39-3	
Beryllium	0.00019J	mg/L	0.00050	0.000054	1	09/29/23 12:07	10/02/23 18:30	7440-41-7	
Boron	6.9	mg/L	0.40	0.086	10	09/29/23 12:07	10/03/23 18:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/29/23 12:07	10/02/23 18:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/29/23 12:07	10/02/23 18:30	7440-47-3	
Cobalt	0.030	mg/L	0.0050	0.00039	1	09/29/23 12:07	10/02/23 18:30	7440-48-4	
Lead	0.00037J	mg/L	0.0010	0.00012	1	09/29/23 12:07	10/02/23 18:30	7439-92-1	
Lithium	0.00088J	mg/L	0.030	0.00073	1	09/29/23 12:07	10/02/23 18:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/29/23 12:07	10/02/23 18:30	7439-98-7	
Selenium	0.0026J	mg/L	0.0050	0.0014	1	09/29/23 12:07	10/02/23 18:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/29/23 12:07	10/02/23 18:30	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	09/28/23 13:00	09/28/23 17:52	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1950	mg/L	50.0	50.0	1		09/26/23 11:37		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	232	mg/L	5.0	5.0	1		09/27/23 19:10		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/27/23 19:10		
Alkalinity, Total as CaCO3	232	mg/L	5.0	5.0	1		09/27/23 19:10		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		09/26/23 00:26	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	229	mg/L	16.0	9.6	16		09/25/23 01:54	16887-00-6	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-PT-03 Lab ID: 92689426006 Collected: 09/19/23 07:40 Received: 09/21/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.37</b>	mg/L	0.10	0.050	1		09/24/23 20:55	16984-48-8	
Sulfate	<b>788</b>	mg/L	16.0	8.0	16		09/25/23 01:54	14808-79-8	

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## ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-PT-04		Lab ID: 92689426007		Collected: 09/19/23 10:26		Received: 09/21/23 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	2.9	mg/L	0.040	0.025	1	10/06/23 13:34	10/17/23 20:29	7439-89-6	
Manganese	6.6	mg/L	0.040	0.011	1	10/06/23 13:34	10/17/23 20:29	7439-96-5	
Potassium	12.1	mg/L	0.50	0.15	1	10/06/23 13:34	10/17/23 20:29	7440-09-7	
Magnesium	14.2	mg/L	0.050	0.012	1	10/06/23 13:34	10/17/23 20:29	7439-95-4	
Calcium	169	mg/L	5.0	0.61	5	10/06/23 13:34	10/17/23 20:34	7440-70-2	
Sodium	586	mg/L	10.0	5.8	10	10/06/23 13:34	10/23/23 21:01	7440-23-5	
<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	0.0012	1	09/29/23 12:07	09/29/23 20:35	7440-36-0	
Arsenic	0.0092J	mg/L	0.010	0.0037	1	09/29/23 12:07	10/03/23 18:42	7440-38-2	
Barium	0.072	mg/L	0.0050	0.00067	1	09/29/23 12:07	09/29/23 20:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/29/23 12:07	10/03/23 18:42	7440-41-7	
Boron	4.2	mg/L	0.040	0.0086	1	09/29/23 12:07	10/03/23 18:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/29/23 12:07	09/29/23 20:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/29/23 12:07	10/03/23 18:42	7440-47-3	
Cobalt	0.018	mg/L	0.0050	0.00039	1	09/29/23 12:07	10/03/23 18:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	09/29/23 12:07	09/29/23 20:35	7439-92-1	
Lithium	0.0055J	mg/L	0.030	0.00073	1	09/29/23 12:07	10/03/23 18:42	7439-93-2	
Molybdenum	0.0040J	mg/L	0.010	0.00074	1	09/29/23 12:07	09/29/23 20:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/29/23 12:07	10/03/23 18:42	7782-49-2	
Thallium	0.00063J	mg/L	0.0010	0.00018	1	09/29/23 12:07	09/29/23 20:35	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	09/28/23 13:00	09/28/23 17:55	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	2280	mg/L	50.0	50.0	1		09/26/23 11:37		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	1400	mg/L	5.0	5.0	1		09/27/23 19:18		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/27/23 19:18		
Alkalinity, Total as CaCO3	1400	mg/L	5.0	5.0	1		09/27/23 19:18		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		09/26/23 00:27	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	107	mg/L	9.0	5.4	9		09/25/23 02:08	16887-00-6	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

**Sample: HAM-PT-04**      **Lab ID: 92689426007**      Collected: 09/19/23 10:26      Received: 09/21/23 10:10      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

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

Fluoride	<b>0.12</b>	mg/L	0.10	0.050	1		09/24/23 21:09	16984-48-8	
Sulfate	<b>442</b>	mg/L	9.0	4.5	9		09/25/23 02:08	14808-79-8	

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## ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-PT-05		Lab ID: 92689426008		Collected: 09/19/23 13:30		Received: 09/21/23 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	0.34	mg/L	0.040	0.025	1	10/06/23 13:34	10/17/23 20:39	7439-89-6	
Manganese	2.7	mg/L	0.040	0.011	1	10/06/23 13:34	10/17/23 20:39	7439-96-5	
Potassium	8.1	mg/L	0.50	0.15	1	10/06/23 13:34	10/17/23 20:39	7440-09-7	
Magnesium	16.0	mg/L	0.050	0.012	1	10/06/23 13:34	10/17/23 20:39	7439-95-4	
Sodium	716	mg/L	5.0	2.9	5	10/06/23 13:34	10/17/23 20:45	7440-23-5	
Calcium	87.4	mg/L	5.0	0.61	5	10/06/23 13:34	10/17/23 20:45	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	0.0012	1	09/29/23 12:07	09/29/23 20:39	7440-36-0	
Arsenic	ND	mg/L	0.010	0.0037	1	09/29/23 12:07	10/03/23 18:46	7440-38-2	
Barium	0.066	mg/L	0.0050	0.00067	1	09/29/23 12:07	09/29/23 20:39	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/29/23 12:07	10/03/23 18:46	7440-41-7	
Boron	2.5	mg/L	0.040	0.0086	1	09/29/23 12:07	10/03/23 18:46	7440-42-8	
Cadmium	0.00030J	mg/L	0.00050	0.00011	1	09/29/23 12:07	09/29/23 20:39	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/29/23 12:07	10/03/23 18:46	7440-47-3	
Cobalt	0.0099	mg/L	0.0050	0.00039	1	09/29/23 12:07	10/03/23 18:46	7440-48-4	
Lead	0.00015J	mg/L	0.0010	0.00012	1	09/29/23 12:07	09/29/23 20:39	7439-92-1	
Lithium	0.0057J	mg/L	0.030	0.00073	1	09/29/23 12:07	10/03/23 18:46	7439-93-2	
Molybdenum	0.0034J	mg/L	0.010	0.00074	1	09/29/23 12:07	09/29/23 20:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/29/23 12:07	10/03/23 18:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/29/23 12:07	09/29/23 20:39	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	0.00013	1	09/28/23 13:00	09/28/23 17:57	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	3010	mg/L	50.0	50.0	1		09/26/23 11:37		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	2760	mg/L	5.0	5.0	1		09/27/23 19:30		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/27/23 19:30		
Alkalinity, Total as CaCO3	2760	mg/L	5.0	5.0	1		09/27/23 19:30		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		09/26/23 00:27	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	49.5	mg/L	1.0	0.60	1		09/24/23 21:23	16887-00-6	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-PT-05		Lab ID: 92689426008		Collected: 09/19/23 13:30	Received: 09/21/23 10:10	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	<b>0.082J</b>	mg/L	0.10	0.050	1		09/24/23 21:23	16984-48-8	
Sulfate	<b>230</b>	mg/L	5.0	2.5	5		09/25/23 02:22	14808-79-8	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Sample: HAM-PT-06		Lab ID: 92689426009		Collected: 09/19/23 11:25		Received: 09/21/23 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Sodium	682	mg/L	5.0	2.9	5	10/06/23 13:34	10/17/23 20:55	7440-23-5	
Calcium	226	mg/L	5.0	0.61	5	10/06/23 13:34	10/17/23 20:55	7440-70-2	
Iron	1.2	mg/L	0.040	0.025	1	10/06/23 13:34	10/17/23 20:50	7439-89-6	
Manganese	11.5	mg/L	0.040	0.011	1	10/06/23 13:34	10/17/23 20:50	7439-96-5	
Potassium	11.0	mg/L	0.50	0.15	1	10/06/23 13:34	10/17/23 20:50	7440-09-7	
Magnesium	17.1	mg/L	0.050	0.012	1	10/06/23 13:34	10/17/23 20:50	7439-95-4	
<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	0.0012	1	10/03/23 13:13	10/04/23 19:10	7440-36-0	
Arsenic	ND	mg/L	0.050	0.018	5	10/03/23 13:13	10/05/23 13:29	7440-38-2	D3
Barium	0.052	mg/L	0.0050	0.00067	1	10/03/23 13:13	10/04/23 19:10	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	10/03/23 13:13	10/05/23 13:29	7440-41-7	D3
Boron	5.8	mg/L	0.20	0.043	5	10/03/23 13:13	10/05/23 13:29	7440-42-8	M1
Cadmium	0.00045J	mg/L	0.00050	0.00011	1	10/03/23 13:13	10/04/23 19:10	7440-43-9	
Chromium	ND	mg/L	0.025	0.0055	5	10/03/23 13:13	10/05/23 13:29	7440-47-3	D3
Cobalt	0.029	mg/L	0.025	0.0020	5	10/03/23 13:13	10/05/23 13:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	10/03/23 13:13	10/04/23 19:10	7439-92-1	
Lithium	0.0079J	mg/L	0.15	0.0036	5	10/03/23 13:13	10/05/23 13:29	7439-93-2	D3
Molybdenum	0.0024J	mg/L	0.010	0.00074	1	10/03/23 13:13	10/04/23 19:10	7439-98-7	
Selenium	ND	mg/L	0.025	0.0068	5	10/03/23 13:13	10/05/23 13:29	7782-49-2	D3
Thallium	0.0010	mg/L	0.0010	0.00018	1	10/03/23 13:13	10/04/23 19:10	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	09/28/23 13:00	09/28/23 18:00	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	2120	mg/L	50.0	50.0	1		09/26/23 11:37		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	1270	mg/L	5.0	5.0	1		09/27/23 19:47		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/27/23 19:47		
Alkalinity, Total as CaCO3	1270	mg/L	5.0	5.0	1		09/27/23 19:47		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		09/26/23 00:27	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	99.0	mg/L	10.0	6.0	10		09/25/23 02:36	16887-00-6	

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### ANALYTICAL RESULTS

Project: Week 1- Hammond-AP-2 CA  
 Pace Project No.: 92689426

Sample: HAM-PT-06		Lab ID: 92689426009		Collected: 09/19/23 11:25		Received: 09/21/23 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	<b>0.065J</b>	mg/L	0.10	0.050	1		09/24/23 21:37	16984-48-8	
Sulfate	<b>460</b>	mg/L	10.0	5.0	10		09/25/23 02:36	14808-79-8	

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

QC Batch:	804685	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008, 92689426009		

METHOD BLANK:	4167200	Matrix:	Water
Associated Lab Samples:	92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008, 92689426009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	10/12/23 15:34	
Iron	mg/L	ND	0.040	0.025	10/17/23 19:05	
Magnesium	mg/L	ND	0.050	0.012	10/12/23 15:34	
Manganese	mg/L	ND	0.040	0.011	10/12/23 15:34	
Potassium	mg/L	0.17J	0.50	0.15	10/12/23 15:34	
Sodium	mg/L	ND	1.0	0.58	10/12/23 15:34	

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	101	80-120	
Iron	mg/L	1	0.99	99	80-120	
Magnesium	mg/L	1	1.0	100	80-120	
Manganese	mg/L	1	0.96	96	80-120	
Potassium	mg/L	1	1.2	117	80-120	
Sodium	mg/L	1	1.1	108	80-120	

Parameter	Units	4167202		4167203		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92689426001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	ND	1	1	0.97J	1.0	96	103	75-125	20	
Iron	mg/L	ND	1	1	0.94	0.98	94	97	75-125	4	20
Magnesium	mg/L	ND	1	1	0.96	0.96	96	96	75-125	0	20
Manganese	mg/L	ND	1	1	0.92	0.92	92	92	75-125	0	20
Potassium	mg/L	ND	1	1	0.89	1.0	76	92	75-125	16	20
Sodium	mg/L	ND	1	1	1.0	1.1	102	109	75-125	6	20

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### QUALITY CONTROL DATA

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

QC Batch: 803109 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008

METHOD BLANK: 4159738 Matrix: Water  
 Associated Lab Samples: 92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	09/29/23 19:41	
Arsenic	mg/L	ND	0.010	0.0037	09/29/23 19:41	
Barium	mg/L	ND	0.0050	0.00067	09/29/23 19:41	
Beryllium	mg/L	ND	0.00050	0.000054	09/29/23 19:41	
Boron	mg/L	ND	0.040	0.0086	09/29/23 19:41	
Cadmium	mg/L	ND	0.00050	0.00011	09/29/23 19:41	
Chromium	mg/L	ND	0.0050	0.0011	09/29/23 19:41	
Cobalt	mg/L	ND	0.0050	0.00039	09/29/23 19:41	
Lead	mg/L	ND	0.0010	0.00012	09/29/23 19:41	
Lithium	mg/L	ND	0.030	0.00073	09/29/23 19:41	
Molybdenum	mg/L	ND	0.010	0.00074	09/29/23 19:41	
Selenium	mg/L	ND	0.0050	0.0014	09/29/23 19:41	
Thallium	mg/L	ND	0.0010	0.00018	09/29/23 19:41	

LABORATORY CONTROL SAMPLE: 4159739

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.10	105	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.11	106	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4159740 4159741

Parameter	Units	92689426001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	113	100	75-125	12	20	

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4159740												4159741	
Parameter	Units	92689426001		MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual	
		Result	Conc.	Spike	Spike	Result	Result	% Rec	% Rec	Limits	RPD		
Arsenic	mg/L	ND	0.1	0.1	0.1	0.10	0.10	108	99	75-125	8	20	
Barium	mg/L	ND	0.1	0.1	0.1	0.11	0.096	108	96	75-125	12	20	
Beryllium	mg/L	ND	0.1	0.1	0.1	0.11	0.10	107	101	75-125	6	20	
Boron	mg/L	ND	1	1	1	1.1	1.0	111	103	75-125	8	20	
Cadmium	mg/L	ND	0.1	0.1	0.1	0.11	0.10	108	102	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.1	0.11	0.10	109	103	75-125	6	20	
Cobalt	mg/L	ND	0.1	0.1	0.1	0.11	0.10	110	103	75-125	7	20	
Lead	mg/L	ND	0.1	0.1	0.1	0.11	0.091	107	91	75-125	16	20	
Lithium	mg/L	ND	0.1	0.1	0.1	0.11	0.10	110	104	75-125	5	20	
Molybdenum	mg/L	ND	0.1	0.1	0.1	0.11	0.096	108	96	75-125	12	20	
Selenium	mg/L	ND	0.1	0.1	0.1	0.11	0.099	106	99	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.1	0.11	0.088	106	88	75-125	18	20	

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

QC Batch:	803733	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92689426009

METHOD BLANK: 4162519 Matrix: Water

Associated Lab Samples: 92689426009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	10/04/23 19:02	
Arsenic	mg/L	ND	0.010	0.0037	10/04/23 19:02	
Barium	mg/L	ND	0.0050	0.00067	10/04/23 19:02	
Beryllium	mg/L	ND	0.00050	0.000054	10/04/23 19:02	
Boron	mg/L	ND	0.040	0.0086	10/04/23 19:02	
Cadmium	mg/L	ND	0.00050	0.00011	10/04/23 19:02	
Chromium	mg/L	ND	0.0050	0.0011	10/04/23 19:02	
Cobalt	mg/L	ND	0.0050	0.00039	10/04/23 19:02	
Lead	mg/L	ND	0.0010	0.00012	10/04/23 19:02	
Lithium	mg/L	ND	0.030	0.00073	10/04/23 19:02	
Molybdenum	mg/L	ND	0.010	0.00074	10/04/23 19:02	
Selenium	mg/L	ND	0.0050	0.0014	10/04/23 19:02	
Thallium	mg/L	ND	0.0010	0.00018	10/04/23 19:02	

LABORATORY CONTROL SAMPLE: 4162520

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	109	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.11	105	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	110	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.11	112	80-120	
Molybdenum	mg/L	0.1	0.11	105	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4162521 4162522

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92689426009	Result	Spike Conc.	Spike Conc.								
Antimony	mg/L	ND	0.1	0.1	0.1	0.11	0.11	108	112	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.1	0.10	0.10	103	105	75-125	1	20	

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Parameter	Units	4162521		4162522		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92689426009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.052	0.1	0.1	0.16	0.17	108	117	75-125	6	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Boron	mg/L	5.8	1	1	6.9	7.3	115	155	75-125	5	20	M1	
Cadmium	mg/L	0.00045J	0.1	0.1	0.096	0.099	96	99	75-125	3	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	0	20		
Cobalt	mg/L	0.029	0.1	0.1	0.13	0.13	98	101	75-125	2	20		
Lead	mg/L	ND	0.1	0.1	0.090	0.096	89	95	75-125	7	20		
Lithium	mg/L	0.0079J	0.1	0.1	0.11J	0.11J	103	103	75-125		20		
Molybdenum	mg/L	0.0024J	0.1	0.1	0.11	0.11	104	108	75-125	4	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Thallium	mg/L	0.0010	0.1	0.1	0.090	0.095	89	94	75-125	6	20		

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

QC Batch: 802712 Analysis Method: EPA 7470A  
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008, 92689426009

METHOD BLANK: 4157672 Matrix: Water  
 Associated Lab Samples: 92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008, 92689426009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	09/28/23 17:28	

LABORATORY CONTROL SAMPLE: 4157673

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0028	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4157674 4157675

Parameter	Units	92689714001 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	0.0027	0.0027	108	107	75-125	1	20	

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

QC Batch: 802060 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: 92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008, 92689426009

METHOD BLANK: 4154549 Matrix: Water  
 Associated Lab Samples: 92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008, 92689426009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	09/26/23 11:29	

LABORATORY CONTROL SAMPLE: 4154550

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	381	95	80-120	

SAMPLE DUPLICATE: 4154551

Parameter	Units	92689423001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	146	148	1	10	

SAMPLE DUPLICATE: 4154552

Parameter	Units	92689426004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	5800	4260	31	10 D6	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

QC Batch: 802063 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92689426001, 92689426002, 92689426003

METHOD BLANK: 4154591 Matrix: Water  
 Associated Lab Samples: 92689426001, 92689426002, 92689426003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/26/23 13:29	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/26/23 13:29	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/26/23 13:29	

LABORATORY CONTROL SAMPLE: 4154592

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.2	102	80-120	

LABORATORY CONTROL SAMPLE: 4154593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.9	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4154594 4154595

Parameter	Units	92689006001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	214	50	50	276	274	123	120	80-120	1	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4154596 4154597

Parameter	Units	92689006002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	54.1	50	50	102	103	96	98	80-120	1	25	

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

QC Batch: 802369 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92689426005, 92689426006, 92689426007, 92689426008, 92689426009

METHOD BLANK: 4156231 Matrix: Water  
 Associated Lab Samples: 92689426005, 92689426006, 92689426007, 92689426008, 92689426009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/27/23 14:06	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/27/23 14:06	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/27/23 14:06	

LABORATORY CONTROL SAMPLE: 4156232

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.5	103	80-120	

LABORATORY CONTROL SAMPLE: 4156233

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.5	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4156234 4156235

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.								
Alkalinity, Total as CaCO3	mg/L	92689791018	115	50	50	169	169	107	107	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4156236 4156237

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.								
Alkalinity, Total as CaCO3	mg/L	92690079001	157	50	50	204	206	94	98	80-120	1	25	

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

QC Batch: 803118

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92689426004

METHOD BLANK: 4159790

Matrix: Water

Associated Lab Samples: 92689426004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/29/23 16:04	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/29/23 16:04	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/29/23 16:04	

LABORATORY CONTROL SAMPLE: 4159791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.9	104	80-120	

LABORATORY CONTROL SAMPLE: 4159792

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.7	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4159793 4159794

Parameter	Units	92690198008		4159793		4159794		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					
Alkalinity, Total as CaCO3	mg/L	7.0	7.0	50	50	59.6	60.1	105	106	80-120	1	25

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4159795 4159796

Parameter	Units	92690198009		4159795		4159796		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					
Alkalinity, Total as CaCO3	mg/L	ND	ND	50	50	55.0	54.8	105	104	80-120	0	25

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

QC Batch: 801929 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008, 92689426009

METHOD BLANK: 4154115 Matrix: Water  
 Associated Lab Samples: 92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008, 92689426009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	09/26/23 00:22	

LABORATORY CONTROL SAMPLE: 4154116

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.53	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4154117 4154118

Parameter	Units	92689426001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.50	0.51	101	103	80-120	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4154119 4154120

Parameter	Units	92689510011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	0.024J	0.5	0.5	0.52	0.54	99	104	80-120	4	10	

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**QUALITY CONTROL DATA**

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

QC Batch:	801576	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:	92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008, 92689426009		

METHOD BLANK:	4152157	Matrix:	Water
Associated Lab Samples:	92689426001, 92689426002, 92689426003, 92689426004, 92689426005, 92689426006, 92689426007, 92689426008, 92689426009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/23/23 18:22	
Fluoride	mg/L	ND	0.10	0.050	09/23/23 18:22	
Sulfate	mg/L	ND	1.0	0.50	09/23/23 18:22	

LABORATORY CONTROL SAMPLE: 4152158						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.8	106	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	53.1	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4152159												4152160	
Parameter	Units	92689423010 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	55.5	56.0	103	104	90-110	1	10		
Fluoride	mg/L	0.082J	2.5	2.5	2.5	2.5	96	97	90-110	2	10		
Sulfate	mg/L	83.4	50	50	126	128	86	89	90-110	1	10 M1		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4152161												4152162	
Parameter	Units	92689426004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Chloride	mg/L	ND	50	50	ND	ND	0	0	90-110		10 M1		
Fluoride	mg/L	ND	2.5	2.5	ND	ND	0	0	90-110		10 M1		
Sulfate	mg/L	152	50	50	192	196	81	89	90-110	2	10 M1		

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## QUALIFIERS

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

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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

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

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

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

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92689426001	HAM-AP2-EB-01	EPA 3010A	804685	EPA 6010D	804769
92689426002	HAM-AP2-FB-01	EPA 3010A	804685	EPA 6010D	804769
92689426003	HAM-AP2-FD-01	EPA 3010A	804685	EPA 6010D	804769
92689426004	HAM-PT-01	EPA 3010A	804685	EPA 6010D	804769
92689426005	HAM-PT-02	EPA 3010A	804685	EPA 6010D	804769
92689426006	HAM-PT-03	EPA 3010A	804685	EPA 6010D	804769
92689426007	HAM-PT-04	EPA 3010A	804685	EPA 6010D	804769
92689426008	HAM-PT-05	EPA 3010A	804685	EPA 6010D	804769
92689426009	HAM-PT-06	EPA 3010A	804685	EPA 6010D	804769
92689426001	HAM-AP2-EB-01	EPA 3005A	803109	EPA 6020B	803192
92689426002	HAM-AP2-FB-01	EPA 3005A	803109	EPA 6020B	803192
92689426003	HAM-AP2-FD-01	EPA 3005A	803109	EPA 6020B	803192
92689426004	HAM-PT-01	EPA 3005A	803109	EPA 6020B	803192
92689426005	HAM-PT-02	EPA 3005A	803109	EPA 6020B	803192
92689426006	HAM-PT-03	EPA 3005A	803109	EPA 6020B	803192
92689426007	HAM-PT-04	EPA 3005A	803109	EPA 6020B	803192
92689426008	HAM-PT-05	EPA 3005A	803109	EPA 6020B	803192
92689426009	HAM-PT-06	EPA 3005A	803733	EPA 6020B	803905
92689426001	HAM-AP2-EB-01	EPA 7470A	802712	EPA 7470A	802784
92689426002	HAM-AP2-FB-01	EPA 7470A	802712	EPA 7470A	802784
92689426003	HAM-AP2-FD-01	EPA 7470A	802712	EPA 7470A	802784
92689426004	HAM-PT-01	EPA 7470A	802712	EPA 7470A	802784
92689426005	HAM-PT-02	EPA 7470A	802712	EPA 7470A	802784
92689426006	HAM-PT-03	EPA 7470A	802712	EPA 7470A	802784
92689426007	HAM-PT-04	EPA 7470A	802712	EPA 7470A	802784
92689426008	HAM-PT-05	EPA 7470A	802712	EPA 7470A	802784
92689426009	HAM-PT-06	EPA 7470A	802712	EPA 7470A	802784
92689426001	HAM-AP2-EB-01	SM 2540C-2015	802060		
92689426002	HAM-AP2-FB-01	SM 2540C-2015	802060		
92689426003	HAM-AP2-FD-01	SM 2540C-2015	802060		
92689426004	HAM-PT-01	SM 2540C-2015	802060		
92689426005	HAM-PT-02	SM 2540C-2015	802060		
92689426006	HAM-PT-03	SM 2540C-2015	802060		
92689426007	HAM-PT-04	SM 2540C-2015	802060		
92689426008	HAM-PT-05	SM 2540C-2015	802060		
92689426009	HAM-PT-06	SM 2540C-2015	802060		
92689426001	HAM-AP2-EB-01	SM 2320B-2011	802063		
92689426002	HAM-AP2-FB-01	SM 2320B-2011	802063		
92689426003	HAM-AP2-FD-01	SM 2320B-2011	802063		
92689426004	HAM-PT-01	SM 2320B-2011	803118		
92689426005	HAM-PT-02	SM 2320B-2011	802369		
92689426006	HAM-PT-03	SM 2320B-2011	802369		
92689426007	HAM-PT-04	SM 2320B-2011	802369		
92689426008	HAM-PT-05	SM 2320B-2011	802369		
92689426009	HAM-PT-06	SM 2320B-2011	802369		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Week 1- Hammond-AP-2 CA

Pace Project No.: 92689426

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92689426001	HAM-AP2-EB-01	SM 4500-S2D-2011	801929		
92689426002	HAM-AP2-FB-01	SM 4500-S2D-2011	801929		
92689426003	HAM-AP2-FD-01	SM 4500-S2D-2011	801929		
92689426004	HAM-PT-01	SM 4500-S2D-2011	801929		
92689426005	HAM-PT-02	SM 4500-S2D-2011	801929		
92689426006	HAM-PT-03	SM 4500-S2D-2011	801929		
92689426007	HAM-PT-04	SM 4500-S2D-2011	801929		
92689426008	HAM-PT-05	SM 4500-S2D-2011	801929		
92689426009	HAM-PT-06	SM 4500-S2D-2011	801929		
92689426001	HAM-AP2-EB-01	EPA 300.0 Rev 2.1 1993	801576		
92689426002	HAM-AP2-FB-01	EPA 300.0 Rev 2.1 1993	801576		
92689426003	HAM-AP2-FD-01	EPA 300.0 Rev 2.1 1993	801576		
92689426004	HAM-PT-01	EPA 300.0 Rev 2.1 1993	801576		
92689426005	HAM-PT-02	EPA 300.0 Rev 2.1 1993	801576		
92689426006	HAM-PT-03	EPA 300.0 Rev 2.1 1993	801576		
92689426007	HAM-PT-04	EPA 300.0 Rev 2.1 1993	801576		
92689426008	HAM-PT-05	EPA 300.0 Rev 2.1 1993	801576		
92689426009	HAM-PT-06	EPA 300.0 Rev 2.1 1993	801576		

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**CHAIN-OF-CUSTODY Analytical Request Document**  
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company Name: GA Power  
 Street Address: 241 Ralph McGill Blvd NE, Atlanta, GA 30308

Contact/Report To: Jurhko, Kristen  
 Phone #: 470-217-0008  
 E-Mail: krj@unhcr@southemco.com  
 CC E-Mail:

Customer Project #: Week 1-Hammond-AP-2-CA

Invoice To:  
 Invoice E-Mail:

Site Collection Info/Facility ID (as applicable):

Purchase Order # (if applicable):  
 Quote #:

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET

Regulatory Program (DW, RCRA, etc.) as applicable:  
 County / State origin of sample(s): Georgia

Data Deliverables:  
 Level II  Level III  Level IV  
 EQUIS  
 Other \_\_\_\_\_

Rush (Pre-approval required):  
 2 Day  3 day  5 day  Other \_\_\_\_\_  
 Date Results Requested:  
 Analysis:

Matrix Codes (insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Other (OT), Surface Water (SW), Sediment (SED), Sludge (SL), Cask

DW PWSID # or WW Permit # as applicable:  
 Field Filtered (if applicable): [ ] Yes [ ] No

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res. Cl2	Number & Type of Containers Plastic Glass	300.0-F, SO4, Cl	Alkalinity	App III/IV Metals + Major Ions	Sulfide	Total Dissolved Solids (TDS)	Additional Instructions from Pace®:
			Date	Time	Date	Time								
EXTRA 2	WT								X	X	X	X		
HAM-AP2-EB-01	WT		09/19/2023	1148					X	X	X	X		
HAM-AP2-EB-01	WT		09/19/2023	1135					X	X	X	X		
HAM-AP2-EB-01	WT		09/19/2023	0800					X	X	X	X		
HAM-PT-01	WT		09/19/2023	1822					X	X	X	X		
HAM-PT-02	WT		09/19/2023	1541					X	X	X	X		
HAM-PT-03	WT		09/19/2023	0740					X	X	X	X		
HAM-PT-04	WT		09/19/2023	1022					X	X	X	X		
HAM-PT-05	WT		09/19/2023	1244					X	X	X	X		

Customer Remarks / Special Conditions / Possible Hazards:  
 -Performance Monitoring: B, Ca, Cl, F, pH, Sulfate, TDS, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl, Major Ions: Bicarbonate Alk., Total Alk., Fe, Mg, Mn, K, Na, Sulfide

Collected By: Thomas Messler, Jacob King  
 Printed Name: Thomas Messler, Jacob King  
 Signature: [Signatures]

Received by/Company (Signature): [Signatures]  
 Date/Time: 09/19/2023 15:05  
 Received by/Company (Signature): [Signatures]  
 Date/Time: 09/21/2023 04:10  
 Received by/Company (Signature): [Signatures]  
 Date/Time: 09/21/2023 10:10  
 Received by/Company (Signature): [Signatures]  
 Date/Time: 09/21/2023 13:25



LAB USE ONLY - Add Workorder/Login Label Here  
**W0# : 92689426**  
 92689426

Specify Container Size \*\*  
 Identify Container Preservation Type\*\*\*  
 Analysis Requested

Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL Vial, (7) Erlenmeyer, (8) Test Tube, (9) Other  
 Preservation Type: (1) None, (2) HHO3, (3) H2SO4, (4) HCl, (5) HNO3, (6) Zn Acetate, (7) H2SO4, (8) Seal, Thiosulfate, (9) Acetic Acid, (10) Meth, (11) Other  
 Bottle Vial Acetum / Client ID:  
 Bottle #: \_\_\_\_\_  
 Specifics / Templates: 16483-20  
 Prefab / Bottle Ord. ID: 1144819



### CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company Name: **GA Power**  
 Street Address: **241 Ralph McGill Blvd NE, Atlanta, GA 30308**  
 Customer Project #: **Week 1 Hammond-AP-2 CA**

Contact/Report To: **Jurinko, Kristen**  
 Phone #: **470-217-0008**  
 E-Mail: **knjurink@southenco.com**  
 C-E Mail:

Time Zone Collected:  AK  PT  MT  CT  ET  
 Data Deliverables:  Level II  Level III  Level IV  
 EQUIS  Other

County / State origin of sample: **Georgia**  
 Regulatory Program (DW, RCRA, etc.) as applicable:  
 Rush (Pre-approval required):  2 Day  3 day  5 day  Other  
 DW PWSID # or VWR Permit # as applicable:  
 Field Filtered (if applicable):  Yes  No  
 Analysis:  
 Requested:  
 Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Other (OT), Surface Water (SW), Sediment (SD), Sludge (SL), Cook

Customer Sample ID: **HAM-PT-06**  
 Matrix: **WT**  
 Comp / Grab: **C**  
 Date: **09/19/23**  
 Time: **1125**  
 Composite End Date: **09/19/23**  
 Time: **1125**  
 Req. Container: **300.0-F, SO4, Cl**  
 Number & Type of Containers: **5**

Specimen Container Size \*\*  
 Identify Container Preservative Type\*\*\*  
 Analysis Requested  
 \*\*Container Size: (1) 1L, (2) 500ml, (3) 250ml, (4) 125ml, (5) 100ml, (6) 40ml vial, (7) Brokaw, (8) Tectone, (9) Other  
 \*\*\*Preservative Type: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) H2O2, (6) Zn Acetate, (7) H2SO4, (8) Sed. Thiosulfate, (9) Acetic Acid, (10) MeOH, (11) Other

Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Other (OT), Surface Water (SW), Sediment (SD), Sludge (SL), Cook

Lab Use Only  
 Profile / Template: **16483-20**  
 Bottle / Client ID:  
 Bottle Vial:  
 AcctNum / Client ID:  
 Bottle #:  
 Profile / Template:  
 Bottle / Client ID:  
 Bottle Vial:  
 AcctNum / Client ID:  
 Bottle #:  
 Profile / Template:  
 Bottle / Client ID:  
 Bottle Vial:  
 AcctNum / Client ID:  
 Bottle #:

Customer Sample ID	Matrix *	Comp / Grab	Collected Date	Time	Composite End Date	Time	Req. Container	Number & Type of Containers	300.0-F, SO4, Cl	Alkalinity	App III/IV Metals-Major Ions	Sulfide	Total Dissolved Solids (TDS)
HAM-PT-06	WT	C	09/19/23	1125	09/19/23	1125	300.0-F, SO4, Cl	5	X	X	X	X	X

Customer Remarks / Special Conditions / Possible Hazards:  
 -Performance Monitoring: B, Ca, Cl, F, pH, Sulfate, TDS, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, Tl, Major Ions, Bicarbonate Alk., Total Alk., Fe, Mg, Mn, K, Na, Sulfide  
 Collected By: **Neeraj Jacob**  
 Printed Name: **Neeraj Jacob**  
 Signature: *[Signature]*

Additional Instructions from Pace\*:  
 a Cooldown: **Thermometer ID:** **Correction Factor (%):** **Obs. Temp. (°C):** **Corrected Temp. (°C)**  
 Date/Time: **09/20/23 13:00**  
 Signature: **Jacob Tracy**  
 Date/Time: **09/21/23 10:10**  
 Signature: **Jacob Tracy**



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

Project #:

WO#: 92689426

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

PM: BV Due Date: 10/05/23  
CLIENT: 92- GP-HAM

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 9-21-23 JCC

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

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

Cooler Temp: 4.8 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): 4.8

USDA Regulated Soil (  N/A, water sample)

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

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

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



Effective Date: 11/14/2022

**WO# : 92689426**

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

Project

PH: BV

Due Date: 10/05/23

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

CLIENT: 92- GP-HAM

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

\*\*\*Check all unpreserved Nitrates for chlorine

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

**pH Adjustment Log for Preserved Samples**

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

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

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

**Section A** Required Client Information: Company: GA Power Address: Atlanta, GA  
**Section B** Required Project Information: Report To: SCS Contacts Copy To: Wood/WSP E&I Contacts  
**Section C** Invoice Information: Attention: Southern Co. Company Name: Address: Pace Analytical Reference: Pace Project Manager: Bonnie Yang  
 Regulatory Agency: NPDES  GROUND WATER  DRINKING WATER  UST  RCRA  OTHER CCR

Requested Due Date/TAT: 10 Day Project Name: Mitchell AP-A, AP-1, AP-2 Project Number: Pace Profile #: 10834  
 Site Location: GA STATE: GA

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW WASTE WATER P FINDICENT SL SOIL/SOLID QL OIL WP WIPE AR AIR OT OTHER TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab ID.		
					COMPOSITE START	COMPOSITE END/DBS			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol					Other	Y
1	MIT-APAI2-EB-1		MG G			9/21/23	0900	5	X	X	X	X	X	X	X	X	X	X	X		
2	MIT-PZ-33		MG G			9/21/23	0915	5	X	X	X	X	X	X	X	X	X	X	X		
3	MIT-APAI2-FD-1		MG G			9/21/23	—	5	X	X	X	X	X	X	X	X	X	X	X		
4	MIT-PZ-57		MG G			9/21/23	0945	5	X	X	X	X	X	X	X	X	X	X	X		
5	MIT-APAI2-FD-2		MG G			9/21/23	—	5	X	X	X	X	X	X	X	X	X	X	X		
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS: Relinquished by affiliation: Daniel Howard/WSP 9/21/23 1730 hrs for 9-22-2028

SAMPLER NAME AND SIGNATURE: Daniel Howard  
 PRINT Name of SAMPLER: Daniel Howard  
 SIGNATURE of SAMPLER: Daniel Howard  
 DATE Signed (MM/DD/YY): 09/21/23  
 Temp in °C: \_\_\_\_\_  
 Received on Ice (Y/N): \_\_\_\_\_  
 Custody Sealed Cooler (Y/N): \_\_\_\_\_  
 Samples Intact (Y/N): \_\_\_\_\_

DC# Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

ANALYTICAL SERVICES

Page 48 of 48

Laboratory receiving samples:

- Asheville
- Eden
- Greenwood
- Huntersville
- Raleigh
- Mechanicsville
- Atlanta
- Kernersville

Sample Condition Upon Receipt

Client Name: **GA Power**

Project #:

- Courier:  Commercial
- Fed Ex
- UPS
- USPS
- Client

Custody Seal Present?  Yes  No

Seals Intact?  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer:  IR Gun ID: **083**

Cooler Temp: **5.8** Cooler Temp Corrected (°C): **5.8**

Correction Factor: **0.0** Add/Subtract (°C): **5.8**

USDA Regulated Soil (  N/A, water sample)

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

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

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

Biological Tissue Frozen?  Yes  No  N/A

Date/Initials Person Examining Contents: **11-23-22**

Blank box for additional notes or signatures.

Chain of Custody Present?	Samples Arrived within Hold Time?	Short Hold Time Analysis (<72 hr.?)	Rush Turn Around Time Requested?	Sufficient Volume?	Correct Containers Used?	-Face Containers Used?	Containers Intact?	Dissolved analysis: Samples Field Filtered?	Sample Labels Match COC?	-Includes Date/Time/ID/Analysis Matrix:	Headspace in VOA Vials (>5-6mm)?	Trip Blank Present?	Trip Blank Custody Seals Present?
<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<b>WQ</b>	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes
<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No		<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No

Field Data Required?  Yes  No

COMMENTS/SAMPLE DISCREPANCY

**11/14/2022 14:37**

CLIENT NOTIFICATION/RESOLUTION

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

Project Manager SCURF Review: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

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

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





October 18, 2023

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

RE: Project: Plant Hammond Waters  
Pace Project No.: 92690312

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on September 27, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Plant Hammond Waters

Pace Project No.: 92690312

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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

Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Plant Hammond Waters  
Pace Project No.: 92690312

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92690312001	HAM-AP2-EB-01	Water	09/26/23 14:35	09/27/23 10:00
92690312002	HAM-AP2-FB-01	Water	09/26/23 14:30	09/27/23 10:00
92690312003	HAM-AP2-FD-01	Water	09/26/23 00:00	09/27/23 10:00
92690312004	HAM-PT-01	Water	09/26/23 11:09	09/27/23 10:00
92690312005	HAM-PT-02	Water	09/26/23 10:00	09/27/23 10:00
92690312006	HAM-PT-03	Water	09/26/23 11:05	09/27/23 10:00
92690312007	HAM-PT-04	Water	09/26/23 13:40	09/27/23 10:00
92690312008	HAM-PT-05	Water	09/26/23 14:47	09/27/23 10:00
92690312009	HAM-PT-06	Water	09/26/23 13:25	09/27/23 10:00

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Plant Hammond Waters

Pace Project No.: 92690312

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Lab ID	Sample ID	Method	Analysts	Analytes Reported
92690312001	HAM-AP2-EB-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92690312002	HAM-AP2-FB-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92690312003	HAM-AP2-FD-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92690312004	HAM-PT-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92690312005	HAM-PT-02	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92690312006	HAM-PT-03	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92690312007	HAM-PT-04	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92690312008	HAM-PT-05	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92690312009	HAM-PT-06	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3

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PASI-A = Pace Analytical Services - Asheville

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

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Plant Hammond Waters

Pace Project No.: 92690312

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92690312001</b>	<b>HAM-AP2-EB-01</b>					
EPA 6020B	Boron	0.017J	mg/L	0.040	10/11/23 15:21	M1,R1
<b>92690312002</b>	<b>HAM-AP2-FB-01</b>					
EPA 6020B	Boron	0.026J	mg/L	0.040	10/11/23 15:38	
<b>92690312003</b>	<b>HAM-AP2-FD-01</b>					
EPA 6020B	Boron	1.0	mg/L	0.40	10/12/23 18:30	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	4720	mg/L	5.0	10/10/23 12:11	
SM 2320B-2011	Alkalinity, Total as CaCO3	4720	mg/L	5.0	10/10/23 12:11	
<b>92690312004</b>	<b>HAM-PT-01</b>					
EPA 6020B	Boron	0.76	mg/L	0.040	10/11/23 15:46	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	4800	mg/L	5.0	10/10/23 12:20	
SM 2320B-2011	Alkalinity, Total as CaCO3	4800	mg/L	5.0	10/10/23 12:20	
<b>92690312005</b>	<b>HAM-PT-02</b>					
EPA 6020B	Boron	2.7	mg/L	0.40	10/12/23 18:38	
EPA 6020B	Cobalt	0.013J	mg/L	0.050	10/12/23 18:38	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	3790	mg/L	5.0	10/06/23 19:06	
SM 2320B-2011	Alkalinity, Total as CaCO3	3790	mg/L	5.0	10/06/23 19:06	
<b>92690312006</b>	<b>HAM-PT-03</b>					
EPA 6020B	Boron	8.0	mg/L	0.40	10/12/23 18:42	
EPA 6020B	Cobalt	0.029J	mg/L	0.050	10/12/23 18:42	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	197	mg/L	5.0	10/06/23 17:13	
SM 2320B-2011	Alkalinity, Total as CaCO3	197	mg/L	5.0	10/06/23 17:13	
<b>92690312007</b>	<b>HAM-PT-04</b>					
EPA 6020B	Boron	6.5	mg/L	0.40	10/12/23 18:46	
EPA 6020B	Cobalt	0.022J	mg/L	0.050	10/12/23 18:46	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1030	mg/L	5.0	10/07/23 11:34	
SM 2320B-2011	Alkalinity, Total as CaCO3	1030	mg/L	5.0	10/07/23 11:34	
<b>92690312008</b>	<b>HAM-PT-05</b>					
EPA 6020B	Boron	4.6	mg/L	0.40	10/12/23 18:50	
EPA 6020B	Cobalt	0.011J	mg/L	0.050	10/12/23 18:50	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	2200	mg/L	5.0	10/07/23 11:46	
SM 2320B-2011	Alkalinity, Total as CaCO3	2200	mg/L	5.0	10/07/23 11:46	
<b>92690312009</b>	<b>HAM-PT-06</b>					
EPA 6020B	Boron	6.8	mg/L	0.40	10/13/23 15:18	
EPA 6020B	Cobalt	0.034J	mg/L	0.050	10/13/23 15:18	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1070	mg/L	5.0	10/07/23 11:58	
SM 2320B-2011	Alkalinity, Total as CaCO3	1070	mg/L	5.0	10/07/23 11:58	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Plant Hammond Waters

Pace Project No.: 92690312

Sample: HAM-AP2-EB-01 Lab ID: 92690312001 Collected: 09/26/23 14:35 Received: 09/27/23 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	0.017J	mg/L	0.040	0.0086	1	10/07/23 10:09	10/11/23 15:21	7440-42-8	M1,R1
Cobalt	ND	mg/L	0.0050	0.00039	1	10/07/23 10:09	10/11/23 15:21	7440-48-4	M1,R1
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/06/23 16:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/06/23 16:42		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/06/23 16:42		

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### ANALYTICAL RESULTS

Project: Plant Hammond Waters

Pace Project No.: 92690312

Sample: HAM-AP2-FB-01 Lab ID: 92690312002 Collected: 09/26/23 14:30 Received: 09/27/23 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	0.026J	mg/L	0.040	0.0086	1	10/07/23 10:09	10/11/23 15:38	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/07/23 10:09	10/11/23 15:38	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/06/23 16:46		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/06/23 16:46		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/06/23 16:46		

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### ANALYTICAL RESULTS

Project: Plant Hammond Waters

Pace Project No.: 92690312

Sample: HAM-AP2-FD-01 Lab ID: 92690312003 Collected: 09/26/23 00:00 Received: 09/27/23 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	1.0	mg/L	0.40	0.086	10	10/07/23 10:09	10/12/23 18:30	7440-42-8	
Cobalt	ND	mg/L	0.050	0.0039	10	10/07/23 10:09	10/12/23 18:30	7440-48-4	D3
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO3)	4720	mg/L	5.0	5.0	1		10/10/23 12:11		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/10/23 12:11		
Alkalinity, Total as CaCO3	4720	mg/L	5.0	5.0	1		10/10/23 12:11		

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### ANALYTICAL RESULTS

Project: Plant Hammond Waters

Pace Project No.: 92690312

Sample: HAM-PT-01 Lab ID: 92690312004 Collected: 09/26/23 11:09 Received: 09/27/23 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	0.76	mg/L	0.040	0.0086	1	10/07/23 10:09	10/11/23 15:46	7440-42-8	
Cobalt	ND	mg/L	0.050	0.0039	10	10/07/23 10:09	10/12/23 18:34	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	4800	mg/L	5.0	5.0	1		10/10/23 12:20		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/10/23 12:20		
Alkalinity, Total as CaCO3	4800	mg/L	5.0	5.0	1		10/10/23 12:20		

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### ANALYTICAL RESULTS

Project: Plant Hammond Waters

Pace Project No.: 92690312

Sample: HAM-PT-02 Lab ID: 92690312005 Collected: 09/26/23 10:00 Received: 09/27/23 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	2.7	mg/L	0.40	0.086	10	10/07/23 10:09	10/12/23 18:38	7440-42-8	
Cobalt	0.013J	mg/L	0.050	0.0039	10	10/07/23 10:09	10/12/23 18:38	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	3790	mg/L	5.0	5.0	1		10/06/23 19:06		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/06/23 19:06		
Alkalinity, Total as CaCO3	3790	mg/L	5.0	5.0	1		10/06/23 19:06		

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### ANALYTICAL RESULTS

Project: Plant Hammond Waters

Pace Project No.: 92690312

Sample: HAM-PT-03 Lab ID: 92690312006 Collected: 09/26/23 11:05 Received: 09/27/23 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	8.0	mg/L	0.40	0.086	10	10/07/23 10:09	10/12/23 18:42	7440-42-8	
Cobalt	0.029J	mg/L	0.050	0.0039	10	10/07/23 10:09	10/12/23 18:42	7440-48-4	D3
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO3)	197	mg/L	5.0	5.0	1		10/06/23 17:13		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/06/23 17:13		
Alkalinity, Total as CaCO3	197	mg/L	5.0	5.0	1		10/06/23 17:13		

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### ANALYTICAL RESULTS

Project: Plant Hammond Waters

Pace Project No.: 92690312

Sample: HAM-PT-04 Lab ID: 92690312007 Collected: 09/26/23 13:40 Received: 09/27/23 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	6.5	mg/L	0.40	0.086	10	10/07/23 10:09	10/12/23 18:46	7440-42-8	
Cobalt	0.022J	mg/L	0.050	0.0039	10	10/07/23 10:09	10/12/23 18:46	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	1030	mg/L	5.0	5.0	1		10/07/23 11:34		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/07/23 11:34		
Alkalinity, Total as CaCO3	1030	mg/L	5.0	5.0	1		10/07/23 11:34		

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### ANALYTICAL RESULTS

Project: Plant Hammond Waters

Pace Project No.: 92690312

Sample: HAM-PT-05 Lab ID: 92690312008 Collected: 09/26/23 14:47 Received: 09/27/23 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	4.6	mg/L	0.40	0.086	10	10/07/23 10:09	10/12/23 18:50	7440-42-8	
Cobalt	0.011J	mg/L	0.050	0.0039	10	10/07/23 10:09	10/12/23 18:50	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	2200	mg/L	5.0	5.0	1		10/07/23 11:46		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/07/23 11:46		
Alkalinity, Total as CaCO3	2200	mg/L	5.0	5.0	1		10/07/23 11:46		

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### ANALYTICAL RESULTS

Project: Plant Hammond Waters

Pace Project No.: 92690312

**Sample: HAM-PT-06**      **Lab ID: 92690312009**      Collected: 09/26/23 13:25      Received: 09/27/23 10:00      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	<b>6.8</b>	mg/L	0.40	0.086	10	10/07/23 10:09	10/13/23 15:18	7440-42-8	
Cobalt	<b>0.034J</b>	mg/L	0.050	0.0039	10	10/07/23 10:09	10/13/23 15:18	7440-48-4	D3
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO <sub>3</sub> )	<b>1070</b>	mg/L	5.0	5.0	1		10/07/23 11:58		
Alkalinity, Carbonate (CaCO <sub>3</sub> )	ND	mg/L	5.0	5.0	1		10/07/23 11:58		
Alkalinity, Total as CaCO <sub>3</sub>	<b>1070</b>	mg/L	5.0	5.0	1		10/07/23 11:58		

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**QUALITY CONTROL DATA**

Project: Plant Hammond Waters

Pace Project No.: 92690312

QC Batch: 804824 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92690312001, 92690312002, 92690312003, 92690312004, 92690312005, 92690312006, 92690312007, 92690312008, 92690312009

METHOD BLANK: 4168094 Matrix: Water  
 Associated Lab Samples: 92690312001, 92690312002, 92690312003, 92690312004, 92690312005, 92690312006, 92690312007, 92690312008, 92690312009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.0086	10/11/23 15:13	
Cobalt	mg/L	ND	0.0050	0.00039	10/11/23 15:13	

LABORATORY CONTROL SAMPLE: 4168095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	1.1	107	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4168098 4168099

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92690312001 Result	Spike Conc.	Spike Conc.	Result								
Boron	mg/L	0.017J	1	1	1.1	1.4	111	137	75-125	21	20	M1,R1	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.14	109	137	75-125	23	20	M1,R1	

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 Waters

Pace Project No.: 92690312

QC Batch:	804634	Analysis Method:	SM 2320B-2011
QC Batch Method:	SM 2320B-2011	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92690312001, 92690312002, 92690312005, 92690312006, 92690312007, 92690312008, 92690312009		

METHOD BLANK:	4166902	Matrix:	Water
Associated Lab Samples:	92690312001, 92690312002, 92690312005, 92690312006, 92690312007, 92690312008, 92690312009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/06/23 16:24	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/06/23 16:24	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/06/23 16:24	

LABORATORY CONTROL SAMPLE: 4166903						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	54.0	108	80-120	

LABORATORY CONTROL SAMPLE: 4166904						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.1	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4168106												4168107	
Parameter	Units	92690312001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.6	51.2	101	101	80-120	1	25		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4168108												4168109	
Parameter	Units	92690312002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Alkalinity, Total as CaCO3	mg/L	ND	50	50	50.8	51.2	101	102	80-120	1	25		

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

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**QUALITY CONTROL DATA**

Project: Plant Hammond Waters

Pace Project No.: 92690312

QC Batch: 805229

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92690312003, 92690312004

METHOD BLANK: 4169782

Matrix: Water

Associated Lab Samples: 92690312003, 92690312004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/10/23 12:50	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/10/23 12:50	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/10/23 12:50	

LABORATORY CONTROL SAMPLE: 4169783

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.7	103	80-120	

LABORATORY CONTROL SAMPLE: 4169784

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	53.0	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4169785 4169786

Parameter	Units	92691636015		4169785		4169786		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					
Alkalinity, Total as CaCO3	mg/L	ND	50	50	52.2	53.3	103	105	80-120	2	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4169787 4169788

Parameter	Units	92691636016		4169787		4169788		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					
Alkalinity, Total as CaCO3	mg/L	ND	50	50	52.0	51.5	103	102	80-120	1	25	

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

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## QUALIFIERS

Project: Plant Hammond Waters

Pace Project No.: 92690312

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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

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

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

R1 RPD value was outside control limits.

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Hammond Waters

Pace Project No.: 92690312

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92690312001	HAM-AP2-EB-01	EPA 3005A	804824	EPA 6020B	804859
92690312002	HAM-AP2-FB-01	EPA 3005A	804824	EPA 6020B	804859
92690312003	HAM-AP2-FD-01	EPA 3005A	804824	EPA 6020B	804859
92690312004	HAM-PT-01	EPA 3005A	804824	EPA 6020B	804859
92690312005	HAM-PT-02	EPA 3005A	804824	EPA 6020B	804859
92690312006	HAM-PT-03	EPA 3005A	804824	EPA 6020B	804859
92690312007	HAM-PT-04	EPA 3005A	804824	EPA 6020B	804859
92690312008	HAM-PT-05	EPA 3005A	804824	EPA 6020B	804859
92690312009	HAM-PT-06	EPA 3005A	804824	EPA 6020B	804859
92690312001	HAM-AP2-EB-01	SM 2320B-2011	804634		
92690312002	HAM-AP2-FB-01	SM 2320B-2011	804634		
92690312003	HAM-AP2-FD-01	SM 2320B-2011	805229		
92690312004	HAM-PT-01	SM 2320B-2011	805229		
92690312005	HAM-PT-02	SM 2320B-2011	804634		
92690312006	HAM-PT-03	SM 2320B-2011	804634		
92690312007	HAM-PT-04	SM 2320B-2011	804634		
92690312008	HAM-PT-05	SM 2320B-2011	804634		
92690312009	HAM-PT-06	SM 2320B-2011	804634		

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DC#\_ Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92690312



Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other:

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 9-29-23

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 214 Type of Ice:  Wet  Blue  None

Cooler Temp: 4.8 Correction Factor: Add/Subtract (°C) 4.8

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

Cooler Temp Corrected (°C): USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

		Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	WT	
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

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

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

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

\*\*\*Check all unpreserved Nitrates for chlorine

Project #

**WO# : 92690312**

PM: BV

Due Date: 10/11/23

CLIENT: 92- GP-HAM

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

**pH Adjustment Log for Preserved Samples**

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

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

**CHAIN-OF-CUSTODY Analytical Request Document**  
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields



Company Name: **GA Power**  
 Street Address: **241 Ralph McGill Blvd NE, Atlanta, GA 30308**  
 Customer Project #: **Week 2-Hammond-AP-2-CA**  
 Project Name: **Week 2-Hammond-AP-2-CA**  
 Site Collection Info/Facility ID (as applicable):  
 Contact/Report To: **Jurinko, Kristen**  
 Phone #: **470-217-0008**  
 E-Mail: **knj@unlinc.com**  
 C.E. Mail: **knj@unlinc.com**  
 Invoice To:  
 Invoice E-Mail:  
 Purchase Order # (if applicable):  
 Quote #:

Time Zone Collected:  AK  PR  MT  CT  ET  
 Data Deliverables:  
 Level II  Level III  Level IV  
 ECUS  
 Other:  
 Regulatory Program (DW, RCRA, etc.) as applicable: **Georgia**  
 County / State origin of sample(s):  
 DW PWSID # or VW Permit # as applicable:  
 DW PWSID # or VW Permit # as applicable:  
 Field Filtered (if applicable):  Yes  No  
 Analysis:  
 Requested:  
 [ ] 2 Day [ ] 3 day [ ] 5 day [ ] Other:  
 Requested:

Customer Sample ID	Matrix *	Comp / Grab	Collected (for Composite Start)		Composite End		Ret. Q12	Number & Type of Containers (Plastic / Glass)	Bicarbonate Alk., Total Alk.	Boron and Cobalt	Sample Comment
			Date	Time	Date	Time					
EXTRA 1	WT								X	X	
EXTRA 2	WT								X	X	
HAM-AP2-EB-01	WT	G-10b	09/12/2023	1435					X	X	001
HAM-AP2-FB-01	WT	G-10b	09/12/2023	1430					X	X	002
HAM-AP2-FD-01	WT	G-10b	09/12/2023	0000					X	X	003
HAM-PT-01	WT	G-10b	09/12/2023	1109					X	X	004
HAM-PT-02	WT	G-10b	09/12/2023	1109					X	X	005
HAM-PT-03	WT	G-10b	09/12/2023	1105					X	X	006
HAM-PT-04	WT	G-10b	09/12/2023	1340					X	X	007
HAM-PT-05	WT	G-10b	09/12/2023	1447					X	X	008

Customer Remarks / Special Conditions / Possible Hazards:  
 Performance Monitoring: B, pH, Co  
 Major Ions: Bicarbonate Alk., Total Alk.  
 Collected By: **Thomas Kessler, (ENVOR CORP)**  
 Printed Name: **Thomas Kessler, (ENVOR CORP)**  
 Signature: *[Signature]*

Relinquished by/Company (Signature): *[Signature]* Date/Time: **09/21/2023 13:35**  
 Relinquished by/Company (Signature): *[Signature]* Date/Time: **09/21/2023 13:35**  
 Relinquished by/Company (Signature): *[Signature]* Date/Time: **09/21/2023 13:35**  
 Relinquished by/Company (Signature): *[Signature]* Date/Time: **09/21/2023 13:35**

Additional Instructions from Pace\*:  
 # Cooldown:  Thermometer ID:  Correction Factor (%):  Ok, Temp. (°C)  Corrected Temp. (°C)  
 Tracking Number:  
 Delivered by:  In-Person  Courier  
 FedEx  UPS  Other  
 Page: **1** of **2**

### CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY - Atria WorkorderLogin Label Terms

Scan QR Code for instructions

Pace<sup>®</sup> Location Requested (City/State):  
 Pace Analytical Charlotte  
 9800 Winery Ave., Suite 100, Huntersville, NC 28078

Company Name: GA Power  
 Street Address: 241 Ralph McGill Blvd NE, Atlanta, GA 30308

Customer Project #: Week 2-Hammond-AP-2 CA  
 Project Name:

Site Collection Info/soilry ID (as applicable):  
 Time Zone Collected: [ ] AT [ ] PT [ ] MT [ ] CT [ ] ET

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV  
 [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Georgia  
 County / State of origin of sample(s):

Rush (Pre-approval required): [ ] 2 Day [ ] 3 day [ ] 5 day [ ] Other  
 Date Results Requested:

Matrix Codes (Inert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OI), Wiper (WP), Tissue (TS), Bleach (B), Vapor (V), Other (OT), Surface Water (SW), Sediment (SD), Sludge (SL), Cank

Customer Sample ID: HAM-PT-06  
 Matrix #: WT  
 Comp / Grab: Grab  
 Date: 08/26/2023  
 Time: 1325

Collected (for Composite Start) Date: 08/26/2023  
 Time: 1325  
 Composite End Date: 08/26/2023  
 Time: 1325

Res. C2: 2  
 Number & Type of Containers: Plastic Glass

Bicarbonate Alk., Total Alk. X  
 Boron and Cobalt X

Customer Remarks / Special Conditions / Possible Hazards:  
 Performance Monitoring B, pH, Co  
 Major Ions: Bicarbonate Alk., Total Alk.

Subscribed by/Company (Signature):  
 Received by/Company (Signature):  
 Date/Time: 08/27/2023 11000  
 Date/Time: 08/27/2023 1355

Contact/Report To: Junhko, Kristen  
 Phone #: 470-217-0008  
 E-Mail: junhko@southernco.com  
 CC E-Mail:  
 Invoice To:  
 Invoice E-Mail:  
 Purchase Order # (if applicable):  
 Quote #:

DW PWSID # or WW Permit # as applicable:  
 Field Filtered (if applicable) [ ] Yes [ ] No  
 Analysis:

Matrix #	Comp / Grab	Collected (for Composite Start) Date	Time	Composite End Date	Time	Res. C2	Number & Type of Containers
WT	Grab	08/26/2023	1325	08/26/2023	1325	2	Plastic Glass

Collected By: Thomas Hessler, Contractor  
 Printed Name: Thomas Hessler, Contractor  
 Signature: [Signature]

Specify Container Size: \*\*  
 Identify Container Preservative Type: \*\*\*  
 Analysis Requested  
 \*\*Container Size: (1) 1L (2) 500mL (3) 250mL (4) 125mL (5) 100mL (6) 40mL vol. (7) 5mL (8) Ferrocene (9) Other  
 \*\*\* Preservative Type: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) HAcOH, (6) Zn Acetate, (7) H2SO4, (8) Sod. Thioacetate, (9) Acetic Acid, (10) MCH, (11) Other  
 Proj. Mgr.:  
 Bonnie Vans  
 Actinium / Client ID:  
 Table #: 15483-20  
 Profile / Template:  
 Presig. / Bottle Ord. ID: 1145437  
 Sample Comment: 005

Additional Instructions from Pace:  
 # Codes: Thermometer ID: Correction Factor (%):  
 Date/Time: 08/27/2023 1355  
 Date/Time: 08/27/2023 1355

Tracking Number:  
 Delivered by: [ ] In-Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other  
 Page: 2 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace<sup>®</sup> Terms and Conditions found at <https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/>  
 ENV-FRM-CORO-0019\_v01\_082123

October 2023



October 19, 2023

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

RE: Project: Hammond AP-2  
Pace Project No.: 92691448

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on October 04, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

cc: Kip Gray, Geosyntec  
Christine Hug, Geosyntec Consultants, Inc.  
Thomas Kessler, Geosyntec Consultants  
Whitney Law, Geosyntec Consultants  
Laura Midkiff, Southern Company  
Caroline Nelson, Geosyntec



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Hammond AP-2

Pace Project No.: 92691448

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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

Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Hammond AP-2  
Pace Project No.: 92691448

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92691448001	HAM-PT-01	Water	10/03/23 13:12	10/04/23 10:10
92691448002	HAM-PT-02	Water	10/03/23 11:27	10/04/23 10:10
92691448003	HAM-PT-03	Water	10/03/23 12:35	10/04/23 10:10
92691448004	HAM-PT-04	Water	10/03/23 15:46	10/04/23 10:10
92691448005	HAM-PT-05	Water	10/03/23 16:08	10/04/23 10:10
92691448006	HAM-PT-06	Water	10/03/23 17:27	10/04/23 10:10
92691448007	HAM-AP2-EB-01	Water	10/03/23 16:55	10/04/23 10:10
92691448008	HAM-AP2-FB-01	Water	10/03/23 17:00	10/04/23 10:10
92691448009	HAM-AP2-FD-01	Water	10/03/23 00:00	10/04/23 10:10

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92691448

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Lab ID	Sample ID	Method	Analysts	Analytes Reported
92691448001	HAM-PT-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92691448002	HAM-PT-02	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92691448003	HAM-PT-03	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92691448004	HAM-PT-04	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92691448005	HAM-PT-05	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92691448006	HAM-PT-06	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92691448007	HAM-AP2-EB-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92691448008	HAM-AP2-FB-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92691448009	HAM-AP2-FD-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3

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PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

### REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92691448

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92691448001</b>	<b>HAM-PT-01</b>					
EPA 6020B	Boron	1.9	mg/L	0.40	10/19/23 11:37	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	3920	mg/L	5.0	10/13/23 14:42	
SM 2320B-2011	Alkalinity, Total as CaCO3	3920	mg/L	5.0	10/13/23 14:42	
<b>92691448002</b>	<b>HAM-PT-02</b>					
EPA 6020B	Boron	3.1	mg/L	0.40	10/19/23 11:49	
EPA 6020B	Cobalt	0.017	mg/L	0.0050	10/17/23 21:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	2820	mg/L	5.0	10/13/23 15:02	
SM 2320B-2011	Alkalinity, Total as CaCO3	2820	mg/L	5.0	10/13/23 15:02	
<b>92691448003</b>	<b>HAM-PT-03</b>					
EPA 6020B	Boron	7.4	mg/L	0.40	10/19/23 11:53	
EPA 6020B	Cobalt	0.018	mg/L	0.0050	10/17/23 21:28	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	150	mg/L	5.0	10/12/23 18:58	
SM 2320B-2011	Alkalinity, Total as CaCO3	150	mg/L	5.0	10/12/23 18:58	
<b>92691448004</b>	<b>HAM-PT-04</b>					
EPA 6020B	Boron	7.1	mg/L	0.40	10/19/23 11:57	
EPA 6020B	Cobalt	0.026	mg/L	0.0050	10/17/23 21:32	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	966	mg/L	5.0	10/13/23 15:19	
SM 2320B-2011	Alkalinity, Total as CaCO3	966	mg/L	5.0	10/13/23 15:19	
<b>92691448005</b>	<b>HAM-PT-05</b>					
EPA 6020B	Boron	3.7	mg/L	0.40	10/19/23 12:01	
EPA 6020B	Cobalt	0.0089	mg/L	0.0050	10/17/23 21:36	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	2660	mg/L	5.0	10/13/23 15:30	
SM 2320B-2011	Alkalinity, Total as CaCO3	2660	mg/L	5.0	10/13/23 15:30	
<b>92691448006</b>	<b>HAM-PT-06</b>					
EPA 6020B	Boron	7.1	mg/L	0.40	10/19/23 12:05	
EPA 6020B	Cobalt	0.033	mg/L	0.0050	10/17/23 21:48	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	863	mg/L	5.0	10/13/23 15:46	
SM 2320B-2011	Alkalinity, Total as CaCO3	863	mg/L	5.0	10/13/23 15:46	
<b>92691448009</b>	<b>HAM-AP2-FD-01</b>					
EPA 6020B	Boron	3.6	mg/L	0.40	10/19/23 12:25	
EPA 6020B	Cobalt	0.0086	mg/L	0.0050	10/17/23 22:04	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	2660	mg/L	5.0	10/13/23 15:56	
SM 2320B-2011	Alkalinity, Total as CaCO3	2660	mg/L	5.0	10/13/23 15:56	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92691448

Sample: HAM-PT-01 Lab ID: 92691448001 Collected: 10/03/23 13:12 Received: 10/04/23 10:10 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	1.9	mg/L	0.40	0.086	10	10/11/23 10:16	10/19/23 11:37	7440-42-8	
Cobalt	ND	mg/L	0.050	0.0039	10	10/11/23 10:16	10/19/23 11:37	7440-48-4	D3
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO3)	3920	mg/L	5.0	5.0	1		10/13/23 14:42		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 14:42		
Alkalinity, Total as CaCO3	3920	mg/L	5.0	5.0	1		10/13/23 14:42		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92691448

**Sample: HAM-PT-02**      **Lab ID: 92691448002**      Collected: 10/03/23 11:27      Received: 10/04/23 10:10      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	<b>3.1</b>	mg/L	0.40	0.086	10	10/11/23 10:16	10/19/23 11:49	7440-42-8	
Cobalt	<b>0.017</b>	mg/L	0.0050	0.00039	1	10/11/23 10:16	10/17/23 21:24	7440-48-4	
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO <sub>3</sub> )	<b>2820</b>	mg/L	5.0	5.0	1		10/13/23 15:02		
Alkalinity, Carbonate (CaCO <sub>3</sub> )	ND	mg/L	5.0	5.0	1		10/13/23 15:02		
Alkalinity, Total as CaCO <sub>3</sub>	<b>2820</b>	mg/L	5.0	5.0	1		10/13/23 15:02		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92691448

Sample: HAM-PT-03 Lab ID: 92691448003 Collected: 10/03/23 12:35 Received: 10/04/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	7.4	mg/L	0.40	0.086	10	10/11/23 10:16	10/19/23 11:53	7440-42-8	
Cobalt	0.018	mg/L	0.0050	0.00039	1	10/11/23 10:16	10/17/23 21:28	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	150	mg/L	5.0	5.0	1		10/12/23 18:58		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/12/23 18:58		
Alkalinity, Total as CaCO3	150	mg/L	5.0	5.0	1		10/12/23 18:58		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92691448

Sample: HAM-PT-04 Lab ID: 92691448004 Collected: 10/03/23 15:46 Received: 10/04/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	7.1	mg/L	0.40	0.086	10	10/11/23 10:16	10/19/23 11:57	7440-42-8	
Cobalt	0.026	mg/L	0.0050	0.00039	1	10/11/23 10:16	10/17/23 21:32	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	966	mg/L	5.0	5.0	1		10/13/23 15:19		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 15:19		
Alkalinity, Total as CaCO3	966	mg/L	5.0	5.0	1		10/13/23 15:19		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92691448

Sample: HAM-PT-05 Lab ID: 92691448005 Collected: 10/03/23 16:08 Received: 10/04/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	3.7	mg/L	0.40	0.086	10	10/11/23 10:16	10/19/23 12:01	7440-42-8	
Cobalt	0.0089	mg/L	0.0050	0.00039	1	10/11/23 10:16	10/17/23 21:36	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	2660	mg/L	5.0	5.0	1		10/13/23 15:30		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 15:30		
Alkalinity, Total as CaCO3	2660	mg/L	5.0	5.0	1		10/13/23 15:30		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92691448

Sample: HAM-PT-06 Lab ID: 92691448006 Collected: 10/03/23 17:27 Received: 10/04/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	7.1	mg/L	0.40	0.086	10	10/11/23 10:16	10/19/23 12:05	7440-42-8	
Cobalt	0.033	mg/L	0.0050	0.00039	1	10/11/23 10:16	10/17/23 21:48	7440-48-4	
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO3)	863	mg/L	5.0	5.0	1		10/13/23 15:46		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 15:46		
Alkalinity, Total as CaCO3	863	mg/L	5.0	5.0	1		10/13/23 15:46		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92691448

Sample: HAM-AP2-EB-01 Lab ID: 92691448007 Collected: 10/03/23 16:55 Received: 10/04/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	0.0086	1	10/11/23 10:16	10/19/23 12:17	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/11/23 10:16	10/17/23 21:56	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/12/23 19:31		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/12/23 19:31		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/12/23 19:31		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92691448

Sample: HAM-AP2-FB-01 Lab ID: 92691448008 Collected: 10/03/23 17:00 Received: 10/04/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	0.0086	1	10/11/23 10:16	10/19/23 12:21	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/11/23 10:16	10/17/23 22:00	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/12/23 19:35		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/12/23 19:35		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/12/23 19:35		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92691448

Sample: HAM-AP2-FD-01 Lab ID: 92691448009 Collected: 10/03/23 00:00 Received: 10/04/23 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	3.6	mg/L	0.40	0.086	10	10/11/23 10:16	10/19/23 12:25	7440-42-8	
Cobalt	0.0086	mg/L	0.0050	0.00039	1	10/11/23 10:16	10/17/23 22:04	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	2660	mg/L	5.0	5.0	1		10/13/23 15:56		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 15:56		
Alkalinity, Total as CaCO3	2660	mg/L	5.0	5.0	1		10/13/23 15:56		

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92691448

QC Batch:	805534	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92691448001, 92691448002, 92691448003, 92691448004, 92691448005, 92691448006, 92691448007, 92691448008, 92691448009		

METHOD BLANK:	4171144	Matrix:	Water
Associated Lab Samples:	92691448001, 92691448002, 92691448003, 92691448004, 92691448005, 92691448006, 92691448007, 92691448008, 92691448009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.0086	10/19/23 11:29	
Cobalt	mg/L	ND	0.0050	0.00039	10/17/23 21:00	

LABORATORY CONTROL SAMPLE: 4171145						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.95	95	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4171146												4171147	
Parameter	Units	92691448001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Boron	mg/L	1.9	1	1	2.9	2.9	93	102	75-125	3	20		
Cobalt	mg/L	ND	0.1	0.1	0.093	0.092	90	90	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92691448

QC Batch: 805980 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92691448003, 92691448007, 92691448008

METHOD BLANK: 4173857 Matrix: Water  
 Associated Lab Samples: 92691448003, 92691448007, 92691448008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/12/23 17:37	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/12/23 17:37	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/12/23 17:37	

LABORATORY CONTROL SAMPLE: 4173858

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.7	103	80-120	

LABORATORY CONTROL SAMPLE: 4173859

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.2	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4173860 4173861

Parameter	Units	4173860		4173861		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	31.3	50	50	80.5	80.4	98	98	80-120	0	25

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4173862 4173863

Parameter	Units	4173862		4173863		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	33.6	50	50	86.5	82.5	106	98	80-120	5	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: Hammond AP-2

Pace Project No.: 92691448

QC Batch: 806167 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92691448001, 92691448002, 92691448004, 92691448005, 92691448006, 92691448009

METHOD BLANK: 4174746 Matrix: Water  
 Associated Lab Samples: 92691448001, 92691448002, 92691448004, 92691448005, 92691448006, 92691448009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/13/23 14:24	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/13/23 14:24	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/13/23 14:24	

LABORATORY CONTROL SAMPLE: 4174747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.8	106	80-120	

LABORATORY CONTROL SAMPLE: 4174748

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.1	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4174749 4174750

Parameter	Units	92691980003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4174751 4174752

Parameter	Units	92691980004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALIFIERS

Project: Hammond AP-2

Pace Project No.: 92691448

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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

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92691448

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92691448001	HAM-PT-01	EPA 3005A	805534	EPA 6020B	805628
92691448002	HAM-PT-02	EPA 3005A	805534	EPA 6020B	805628
92691448003	HAM-PT-03	EPA 3005A	805534	EPA 6020B	805628
92691448004	HAM-PT-04	EPA 3005A	805534	EPA 6020B	805628
92691448005	HAM-PT-05	EPA 3005A	805534	EPA 6020B	805628
92691448006	HAM-PT-06	EPA 3005A	805534	EPA 6020B	805628
92691448007	HAM-AP2-EB-01	EPA 3005A	805534	EPA 6020B	805628
92691448008	HAM-AP2-FB-01	EPA 3005A	805534	EPA 6020B	805628
92691448009	HAM-AP2-FD-01	EPA 3005A	805534	EPA 6020B	805628
92691448001	HAM-PT-01	SM 2320B-2011	806167		
92691448002	HAM-PT-02	SM 2320B-2011	806167		
92691448003	HAM-PT-03	SM 2320B-2011	805980		
92691448004	HAM-PT-04	SM 2320B-2011	806167		
92691448005	HAM-PT-05	SM 2320B-2011	806167		
92691448006	HAM-PT-06	SM 2320B-2011	806167		
92691448007	HAM-AP2-EB-01	SM 2320B-2011	805980		
92691448008	HAM-AP2-FB-01	SM 2320B-2011	805980		
92691448009	HAM-AP2-FD-01	SM 2320B-2011	806167		

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# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: \_\_\_\_\_ of \_\_\_\_\_

<b>Section A</b> Required Client Information		<b>Section B</b> Required Project Information		<b>Section C</b> Invoice Information	
Company: GA Power	Report To: Juriniko Kristen	Company Name: Southern Co	Attention: Southern Co	Address:	REGULATORY AGENCY
Address: Atlanta, GA	Copy To: Geosyntec Contacts	Company Name: Bonne Vang	Address: Bonne Vang	Price Quote Reference:	<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER
Email To: knjunink@southernco.com	Purchase Order No:	Price Project Manager: 10839	Price Profile #: 10839	Site Location STATE: GA	<input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER <input type="checkbox"/>
Phone: _____ Fax: _____	Project Name: Hammond AP-1	Requested Analysis Filtered (Y/N)			
Requested Due Date/TAT: 10 Day	Project Number:				

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	COLLECTED		DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test		Requested Analysis Filtered (Y/N)	Residual Chlone (Y/N)	Pace Project No./ Lab ID.
			COMPOSITE	COMPOSITE					H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Y			
1	HAM-PT-01	WG G	1003/2023	1312	21	2	2	1	1	1	1	1	1	1	1	1	X	X	
2	HAM-PT-02	WG G	1003/2023	1127	20	2	2	1	1	1	1	1	1	1	1	1	X	X	
3	HAM-PT-03	WG G	1003/2023	1235	20	2	2	1	1	1	1	1	1	1	1	1	X	X	
4	HAM-PT-04	WG G	1003/2023	1546	22	2	2	1	1	1	1	1	1	1	1	1	X	X	
5	HAM-PT-05	WG G	1003/2023	1608	22	2	2	1	1	1	1	1	1	1	1	1	X	X	
6	HAM-PT-06	WG G	1003/2023	1727	21	2	2	1	1	1	1	1	1	1	1	1	X	X	
7	HAM-AP2-EB-01	WG G	1003/2023	1655	21	2	2	1	1	1	1	1	1	1	1	1	X	X	
8	HAM-AP2-FB-01	WG G	1003/2023	1700	21	2	2	1	1	1	1	1	1	1	1	1	X	X	
9	HAM-AP2-FD-01	WG G	1003/2023	0000	21	2	2	1	1	1	1	1	1	1	1	1	X	X	
10																			
11																			
12																			

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS			
Task Code: HAM-OCR-GA-20231003		Thomas Kessler / Geo		10/04/2023		1016		Kym W. Williams / Pace		10/14/2023		1016		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		Kym W. Williams / Pace		10/14/2023		1210		Kym W. Williams / Pace		10/14/2023		1216					

WO#: 92691448

92691448

and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days

F-ALL-Q-020rev 07, 15-Feb-2007



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

Genpower

Project #

WO#: 92691448

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other: \_\_\_\_\_

PM: BV Due Date: 10/18/23  
CLIENT: 92- GP-HAM

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 11/14/23 JCC

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:

IR Gun ID: 214 Type of Ice:  Wet  Blue  None

Cooler Temp: 6.0 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): 6.0

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		1.
Samples Arrived within Hold Time?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		9.
-Includes Date/Time/ID/Analysis Matrix:	<u>W</u>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92691448

PM: BV

Due Date: 10/18/23

CLIENT: 92- GP-HAM

\*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

\*\*Bottom half of box is to list number of bottles

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFW-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



October 23, 2023

Kristen Jurinko  
Southern Company  
241 Ralph McGill Blvd NE  
Bin 10160  
Atlanta, GA 30308

RE: Project: Hammond AP-2 CA Week 4  
Pace Project No.: 92692737

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on October 11, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Bonnie Vang  
bonnie.vang@pacelabs.com  
704-977-0968  
Project Manager

Enclosures

cc: Kip Gray, Geosyntec  
Christine Hug, Geosyntec Consultants, Inc.  
Thomas Kessler, Geosyntec Consultants  
Whitney Law, Geosyntec Consultants  
Laura Midkiff, Southern Company  
Caroline Nelson, Geosyntec  
Anthony Szwast, Geosyntec Consultants



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

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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

Virginia Certification #: 460204

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### SAMPLE SUMMARY

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92692737001	HAM-PT-01	Water	10/10/23 17:00	10/11/23 13:25
92692737002	HAM-PT-02	Water	10/10/23 15:50	10/11/23 13:25
92692737003	HAM-PT-03	Water	10/10/23 11:07	10/11/23 13:25
92692737004	HAM-PT-04	Water	10/10/23 13:18	10/11/23 13:25
92692737005	HAM-PT-05	Water	10/10/23 18:12	10/11/23 13:25
92692737006	HAM-PT-06	Water	10/10/23 15:23	10/11/23 13:25
92692737007	HAM-AP2-EB-01	Water	10/10/23 16:35	10/11/23 13:25
92692737008	HAM-AP2-FB-01	Water	10/10/23 16:30	10/11/23 13:25
92692737009	HAM-AP2-FD-01	Water	10/10/23 00:00	10/11/23 13:25

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92692737001	HAM-PT-01	EPA 6020B	CW1	2
		SM 2320B-2011	YEG	3
92692737002	HAM-PT-02	EPA 6020B	CW1	2
		SM 2320B-2011	YEG	3
92692737003	HAM-PT-03	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92692737004	HAM-PT-04	EPA 6020B	CW1	2
		SM 2320B-2011	YEG	3
92692737005	HAM-PT-05	EPA 6020B	CW1	2
		SM 2320B-2011	YEG	3
92692737006	HAM-PT-06	EPA 6020B	CW1	2
		SM 2320B-2011	YEG	3
92692737007	HAM-AP2-EB-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92692737008	HAM-AP2-FB-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92692737009	HAM-AP2-FD-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

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### SUMMARY OF DETECTION

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92692737001</b>	<b>HAM-PT-01</b>					
EPA 6020B	Boron	1.7	mg/L	0.40	10/19/23 16:52	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	3770	mg/L	5.0	10/16/23 15:57	
SM 2320B-2011	Alkalinity, Total as CaCO3	3770	mg/L	5.0	10/16/23 15:57	
<b>92692737002</b>	<b>HAM-PT-02</b>					
EPA 6020B	Boron	3.6	mg/L	0.40	10/19/23 17:08	
EPA 6020B	Cobalt	0.015J	mg/L	0.050	10/19/23 17:08	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	2400	mg/L	5.0	10/16/23 16:17	
SM 2320B-2011	Alkalinity, Total as CaCO3	2400	mg/L	5.0	10/16/23 16:17	
<b>92692737003</b>	<b>HAM-PT-03</b>					
EPA 6020B	Boron	6.8	mg/L	0.40	10/19/23 17:12	
EPA 6020B	Cobalt	0.014J	mg/L	0.050	10/19/23 17:12	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	146	mg/L	5.0	10/13/23 21:21	
SM 2320B-2011	Alkalinity, Total as CaCO3	146	mg/L	5.0	10/13/23 21:21	
<b>92692737004</b>	<b>HAM-PT-04</b>					
EPA 6020B	Boron	6.5	mg/L	0.40	10/19/23 17:16	
EPA 6020B	Cobalt	0.023J	mg/L	0.050	10/19/23 17:16	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	818	mg/L	5.0	10/16/23 16:32	
SM 2320B-2011	Alkalinity, Total as CaCO3	818	mg/L	5.0	10/16/23 16:32	
<b>92692737005</b>	<b>HAM-PT-05</b>					
EPA 6020B	Boron	3.8	mg/L	0.40	10/19/23 17:20	
EPA 6020B	Cobalt	0.0097J	mg/L	0.050	10/19/23 17:20	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	2300	mg/L	5.0	10/16/23 16:42	
SM 2320B-2011	Alkalinity, Total as CaCO3	2300	mg/L	5.0	10/16/23 16:42	
<b>92692737006</b>	<b>HAM-PT-06</b>					
EPA 6020B	Boron	6.9	mg/L	0.40	10/19/23 17:55	
EPA 6020B	Cobalt	0.034J	mg/L	0.050	10/19/23 17:55	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	772	mg/L	5.0	10/16/23 16:57	
SM 2320B-2011	Alkalinity, Total as CaCO3	772	mg/L	5.0	10/16/23 16:57	
<b>92692737009</b>	<b>HAM-AP2-FD-01</b>					
EPA 6020B	Boron	6.6	mg/L	0.40	10/19/23 18:11	
EPA 6020B	Cobalt	0.013J	mg/L	0.050	10/19/23 18:11	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	141	mg/L	5.0	10/13/23 22:14	
SM 2320B-2011	Alkalinity, Total as CaCO3	141	mg/L	5.0	10/13/23 22:14	

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### ANALYTICAL RESULTS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Sample: HAM-PT-01 Lab ID: 92692737001 Collected: 10/10/23 17:00 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	1.7	mg/L	0.40	0.086	10	10/14/23 10:56	10/19/23 16:52	7440-42-8	
Cobalt	ND	mg/L	0.050	0.0039	10	10/14/23 10:56	10/19/23 16:52	7440-48-4	D3
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO3)	3770	mg/L	5.0	5.0	1		10/16/23 15:57		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/16/23 15:57		
Alkalinity, Total as CaCO3	3770	mg/L	5.0	5.0	1		10/16/23 15:57		

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### ANALYTICAL RESULTS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Sample: HAM-PT-02 Lab ID: 92692737002 Collected: 10/10/23 15:50 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	3.6	mg/L	0.40	0.086	10	10/14/23 10:56	10/19/23 17:08	7440-42-8	
Cobalt	0.015J	mg/L	0.050	0.0039	10	10/14/23 10:56	10/19/23 17:08	7440-48-4	D3
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO3)	2400	mg/L	5.0	5.0	1		10/16/23 16:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/16/23 16:17		
Alkalinity, Total as CaCO3	2400	mg/L	5.0	5.0	1		10/16/23 16:17		

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### ANALYTICAL RESULTS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Sample: HAM-PT-03 Lab ID: 92692737003 Collected: 10/10/23 11:07 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**6020 MET ICPMS**

Analytical Method: EPA 6020B Preparation Method: EPA 3005A  
Pace Analytical Services - Peachtree Corners, GA

Boron	6.8	mg/L	0.40	0.086	10	10/14/23 10:56	10/19/23 17:12	7440-42-8	
Cobalt	0.014J	mg/L	0.050	0.0039	10	10/14/23 10:56	10/19/23 17:12	7440-48-4	D3

**2320B Alkalinity**

Analytical Method: SM 2320B-2011  
Pace Analytical Services - Asheville

Alkalinity, Bicarbonate (CaCO3)	146	mg/L	5.0	5.0	1		10/13/23 21:21		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 21:21		
Alkalinity, Total as CaCO3	146	mg/L	5.0	5.0	1		10/13/23 21:21		

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### ANALYTICAL RESULTS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Sample: HAM-PT-04 Lab ID: 92692737004 Collected: 10/10/23 13:18 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	<b>6.5</b>	mg/L	0.40	0.086	10	10/14/23 10:56	10/19/23 17:16	7440-42-8	
Cobalt	<b>0.023J</b>	mg/L	0.050	0.0039	10	10/14/23 10:56	10/19/23 17:16	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	<b>818</b>	mg/L	5.0	5.0	1		10/16/23 16:32		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/16/23 16:32		
Alkalinity, Total as CaCO3	<b>818</b>	mg/L	5.0	5.0	1		10/16/23 16:32		

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### ANALYTICAL RESULTS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Sample: HAM-PT-05		Lab ID: 92692737005		Collected: 10/10/23 18:12		Received: 10/11/23 13:25		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	<b>3.8</b>	mg/L	0.40	0.086	10	10/14/23 10:56	10/19/23 17:20	7440-42-8	
Cobalt	<b>0.0097J</b>	mg/L	0.050	0.0039	10	10/14/23 10:56	10/19/23 17:20	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO <sub>3</sub> )	<b>2300</b>	mg/L	5.0	5.0	1		10/16/23 16:42		
Alkalinity, Carbonate (CaCO <sub>3</sub> )	ND	mg/L	5.0	5.0	1		10/16/23 16:42		
Alkalinity, Total as CaCO <sub>3</sub>	<b>2300</b>	mg/L	5.0	5.0	1		10/16/23 16:42		

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### ANALYTICAL RESULTS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

**Sample: HAM-PT-06**      **Lab ID: 92692737006**      Collected: 10/10/23 15:23      Received: 10/11/23 13:25      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	<b>6.9</b>	mg/L	0.40	0.086	10	10/14/23 10:56	10/19/23 17:55	7440-42-8	
Cobalt	<b>0.034J</b>	mg/L	0.050	0.0039	10	10/14/23 10:56	10/19/23 17:55	7440-48-4	D3
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO <sub>3</sub> )	<b>772</b>	mg/L	5.0	5.0	1		10/16/23 16:57		
Alkalinity, Carbonate (CaCO <sub>3</sub> )	ND	mg/L	5.0	5.0	1		10/16/23 16:57		
Alkalinity, Total as CaCO <sub>3</sub>	<b>772</b>	mg/L	5.0	5.0	1		10/16/23 16:57		

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### ANALYTICAL RESULTS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Sample: HAM-AP2-EB-01 Lab ID: 92692737007 Collected: 10/10/23 16:35 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	0.0086	1	10/14/23 10:56	10/19/23 18:03	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/14/23 10:56	10/19/23 18:03	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 22:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 22:05		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/13/23 22:05		

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### ANALYTICAL RESULTS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Sample: HAM-AP2-FB-01 Lab ID: 92692737008 Collected: 10/10/23 16:30 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	0.0086	1	10/14/23 10:56	10/19/23 18:07	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/14/23 10:56	10/19/23 18:07	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 22:09		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 22:09		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/13/23 22:09		

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### ANALYTICAL RESULTS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Sample: HAM-AP2-FD-01 Lab ID: 92692737009 Collected: 10/10/23 00:00 Received: 10/11/23 13:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	6.6	mg/L	0.40	0.086	10	10/14/23 10:56	10/19/23 18:11	7440-42-8	
Cobalt	0.013J	mg/L	0.050	0.0039	10	10/14/23 10:56	10/19/23 18:11	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	141	mg/L	5.0	5.0	1		10/13/23 22:14		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/13/23 22:14		
Alkalinity, Total as CaCO3	141	mg/L	5.0	5.0	1		10/13/23 22:14		

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

QC Batch:	806374	Analysis Method:	EPA 6020B
QC Batch Method:	EPA 3005A	Analysis Description:	6020 MET
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples:	92692737001, 92692737002, 92692737003, 92692737004, 92692737005, 92692737006, 92692737007, 92692737008, 92692737009		

METHOD BLANK:	4175898	Matrix:	Water
Associated Lab Samples:	92692737001, 92692737002, 92692737003, 92692737004, 92692737005, 92692737006, 92692737007, 92692737008, 92692737009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.0086	10/19/23 16:44	
Cobalt	mg/L	ND	0.0050	0.00039	10/19/23 16:44	

LABORATORY CONTROL SAMPLE: 4175899						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.99	99	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4175900												4175901	
Parameter	Units	92692737001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Boron	mg/L	1.7	1	1	2.9	2.9	112	119	75-125	2	20		
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	105	104	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

QC Batch: 806254 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92692737003, 92692737007, 92692737008, 92692737009

METHOD BLANK: 4175171 Matrix: Water  
 Associated Lab Samples: 92692737003, 92692737007, 92692737008, 92692737009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/13/23 19:19	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/13/23 19:19	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/13/23 19:19	

LABORATORY CONTROL SAMPLE: 4175172

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	53.3	107	80-120	

LABORATORY CONTROL SAMPLE: 4175173

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.5	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4175174 4175175

Parameter	Units	92692080029		4175174		4175175		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MS Spike Conc.	MS Result	MS Spike Conc.	MS Result	MS Spike Conc.					
Alkalinity, Total as CaCO3	mg/L	24.4	50	50	50	77.8	76.5	107	104	80-120	2	25

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4175176 4175177

Parameter	Units	92692080030		4175176		4175177		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MS Spike Conc.	MS Result	MS Spike Conc.	MS Result	MS Spike Conc.					
Alkalinity, Total as CaCO3	mg/L	6.0	50	50	50	59.5	60.0	107	108	80-120	1	25

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**QUALITY CONTROL DATA**

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

QC Batch: 806626 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92692737001, 92692737002, 92692737004, 92692737005, 92692737006

METHOD BLANK: 4176779 Matrix: Water  
 Associated Lab Samples: 92692737001, 92692737002, 92692737004, 92692737005, 92692737006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/16/23 15:40	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/16/23 15:40	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/16/23 15:40	

LABORATORY CONTROL SAMPLE: 4176780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.2	104	80-120	

LABORATORY CONTROL SAMPLE: 4176781

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.8	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4176782 4176783

Parameter	Units	92692544003		4176782		4176783		% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec					MSD % Rec
Alkalinity, Total as CaCO3	mg/L	6.6	50	50	59.9	58.5	107	104	80-120	2	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4176784 4176785

Parameter	Units	92692544004		4176784		4176785		% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec					MSD % Rec
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.6	51.8	102	103	80-120	0	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALIFIERS

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

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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

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2 CA Week 4

Pace Project No.: 92692737

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92692737001	HAM-PT-01	EPA 3005A	806374	EPA 6020B	806410
92692737002	HAM-PT-02	EPA 3005A	806374	EPA 6020B	806410
92692737003	HAM-PT-03	EPA 3005A	806374	EPA 6020B	806410
92692737004	HAM-PT-04	EPA 3005A	806374	EPA 6020B	806410
92692737005	HAM-PT-05	EPA 3005A	806374	EPA 6020B	806410
92692737006	HAM-PT-06	EPA 3005A	806374	EPA 6020B	806410
92692737007	HAM-AP2-EB-01	EPA 3005A	806374	EPA 6020B	806410
92692737008	HAM-AP2-FB-01	EPA 3005A	806374	EPA 6020B	806410
92692737009	HAM-AP2-FD-01	EPA 3005A	806374	EPA 6020B	806410
92692737001	HAM-PT-01	SM 2320B-2011	806626		
92692737002	HAM-PT-02	SM 2320B-2011	806626		
92692737003	HAM-PT-03	SM 2320B-2011	806254		
92692737004	HAM-PT-04	SM 2320B-2011	806626		
92692737005	HAM-PT-05	SM 2320B-2011	806626		
92692737006	HAM-PT-06	SM 2320B-2011	806626		
92692737007	HAM-AP2-EB-01	SM 2320B-2011	806254		
92692737008	HAM-AP2-FB-01	SM 2320B-2011	806254		
92692737009	HAM-AP2-FD-01	SM 2320B-2011	806254		

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

<b>Section A</b> Required Client Information		<b>Section B</b> Required Project Information		<b>Section C</b> Invoice Information	
Company: GA Power	Address: Atlanta, GA	Report To: SCS Contacts	Copy To: Geosyntec Contacts	Attention: Southern Co.	Company Name: Southern Co.
Email To: SCS Contacts	Phone: _____	Purchase Order No.: GPC82474-0001	Project Name: Hammond AP-2	Address: _____	Reference: _____
Requested Due Date/TAT: 10 Day	Fax: _____	Project Number: _____	Project Number: _____	Pace Project Manager: Bonnie Yang	Pace Profile #: 10839
REGULATORY AGENCY			Requested Analysis Filtered (Y/N)		
<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER	<input type="checkbox"/> DRINKING WATER			
<input type="checkbox"/> UST	<input type="checkbox"/> RCRA	<input checked="" type="checkbox"/> OTHER			
Site Location: _____		STATE: GA			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test		Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
				DATE	TIME			H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Bicarbonate Alk., Total Alk		
1	HAM-PT-01	WG G	10/10/2023	1700	23	2	1	1									001
2	HAM-PT-02	WG G	10/10/2023	1550	23	2	1	1									002
3	HAM-PT-03	WG G	10/10/2023	1107	20	2	1	1									003
4	HAM-PT-04	WG G	10/10/2023	1318	30	2	1	1									004
5	HAM-PT-05	WG G	10/10/2023	1812	20	2	1	1									005
6	HAM-PT-06	WG G	10/10/2023	1523	22	2	1	1									006
7	HAM-AP2-EB-01	WG G	10/10/2023	1635	23	2	1	1									007
8	HAM-AP2-FB-01	WG G	10/10/2023	1630	23	2	1	1									008
9	HAM-AP2-FD-01	WG G	10/10/2023	0000	23	2	1	1									009
10																	
11																	
12																	

Task Code: HAM-GCR-CA-20231010	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
AP-2 CA Week 4	Thomas Kessler / Geosyntec	10/10/2023	1325	Bonnie Yang / Pace	10/10/2023	1325	
	Kiana Williams / Pace	10/10/2023	1512	Bonnie Yang / Pace	10/10/2023	1512	

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER: Thomas Kessler, Zain Webb, Jacob Tracy / Geosyntec Consultants, Inc.	DATE Signed (MM/DD/YYYY): 10/10/2023
SIGNATURE of SAMPLER: <i>[Signature]</i>	DATE Signed (MM/DD/YYYY): 10/10/2023

Temp in °C \_\_\_\_\_

Received on Ice (Y/N) \_\_\_\_\_

Custody Sealed Cooler (Y/N) \_\_\_\_\_

Samples Intact (Y/N) \_\_\_\_\_

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



Sample Condition Upon Receipt

Laboratory receiving samples: Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt	Effective Date: 11/14/2022
----------------------------------------------------------------	----------------------------



Client Name: GA Powder

Project #:  Client  UPS  Fed Ex  Commercial

Courier:  Commercial  Fed Ex  UPS  Client

Custody Seal Present?  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Type of Ice:  Wet  Blue  None

Thermometer:  IR Gun ID: 0883

Cooler Temp:  Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.5

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

Comments/Discrepancy:

1.	Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
2.	Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
3.	Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4.	Rush Turn Around Time Requested?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
5.	Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6.	Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6.	-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
7.	Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
8.	Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
9.	Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	-Includes Date/Time/ID/Analysis Matrix:	WDR
10.	Headspace in VOA Vials (>5-6mm)?	<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
	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:





December 06, 2023

Kristen Jurinko  
Southern Company  
241 Ralph McGill Blvd NE  
Bin 10160  
Atlanta, GA 30308

RE: Project: Hammond AP-2  
Pace Project No.: 92695189

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on October 25, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Peachtree Corners, GA

Revision 1: Amend COC.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Bonnie Vang  
bonnie.vang@pacelabs.com  
704-977-0968  
Project Manager

Enclosures

cc: Kip Gray, Geosyntec  
Christine Hug, Geosyntec Consultants, Inc.  
Thomas Kessler, Geosyntec Consultants  
Whitney Law, Geosyntec Consultants  
Laura Midkiff, Southern Company  
Caroline Nelson, Geosyntec  
Anthony Szwast, Geosyntec Consultants



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Hammond AP-2

Pace Project No.: 92695189

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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

Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Hammond AP-2  
Pace Project No.: 92695189

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92695189001	HAM-PT-01	Water	10/24/23 17:01	10/25/23 12:16
92695189002	HAM-PT-02	Water	10/24/23 17:25	10/25/23 12:16
92695189003	HAM-PT-03	Water	10/24/23 15:43	10/25/23 12:16
92695189004	HAM-PT-04	Water	10/24/23 11:00	10/25/23 12:16
92695189005	HAM-PT-05	Water	10/24/23 15:40	10/25/23 12:16
92695189006	HAM-PT-06	Water	10/24/23 12:17	10/25/23 12:16
92695189007	HAM-AP2-EB-01	Water	10/24/23 18:41	10/25/23 12:16
92695189008	HAM-AP2-FB-01	Water	10/24/23 18:41	10/25/23 12:16
92695189009	HAM-AP2-FD-01	Water	10/24/23 00:00	10/25/23 12:16

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92695189

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Lab ID	Sample ID	Method	Analysts	Analytes Reported
92695189001	HAM-PT-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92695189002	HAM-PT-02	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92695189003	HAM-PT-03	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92695189004	HAM-PT-04	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92695189005	HAM-PT-05	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92695189006	HAM-PT-06	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92695189007	HAM-AP2-EB-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92695189008	HAM-AP2-FB-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3
92695189009	HAM-AP2-FD-01	EPA 6020B	CW1	2
		SM 2320B-2011	SMS	3

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PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

### REPORT OF LABORATORY ANALYSIS

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## SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92695189

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92695189001</b>	<b>HAM-PT-01</b>					
EPA 6020B	Boron	2.5	mg/L	0.40	11/07/23 19:13	
EPA 6020B	Cobalt	0.0044J	mg/L	0.050	11/07/23 19:13	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	3160	mg/L	5.0	10/26/23 14:24	
SM 2320B-2011	Alkalinity, Total as CaCO3	3160	mg/L	5.0	10/26/23 14:24	
<b>92695189002</b>	<b>HAM-PT-02</b>					
EPA 6020B	Boron	3.7	mg/L	0.40	11/07/23 19:29	
EPA 6020B	Cobalt	0.012J	mg/L	0.050	11/07/23 19:29	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	2220	mg/L	5.0	10/26/23 14:43	
SM 2320B-2011	Alkalinity, Total as CaCO3	2220	mg/L	5.0	10/26/23 14:43	
<b>92695189003</b>	<b>HAM-PT-03</b>					
EPA 6020B	Boron	9.2	mg/L	0.40	11/07/23 19:33	
EPA 6020B	Cobalt	0.046J	mg/L	0.050	11/07/23 19:33	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	97.6	mg/L	5.0	10/26/23 14:58	
SM 2320B-2011	Alkalinity, Total as CaCO3	97.6	mg/L	5.0	10/26/23 14:58	
<b>92695189004</b>	<b>HAM-PT-04</b>					
EPA 6020B	Boron	7.3	mg/L	0.40	11/07/23 19:37	
EPA 6020B	Cobalt	0.029J	mg/L	0.050	11/07/23 19:37	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	730	mg/L	5.0	10/26/23 15:06	
SM 2320B-2011	Alkalinity, Total as CaCO3	730	mg/L	5.0	10/26/23 15:06	
<b>92695189005</b>	<b>HAM-PT-05</b>					
EPA 6020B	Boron	4.4	mg/L	0.40	11/07/23 19:41	
EPA 6020B	Cobalt	0.012J	mg/L	0.050	11/07/23 19:41	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1890	mg/L	5.0	10/26/23 15:16	
SM 2320B-2011	Alkalinity, Total as CaCO3	1890	mg/L	5.0	10/26/23 15:16	
<b>92695189006</b>	<b>HAM-PT-06</b>					
EPA 6020B	Boron	7.2	mg/L	0.40	11/07/23 19:53	
EPA 6020B	Cobalt	0.037J	mg/L	0.050	11/07/23 19:53	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	767	mg/L	5.0	10/26/23 15:30	
SM 2320B-2011	Alkalinity, Total as CaCO3	767	mg/L	5.0	10/26/23 15:30	
<b>92695189009</b>	<b>HAM-AP2-FD-01</b>					
EPA 6020B	Boron	3.7	mg/L	0.40	11/07/23 20:05	
EPA 6020B	Cobalt	0.014J	mg/L	0.050	11/07/23 20:05	D3
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	2130	mg/L	5.0	10/26/23 15:58	
SM 2320B-2011	Alkalinity, Total as CaCO3	2130	mg/L	5.0	10/26/23 15:58	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92695189

Sample: HAM-PT-01 Lab ID: 92695189001 Collected: 10/24/23 17:01 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	2.5	mg/L	0.40	0.12	10	10/30/23 13:17	11/07/23 19:13	7440-42-8	
Cobalt	0.0044J	mg/L	0.050	0.0032	10	10/30/23 13:17	11/07/23 19:13	7440-48-4	D3
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO3)	3160	mg/L	5.0	5.0	1		10/26/23 14:24		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 14:24		
Alkalinity, Total as CaCO3	3160	mg/L	5.0	5.0	1		10/26/23 14:24		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92695189

Sample: HAM-PT-02		Lab ID: 92695189002		Collected: 10/24/23 17:25		Received: 10/25/23 12:16		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	<b>3.7</b>	mg/L	0.40	0.12	10	10/30/23 13:17	11/07/23 19:29	7440-42-8	
Cobalt	<b>0.012J</b>	mg/L	0.050	0.0032	10	10/30/23 13:17	11/07/23 19:29	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	<b>2220</b>	mg/L	5.0	5.0	1		10/26/23 14:43		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 14:43		
Alkalinity, Total as CaCO3	<b>2220</b>	mg/L	5.0	5.0	1		10/26/23 14:43		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92695189

Sample: HAM-PT-03 Lab ID: 92695189003 Collected: 10/24/23 15:43 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	9.2	mg/L	0.40	0.12	10	10/30/23 13:17	11/07/23 19:33	7440-42-8	
Cobalt	0.046J	mg/L	0.050	0.0032	10	10/30/23 13:17	11/07/23 19:33	7440-48-4	D3
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO3)	97.6	mg/L	5.0	5.0	1		10/26/23 14:58		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 14:58		
Alkalinity, Total as CaCO3	97.6	mg/L	5.0	5.0	1		10/26/23 14:58		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92695189

Sample: HAM-PT-04		Lab ID: 92695189004		Collected: 10/24/23 11:00		Received: 10/25/23 12:16		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	<b>7.3</b>	mg/L	0.40	0.12	10	10/30/23 13:17	11/07/23 19:37	7440-42-8	
Cobalt	<b>0.029J</b>	mg/L	0.050	0.0032	10	10/30/23 13:17	11/07/23 19:37	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	<b>730</b>	mg/L	5.0	5.0	1		10/26/23 15:06		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 15:06		
Alkalinity, Total as CaCO3	<b>730</b>	mg/L	5.0	5.0	1		10/26/23 15:06		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92695189

Sample: HAM-PT-05		Lab ID: 92695189005		Collected: 10/24/23 15:40		Received: 10/25/23 12:16		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	<b>4.4</b>	mg/L	0.40	0.12	10	10/30/23 13:17	11/07/23 19:41	7440-42-8	
Cobalt	<b>0.012J</b>	mg/L	0.050	0.0032	10	10/30/23 13:17	11/07/23 19:41	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	<b>1890</b>	mg/L	5.0	5.0	1		10/26/23 15:16		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 15:16		
Alkalinity, Total as CaCO3	<b>1890</b>	mg/L	5.0	5.0	1		10/26/23 15:16		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92695189

Sample: HAM-PT-06 Lab ID: 92695189006 Collected: 10/24/23 12:17 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Boron	7.2	mg/L	0.40	0.12	10	10/30/23 13:17	11/07/23 19:53	7440-42-8	
Cobalt	0.037J	mg/L	0.050	0.0032	10	10/30/23 13:17	11/07/23 19:53	7440-48-4	D3
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity, Bicarbonate (CaCO3)	767	mg/L	5.0	5.0	1		10/26/23 15:30		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 15:30		
Alkalinity, Total as CaCO3	767	mg/L	5.0	5.0	1		10/26/23 15:30		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92695189

Sample: HAM-AP2-EB-01 Lab ID: 92695189007 Collected: 10/24/23 18:41 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	0.012	1	10/30/23 13:17	11/07/23 19:57	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00032	1	10/30/23 13:17	11/07/23 19:57	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 15:40		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 15:40		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/26/23 15:40		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92695189

Sample: HAM-AP2-FB-01 Lab ID: 92695189008 Collected: 10/24/23 18:41 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	ND	mg/L	0.040	0.012	1	10/30/23 13:17	11/07/23 20:01	7440-42-8	
Cobalt	ND	mg/L	0.0050	0.00032	1	10/30/23 13:17	11/07/23 20:01	7440-48-4	
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 15:44		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 15:44		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		10/26/23 15:44		

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92695189

Sample: HAM-AP2-FD-01 Lab ID: 92695189009 Collected: 10/24/23 00:00 Received: 10/25/23 12:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Boron	3.7	mg/L	0.40	0.12	10	10/30/23 13:17	11/07/23 20:05	7440-42-8	
Cobalt	0.014J	mg/L	0.050	0.0032	10	10/30/23 13:17	11/07/23 20:05	7440-48-4	D3
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity, Bicarbonate (CaCO3)	2130	mg/L	5.0	5.0	1		10/26/23 15:58		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		10/26/23 15:58		
Alkalinity, Total as CaCO3	2130	mg/L	5.0	5.0	1		10/26/23 15:58		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92695189

QC Batch: 809740 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92695189001, 92695189002, 92695189003, 92695189004, 92695189005, 92695189006, 92695189007, 92695189008, 92695189009

METHOD BLANK: 4192374 Matrix: Water  
 Associated Lab Samples: 92695189001, 92695189002, 92695189003, 92695189004, 92695189005, 92695189006, 92695189007, 92695189008, 92695189009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.012	11/07/23 19:05	
Cobalt	mg/L	ND	0.0050	0.00032	11/07/23 19:05	

LABORATORY CONTROL SAMPLE: 4192375

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.99	99	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4192376 4192377

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Spike Conc.	Spike Conc.	Result								
Boron	mg/L	2.5	1	1	3.4	3.4	91	89	75-125	1	20		
Cobalt	mg/L	0.0044J	0.1	0.1	0.11	0.11	105	104	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92695189

QC Batch:	809013	Analysis Method:	SM 2320B-2011
QC Batch Method:	SM 2320B-2011	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92695189001, 92695189002, 92695189003, 92695189004, 92695189005, 92695189006, 92695189007, 92695189008, 92695189009		

METHOD BLANK:	4189138	Matrix:	Water
Associated Lab Samples:	92695189001, 92695189002, 92695189003, 92695189004, 92695189005, 92695189006, 92695189007, 92695189008, 92695189009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	10/26/23 12:31	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	10/26/23 12:31	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	10/26/23 12:31	

LABORATORY CONTROL SAMPLE: 4189139						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.8	104	80-120	

LABORATORY CONTROL SAMPLE: 4189140						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.1	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4189141												4189142	
Parameter	Units	92695134001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Alkalinity, Total as CaCO3	mg/L	276	50	50	313	322	74	93	80-120	3	25	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4189861												4189862	
Parameter	Units	92694515017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Alkalinity, Total as CaCO3	mg/L	23.7	50	50	70.1	70.5	93	94	80-120	1	25		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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## QUALIFIERS

Project: Hammond AP-2

Pace Project No.: 92695189

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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

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92695189

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92695189001	HAM-PT-01	EPA 3005A	809740	EPA 6020B	809832
92695189002	HAM-PT-02	EPA 3005A	809740	EPA 6020B	809832
92695189003	HAM-PT-03	EPA 3005A	809740	EPA 6020B	809832
92695189004	HAM-PT-04	EPA 3005A	809740	EPA 6020B	809832
92695189005	HAM-PT-05	EPA 3005A	809740	EPA 6020B	809832
92695189006	HAM-PT-06	EPA 3005A	809740	EPA 6020B	809832
92695189007	HAM-AP2-EB-01	EPA 3005A	809740	EPA 6020B	809832
92695189008	HAM-AP2-FB-01	EPA 3005A	809740	EPA 6020B	809832
92695189009	HAM-AP2-FD-01	EPA 3005A	809740	EPA 6020B	809832
92695189001	HAM-PT-01	SM 2320B-2011	809013		
92695189002	HAM-PT-02	SM 2320B-2011	809013		
92695189003	HAM-PT-03	SM 2320B-2011	809013		
92695189004	HAM-PT-04	SM 2320B-2011	809013		
92695189005	HAM-PT-05	SM 2320B-2011	809013		
92695189006	HAM-PT-06	SM 2320B-2011	809013		
92695189007	HAM-AP2-EB-01	SM 2320B-2011	809013		
92695189008	HAM-AP2-FB-01	SM 2320B-2011	809013		
92695189009	HAM-AP2-FD-01	SM 2320B-2011	809013		

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# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: <u>1</u> of <u>1</u>	
Company: GA Power		Report To: SCS Contacts		Attention: Southern Co.		<b>REGULATORY AGENCY</b>	
Address: Atlanta, GA		Copy To: Geosyntec Contacts		Company Name:			
Email To: SCS Contacts		Purchase Order No: GPC82474-0001		Address:		<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> CCR	
Phone:                      Fax:		Project Name: Hammond AP-2		Pace Quote Reference: Bonnie Vang		<b>Site Location</b> STATE: <u>GA</u>	
Requested Due Date/TAT: 10 Day		Project Number:		Pace Profile #: 10839			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX      CODE DRINKING WATER DW WATER            WT WASTE WATER    WW PRODUCT        P SOIL/SOLID        SL OIL                OL WIPE              WP AIR                AR OTHER            OT TISSUE           TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.														
					COMPOSITE		COMPOSITE				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Bicarbonate Alk., Total Alk.	Boron and Cobalt																		
					DATE	TIME	DATE	TIME																														
1	HAM-PT-01		WG	G	10/24/2023	1701			23	2	1	1								X	X										N	001						
2	HAM-PT-02		WG	G	10/24/2023	1725			23	2	1	1								X	X										N	002						
3	HAM-PT-03		WG	G	10/24/2023	1543			20	2	1	1								X	X										N	003						
4	HAM-PT-04		WG	G	10/24/2023	1100			30	2	1	1								X	X										N	004						
5	HAM-PT-05		WG	G	10/24/2023	1540			20	2	1	1								X	X										N	005						
6	HAM-PT-06		WG	G	10/24/2023	1217			22	2	1	1								X	X										N	006						
7	HAM-AP2-EB-01		WQ	G	10/24/2023	1841			23	2	1	1								X	X										N	007						
8	HAM-AP2-FB-01		WQ	G	10/24/2023	1841			23	2	1	1								X	X										N	008						
9	HAM-AP2-FD-01		WG	G	10/24/2023	0000			23	2	1	1								X	X										N	009						
10																																						
11																																						
12																																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
Task Code: HAM-CCR-CA-20231024	Zain Webb Geosyntec	10/25/23	12:16	Ryan William / Pace	10/25/23	1216		
	Ryan William / Pace	10/25/23	1405	JLL	10/25/23	1405		

<b>SAMPLER NAME AND SIGNATURE</b>		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Zain Webb, Hudson Kennedy / Geosyntec Consultants, Inc.					
SIGNATURE of SAMPLER: <i>Zain Webb</i> DATE Signed (MM/DD/YY): 10/24/23					



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

Project #:

Empty box for Project #

Courier:  Fed Ex  UPS  USPS  Client  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 10-25-22 JCI

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Cooler Temp: 1.1 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C  Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.1

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



Effective Date: 11/14/2022

\*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

\*\*Bottom half of box is to list number of bottles

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1																												
2																												
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12																												

**pH Adjustment Log for Preserved Samples**

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

November 2023





December 08, 2023

Kristen Jurinko  
Southern Company  
241 Ralph McGill Blvd NE  
Bin 10160  
Atlanta, GA 30308

RE: Project: Hammond AP-2  
Pace Project No.: 92700193

Dear Kristen Jurinko:

Enclosed are the analytical results for sample(s) received by the laboratory on November 22, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

*Angela M. Baioni*

Angela Baioni for  
Bonnie Vang  
bonnie.vang@pacelabs.com  
704-977-0968  
Project Manager

Enclosures

cc: Kip Gray, Geosyntec  
Christine Hug, Geosyntec Consultants, Inc.  
Thomas Kessler, Geosyntec Consultants  
Whitney Law, Geosyntec Consultants  
Laura Midkiff, Southern Company  
Caroline Nelson, Geosyntec  
Anthony Szwast, Geosyntec Consultants



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Hammond AP-2

Pace Project No.: 92700193

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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

Virginia Certification #: 460204

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: Hammond AP-2  
Pace Project No.: 92700193

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92700193001	HAM-PT-01	Water	11/21/23 13:19	11/22/23 13:20
92700193002	HAM-PT-02	Water	11/21/23 14:53	11/22/23 13:20
92700193003	HAM-PT-03	Water	11/21/23 11:22	11/22/23 13:20
92700193004	HAM-PT-04	Water	11/21/23 15:15	11/22/23 13:20
92700193005	HAM-PT-05	Water	11/21/23 13:20	11/22/23 13:20
92700193006	HAM-PT-06	Water	11/21/23 09:08	11/22/23 13:20
92700193007	HAM-AP2-EB-01	Water	11/21/23 16:27	11/22/23 13:20
92700193008	HAM-AP2-FB-01	Water	11/21/23 16:15	11/22/23 13:20
92700193009	HAM-AP2-FD-01	Water	11/21/23 00:00	11/22/23 13:20

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92700193

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92700193001	HAM-PT-01	EPA 6010D	DRB	6
		EPA 6020B	CW1, MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92700193002	HAM-PT-02	EPA 6010D	DRB	6
		EPA 6020B	CW1, MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92700193003	HAM-PT-03	EPA 6010D	DRB	6
		EPA 6020B	CW1, MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92700193004	HAM-PT-04	EPA 6010D	DRB	6
		EPA 6020B	CW1, MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92700193005	HAM-PT-05	EPA 6010D	DRB	6
		EPA 6020B	CW1, MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92700193006	HAM-PT-06	EPA 6010D	DRB	6
		EPA 6020B	CW1, MT1	13

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: Hammond AP-2

Pace Project No.: 92700193

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92700193007	HAM-AP2-EB-01	EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1, MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
92700193008	HAM-AP2-FB-01	SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		EPA 6010D	DRB	6
		EPA 6020B	CW1, MT1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		SM 2320B-2011	SMS	3
		SM 4500-S2D-2011	JP1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
		92700193009	HAM-AP2-FD-01	EPA 6010D
EPA 6020B	CW1, MT1			13
EPA 7470A	VB			1
SM 2540C-2015	DL1			1
SM 2320B-2011	SMS			3
SM 4500-S2D-2011	JP1			1
EPA 300.0 Rev 2.1 1993	CDC			3

PASI-A = Pace Analytical Services - Asheville

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92700193

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92700193001</b>	<b>HAM-PT-01</b>					
EPA 6010D	Iron	0.85	mg/L	0.040	12/05/23 11:34	
EPA 6010D	Manganese	3.9	mg/L	0.040	12/04/23 22:14	
EPA 6010D	Potassium	5.2	mg/L	0.50	12/04/23 22:14	
EPA 6010D	Calcium	122	mg/L	1.0	12/04/23 22:14	
EPA 6010D	Magnesium	21.6	mg/L	0.050	12/04/23 22:14	
EPA 6010D	Sodium	1180	mg/L	10.0	12/06/23 13:03	
EPA 6020B	Barium	0.11	mg/L	0.0050	12/06/23 14:10	
EPA 6020B	Boron	3.1	mg/L	0.040	12/06/23 14:10	
EPA 6020B	Cobalt	0.0071J	mg/L	0.025	12/07/23 15:48	D3
SM 2540C-2015	Total Dissolved Solids	3450	mg/L	25.0	11/28/23 12:20	1g
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	2060	mg/L	5.0	12/01/23 09:14	
SM 2320B-2011	Alkalinity, Total as CaCO3	2060	mg/L	5.0	12/01/23 09:14	
EPA 300.0 Rev 2.1 1993	Chloride	92.3	mg/L	16.0	11/26/23 01:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.19	mg/L	0.10	11/25/23 19:22	
EPA 300.0 Rev 2.1 1993	Sulfate	749	mg/L	16.0	11/26/23 01:03	
<b>92700193002</b>	<b>HAM-PT-02</b>					
EPA 6010D	Sodium	918	mg/L	10.0	12/06/23 13:08	
EPA 6010D	Calcium	148	mg/L	10.0	12/06/23 13:08	
EPA 6010D	Iron	4.7	mg/L	0.040	12/05/23 11:53	
EPA 6010D	Manganese	5.2	mg/L	0.040	12/04/23 22:19	
EPA 6010D	Potassium	6.1	mg/L	0.50	12/04/23 22:19	
EPA 6010D	Magnesium	24.7	mg/L	0.050	12/04/23 22:19	
EPA 6020B	Arsenic	0.0024J	mg/L	0.010	12/06/23 14:26	
EPA 6020B	Barium	0.081	mg/L	0.0050	12/06/23 14:26	
EPA 6020B	Boron	3.8	mg/L	0.040	12/06/23 14:26	
EPA 6020B	Cobalt	0.014	mg/L	0.0050	12/06/23 14:26	
SM 2540C-2015	Total Dissolved Solids	2880	mg/L	25.0	11/28/23 12:21	1g
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1500	mg/L	5.0	12/01/23 09:28	
SM 2320B-2011	Alkalinity, Total as CaCO3	1500	mg/L	5.0	12/01/23 09:28	
SM 4500-S2D-2011	Sulfide	0.033J	mg/L	0.10	11/23/23 04:34	
EPA 300.0 Rev 2.1 1993	Chloride	118	mg/L	15.0	11/26/23 01:17	
EPA 300.0 Rev 2.1 1993	Fluoride	0.19	mg/L	0.10	11/25/23 19:36	
EPA 300.0 Rev 2.1 1993	Sulfate	724	mg/L	15.0	11/26/23 01:17	
<b>92700193003</b>	<b>HAM-PT-03</b>					
EPA 6010D	Manganese	8.8	mg/L	0.040	12/04/23 22:24	
EPA 6010D	Potassium	7.1	mg/L	0.50	12/04/23 22:24	
EPA 6010D	Sodium	38.3	mg/L	1.0	12/04/23 22:24	
EPA 6010D	Magnesium	38.3	mg/L	0.050	12/04/23 22:24	
EPA 6010D	Iron	0.85	mg/L	0.040	12/05/23 11:58	
EPA 6010D	Calcium	408	mg/L	10.0	12/06/23 13:12	
EPA 6020B	Arsenic	0.0074J	mg/L	0.010	12/06/23 14:30	
EPA 6020B	Barium	0.032	mg/L	0.0050	12/06/23 14:30	
EPA 6020B	Beryllium	0.0018J	mg/L	0.0025	12/07/23 15:56	D3
EPA 6020B	Boron	7.4	mg/L	0.040	12/06/23 14:30	
EPA 6020B	Cadmium	0.00049J	mg/L	0.00050	12/06/23 14:30	
EPA 6020B	Cobalt	0.11	mg/L	0.0050	12/06/23 14:30	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92700193

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92700193003</b>	<b>HAM-PT-03</b>					
EPA 6020B	Lead	0.00058J	mg/L	0.0010	12/06/23 14:30	
EPA 6020B	Lithium	0.0017J	mg/L	0.030	12/06/23 14:30	
EPA 6020B	Selenium	0.013	mg/L	0.0050	12/06/23 14:30	
EPA 7470A	Mercury	0.00017J	mg/L	0.00020	12/05/23 10:46	
SM 2540C-2015	Total Dissolved Solids	1840	mg/L	25.0	11/28/23 12:21	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	35.7	mg/L	5.0	11/30/23 20:27	
SM 2320B-2011	Alkalinity, Total as CaCO3	35.7	mg/L	5.0	11/30/23 20:27	
EPA 300.0 Rev 2.1 1993	Chloride	165	mg/L	20.0	11/26/23 01:31	
EPA 300.0 Rev 2.1 1993	Fluoride	0.84	mg/L	0.10	11/25/23 19:50	
EPA 300.0 Rev 2.1 1993	Sulfate	981	mg/L	20.0	11/26/23 01:31	
<b>92700193004</b>	<b>HAM-PT-04</b>					
EPA 6010D	Iron	6.7	mg/L	0.040	12/05/23 12:03	
EPA 6010D	Sodium	193	mg/L	10.0	12/06/23 13:17	
EPA 6010D	Calcium	187	mg/L	10.0	12/06/23 13:17	
EPA 6010D	Manganese	9.2	mg/L	0.040	12/04/23 22:29	
EPA 6010D	Potassium	13.2	mg/L	0.50	12/04/23 22:29	
EPA 6010D	Magnesium	15.9	mg/L	0.050	12/04/23 22:29	
EPA 6020B	Antimony	0.00061J	mg/L	0.0030	12/06/23 14:34	
EPA 6020B	Arsenic	0.0042J	mg/L	0.010	12/06/23 14:34	
EPA 6020B	Barium	0.048	mg/L	0.0050	12/06/23 14:34	
EPA 6020B	Boron	5.1	mg/L	0.040	12/06/23 14:34	
EPA 6020B	Cobalt	0.047	mg/L	0.0050	12/06/23 14:34	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	12/06/23 14:34	
EPA 6020B	Molybdenum	0.0020J	mg/L	0.010	12/06/23 14:34	
SM 2540C-2015	Total Dissolved Solids	1270	mg/L	25.0	11/28/23 12:21	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	617	mg/L	5.0	12/01/23 09:41	
SM 2320B-2011	Alkalinity, Total as CaCO3	617	mg/L	5.0	12/01/23 09:41	
EPA 300.0 Rev 2.1 1993	Chloride	84.7	mg/L	1.0	11/25/23 20:33	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	11/25/23 20:33	
EPA 300.0 Rev 2.1 1993	Sulfate	316	mg/L	7.0	11/26/23 02:13	
<b>92700193005</b>	<b>HAM-PT-05</b>					
EPA 6010D	Iron	0.32	mg/L	0.040	12/05/23 12:09	
EPA 6010D	Sodium	789	mg/L	10.0	12/06/23 13:22	
EPA 6010D	Manganese	1.8	mg/L	0.040	12/04/23 22:34	
EPA 6010D	Potassium	5.6	mg/L	0.50	12/04/23 22:34	
EPA 6010D	Calcium	108	mg/L	1.0	12/04/23 22:34	
EPA 6010D	Magnesium	11.5	mg/L	0.050	12/04/23 22:34	
EPA 6020B	Barium	0.043	mg/L	0.0050	12/06/23 14:39	
EPA 6020B	Boron	3.6	mg/L	0.040	12/06/23 14:39	
EPA 6020B	Cobalt	0.0070	mg/L	0.0050	12/06/23 14:39	
EPA 6020B	Lithium	0.0035J	mg/L	0.030	12/06/23 14:39	
EPA 6020B	Molybdenum	0.0023J	mg/L	0.010	12/06/23 14:39	
SM 2540C-2015	Total Dissolved Solids	2310	mg/L	25.0	11/28/23 12:21	1g
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	1560	mg/L	5.0	12/01/23 09:50	
SM 2320B-2011	Alkalinity, Total as CaCO3	1560	mg/L	5.0	12/01/23 09:50	
EPA 300.0 Rev 2.1 1993	Chloride	97.9	mg/L	1.0	11/25/23 20:48	

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: Hammond AP-2

Pace Project No.: 92700193

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92700193005</b>	<b>HAM-PT-05</b>					
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	11/25/23 20:48	
EPA 300.0 Rev 2.1 1993	Sulfate	378	mg/L	8.0	11/26/23 02:27	
<b>92700193006</b>	<b>HAM-PT-06</b>					
EPA 6010D	Sodium	186	mg/L	5.0	12/04/23 22:44	
EPA 6010D	Calcium	235	mg/L	5.0	12/04/23 22:44	
EPA 6010D	Manganese	13.4	mg/L	0.040	12/04/23 22:39	
EPA 6010D	Potassium	7.6	mg/L	0.50	12/04/23 22:39	
EPA 6010D	Magnesium	19.5	mg/L	0.050	12/04/23 22:39	
EPA 6010D	Iron	3.4	mg/L	0.040	12/05/23 12:14	
EPA 6020B	Antimony	0.0017J	mg/L	0.0030	12/06/23 14:43	
EPA 6020B	Arsenic	0.0042J	mg/L	0.010	12/06/23 14:43	
EPA 6020B	Barium	0.042	mg/L	0.0050	12/06/23 14:43	
EPA 6020B	Beryllium	0.0014J	mg/L	0.0025	12/07/23 16:09	D3
EPA 6020B	Boron	6.4	mg/L	0.040	12/06/23 14:43	
EPA 6020B	Cobalt	0.033	mg/L	0.0050	12/06/23 14:43	
EPA 6020B	Lithium	0.0034J	mg/L	0.030	12/06/23 14:43	
SM 2540C-2015	Total Dissolved Solids	1420	mg/L	25.0	11/28/23 12:21	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	225	mg/L	5.0	12/01/23 10:03	
SM 2320B-2011	Alkalinity, Total as CaCO3	225	mg/L	5.0	12/01/23 10:03	
EPA 300.0 Rev 2.1 1993	Chloride	139	mg/L	11.0	11/26/23 02:41	
EPA 300.0 Rev 2.1 1993	Sulfate	537	mg/L	11.0	11/26/23 02:41	
<b>92700193007</b>	<b>HAM-AP2-EB-01</b>					
EPA 6020B	Boron	0.096	mg/L	0.040	12/06/23 14:47	
<b>92700193008</b>	<b>HAM-AP2-FB-01</b>					
EPA 6020B	Boron	0.041	mg/L	0.040	12/06/23 14:51	
<b>92700193009</b>	<b>HAM-AP2-FD-01</b>					
EPA 6010D	Manganese	10.4	mg/L	0.040	12/04/23 22:59	
EPA 6010D	Potassium	10.4	mg/L	0.50	12/04/23 22:59	
EPA 6010D	Magnesium	17.7	mg/L	0.050	12/04/23 22:59	
EPA 6010D	Iron	6.0	mg/L	0.040	12/05/23 12:28	
EPA 6010D	Sodium	203	mg/L	10.0	12/06/23 13:27	
EPA 6010D	Calcium	204	mg/L	10.0	12/06/23 13:27	
EPA 6020B	Arsenic	0.0073J	mg/L	0.010	12/06/23 14:55	
EPA 6020B	Barium	0.050	mg/L	0.0050	12/06/23 14:55	
EPA 6020B	Boron	5.6	mg/L	0.040	12/06/23 14:55	
EPA 6020B	Cobalt	0.030	mg/L	0.0050	12/06/23 14:55	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	12/06/23 14:55	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	12/06/23 14:55	
SM 2540C-2015	Total Dissolved Solids	1450	mg/L	25.0	11/28/23 12:21	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	456	mg/L	5.0	12/01/23 10:23	
SM 2320B-2011	Alkalinity, Total as CaCO3	456	mg/L	5.0	12/01/23 10:23	
EPA 300.0 Rev 2.1 1993	Chloride	120	mg/L	10.0	11/26/23 02:55	
EPA 300.0 Rev 2.1 1993	Fluoride	0.086J	mg/L	0.10	11/25/23 21:45	
EPA 300.0 Rev 2.1 1993	Sulfate	466	mg/L	10.0	11/26/23 02:55	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-PT-01 Lab ID: 92700193001 Collected: 11/21/23 13:19 Received: 11/22/23 13:20 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									
Iron	0.85	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 11:34	7439-89-6	
Manganese	3.9	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 22:14	7439-96-5	
Potassium	5.2	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 22:14	7440-09-7	
Calcium	122	mg/L	1.0	0.12	1	11/29/23 13:50	12/04/23 22:14	7440-70-2	
Magnesium	21.6	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 22:14	7439-95-4	
Sodium	1180	mg/L	10.0	5.8	10	11/29/23 13:50	12/06/23 13:03	7440-23-5	
<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	0.00054	1	12/04/23 11:17	12/06/23 14:10	7440-36-0	
Arsenic	ND	mg/L	0.050	0.0042	5	12/04/23 11:17	12/07/23 15:48	7440-38-2	D3
Barium	0.11	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:10	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	12/04/23 11:17	12/06/23 14:10	7440-41-7	
Boron	3.1	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:10	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:10	7440-43-9	
Chromium	ND	mg/L	0.025	0.0094	5	12/04/23 11:17	12/07/23 15:48	7440-47-3	D3
Cobalt	0.0071J	mg/L	0.025	0.0016	5	12/04/23 11:17	12/07/23 15:48	7440-48-4	D3
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:10	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:10	7439-98-7	
Selenium	ND	mg/L	0.025	0.0048	5	12/04/23 11:17	12/07/23 15:48	7782-49-2	D3
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:10	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	12/04/23 16:00	12/05/23 10:28	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	3450	mg/L	25.0	25.0	1		11/28/23 12:20		1g
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	2060	mg/L	5.0	5.0	1		12/01/23 09:14		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		12/01/23 09:14		
Alkalinity, Total as CaCO3	2060	mg/L	5.0	5.0	1		12/01/23 09:14		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:34	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	92.3	mg/L	16.0	9.6	16		11/26/23 01:03	16887-00-6	

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**ANALYTICAL RESULTS**

Project: Hammond AP-2  
 Pace Project No.: 92700193

**Sample: HAM-PT-01**      **Lab ID: 92700193001**      Collected: 11/21/23 13:19      Received: 11/22/23 13:20      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**      Analytical Method: EPA 300.0 Rev 2.1 1993  
 Pace Analytical Services - Asheville

Fluoride	<b>0.19</b>	mg/L	0.10	0.050	1		11/25/23 19:22	16984-48-8	
Sulfate	<b>749</b>	mg/L	16.0	8.0	16		11/26/23 01:03	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-PT-02		Lab ID: 92700193002		Collected: 11/21/23 14:53		Received: 11/22/23 13:20		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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									
Sodium	918	mg/L	10.0	5.8	10	11/29/23 13:50	12/06/23 13:08	7440-23-5	
Calcium	148	mg/L	10.0	1.2	10	11/29/23 13:50	12/06/23 13:08	7440-70-2	
Iron	4.7	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 11:53	7439-89-6	
Manganese	5.2	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 22:19	7439-96-5	
Potassium	6.1	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 22:19	7440-09-7	
Magnesium	24.7	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 22:19	7439-95-4	
<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	0.00054	1	12/04/23 11:17	12/06/23 14:26	7440-36-0	
Arsenic	0.0024J	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 14:26	7440-38-2	
Barium	0.081	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:26	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00047	5	12/04/23 11:17	12/07/23 15:52	7440-41-7	D3
Boron	3.8	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:26	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 14:26	7440-47-3	
Cobalt	0.014	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 14:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:26	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:26	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 14:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:26	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	12/04/23 16:00	12/05/23 10:44	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	2880	mg/L	25.0	25.0	1		11/28/23 12:21		1g
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	1500	mg/L	5.0	5.0	1		12/01/23 09:28		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		12/01/23 09:28		
Alkalinity, Total as CaCO3	1500	mg/L	5.0	5.0	1		12/01/23 09:28		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	0.033J	mg/L	0.10	0.022	1		11/23/23 04:34	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	118	mg/L	15.0	9.0	15		11/26/23 01:17	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-PT-02      Lab ID: 92700193002      Collected: 11/21/23 14:53      Received: 11/22/23 13:20      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Fluoride	<b>0.19</b>	mg/L	0.10	0.050	1		11/25/23 19:36	16984-48-8	
Sulfate	<b>724</b>	mg/L	15.0	7.5	15		11/26/23 01:17	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-PT-03		Lab ID: 92700193003		Collected: 11/21/23 11:22		Received: 11/22/23 13:20		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Manganese	8.8	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 22:24	7439-96-5	
Potassium	7.1	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 22:24	7440-09-7	
Sodium	38.3	mg/L	1.0	0.58	1	11/29/23 13:50	12/04/23 22:24	7440-23-5	
Magnesium	38.3	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 22:24	7439-95-4	
Iron	0.85	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 11:58	7439-89-6	
Calcium	408	mg/L	10.0	1.2	10	11/29/23 13:50	12/06/23 13:12	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	0.00054	1	12/04/23 11:17	12/06/23 14:30	7440-36-0	
Arsenic	0.0074J	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 14:30	7440-38-2	
Barium	0.032	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:30	7440-39-3	
Beryllium	0.0018J	mg/L	0.0025	0.00047	5	12/04/23 11:17	12/07/23 15:56	7440-41-7	D3
Boron	7.4	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:30	7440-42-8	
Cadmium	0.00049J	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 14:30	7440-47-3	
Cobalt	0.11	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 14:30	7440-48-4	
Lead	0.00058J	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:30	7439-92-1	
Lithium	0.0017J	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:30	7439-98-7	
Selenium	0.013	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 14:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:30	7440-28-0	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	0.00017J	mg/L	0.00020	0.00013	1	12/04/23 16:00	12/05/23 10:46	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1840	mg/L	25.0	25.0	1		11/28/23 12:21		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	35.7	mg/L	5.0	5.0	1		11/30/23 20:27		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 20:27		
Alkalinity, Total as CaCO3	35.7	mg/L	5.0	5.0	1		11/30/23 20:27		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:35	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	165	mg/L	20.0	12.0	20		11/26/23 01:31	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-PT-03      Lab ID: 92700193003      Collected: 11/21/23 11:22      Received: 11/22/23 13:20      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Fluoride	<b>0.84</b>	mg/L	0.10	0.050	1		11/25/23 19:50	16984-48-8	
Sulfate	<b>981</b>	mg/L	20.0	10.0	20		11/26/23 01:31	14808-79-8	

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## ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-PT-04		Lab ID: 92700193004		Collected: 11/21/23 15:15		Received: 11/22/23 13:20		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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							
Iron	6.7	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 12:03	7439-89-6	
Sodium	193	mg/L	10.0	5.8	10	11/29/23 13:50	12/06/23 13:17	7440-23-5	
Calcium	187	mg/L	10.0	1.2	10	11/29/23 13:50	12/06/23 13:17	7440-70-2	
Manganese	9.2	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 22:29	7439-96-5	
Potassium	13.2	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 22:29	7440-09-7	
Magnesium	15.9	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 22:29	7439-95-4	
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	0.00061J	mg/L	0.0030	0.00054	1	12/04/23 11:17	12/06/23 14:34	7440-36-0	
Arsenic	0.0042J	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 14:34	7440-38-2	
Barium	0.048	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:34	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00047	5	12/04/23 11:17	12/07/23 16:00	7440-41-7	D3
Boron	5.1	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:34	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 14:34	7440-47-3	
Cobalt	0.047	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 14:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:34	7439-92-1	
Lithium	0.0021J	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:34	7439-93-2	
Molybdenum	0.0020J	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:34	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 14:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:34	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	12/04/23 16:00	12/05/23 10:49	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	1270	mg/L	25.0	25.0	1		11/28/23 12:21		
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville							
Alkalinity,Bicarbonate (CaCO3)	617	mg/L	5.0	5.0	1		12/01/23 09:41		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		12/01/23 09:41		
Alkalinity, Total as CaCO3	617	mg/L	5.0	5.0	1		12/01/23 09:41		
<b>4500S2D Sulfide Water</b>		Analytical Method: SM 4500-S2D-2011 Pace Analytical Services - Asheville							
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:35	18496-25-8	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	84.7	mg/L	1.0	0.60	1		11/25/23 20:33	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-PT-04 Lab ID: 92700193004 Collected: 11/21/23 15:15 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Fluoride	<b>0.12</b>	mg/L	0.10	0.050	1		11/25/23 20:33	16984-48-8	
Sulfate	<b>316</b>	mg/L	7.0	3.5	7		11/26/23 02:13	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-PT-05		Lab ID: 92700193005		Collected: 11/21/23 13:20		Received: 11/22/23 13:20		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	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									
Iron	0.32	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 12:09	7439-89-6	
Sodium	789	mg/L	10.0	5.8	10	11/29/23 13:50	12/06/23 13:22	7440-23-5	
Manganese	1.8	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 22:34	7439-96-5	
Potassium	5.6	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 22:34	7440-09-7	
Calcium	108	mg/L	1.0	0.12	1	11/29/23 13:50	12/04/23 22:34	7440-70-2	
Magnesium	11.5	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 22:34	7439-95-4	
<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	0.00054	1	12/04/23 11:17	12/06/23 14:39	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 14:39	7440-38-2	
Barium	0.043	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:39	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00047	5	12/04/23 11:17	12/07/23 16:04	7440-41-7	D3
Boron	3.6	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:39	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:39	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 14:39	7440-47-3	
Cobalt	0.0070	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 14:39	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:39	7439-92-1	
Lithium	0.0035J	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:39	7439-93-2	
Molybdenum	0.0023J	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 14:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:39	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	0.00013	1	12/04/23 16:00	12/05/23 10:51	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	2310	mg/L	25.0	25.0	1		11/28/23 12:21		1g
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	1560	mg/L	5.0	5.0	1		12/01/23 09:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		12/01/23 09:50		
Alkalinity, Total as CaCO3	1560	mg/L	5.0	5.0	1		12/01/23 09:50		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:35	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	97.9	mg/L	1.0	0.60	1		11/25/23 20:48	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-PT-05      Lab ID: 92700193005      Collected: 11/21/23 13:20      Received: 11/22/23 13:20      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Fluoride	<b>0.10</b>	mg/L	0.10	0.050	1		11/25/23 20:48	16984-48-8	
Sulfate	<b>378</b>	mg/L	8.0	4.0	8		11/26/23 02:27	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

**Sample: HAM-PT-06**      **Lab ID: 92700193006**      Collected: 11/21/23 09:08      Received: 11/22/23 13:20      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									
Sodium	186	mg/L	5.0	2.9	5	11/29/23 13:50	12/04/23 22:44	7440-23-5	
Calcium	235	mg/L	5.0	0.61	5	11/29/23 13:50	12/04/23 22:44	7440-70-2	
Manganese	13.4	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 22:39	7439-96-5	
Potassium	7.6	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 22:39	7440-09-7	
Magnesium	19.5	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 22:39	7439-95-4	
Iron	3.4	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 12:14	7439-89-6	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.0017J	mg/L	0.0030	0.00054	1	12/04/23 11:17	12/06/23 14:43	7440-36-0	
Arsenic	0.0042J	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 14:43	7440-38-2	
Barium	0.042	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:43	7440-39-3	
Beryllium	0.0014J	mg/L	0.0025	0.00047	5	12/04/23 11:17	12/07/23 16:09	7440-41-7	D3
Boron	6.4	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 14:43	7440-47-3	
Cobalt	0.033	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 14:43	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:43	7439-92-1	
Lithium	0.0034J	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 14:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:43	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	12/04/23 16:00	12/05/23 10:54	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1420	mg/L	25.0	25.0	1		11/28/23 12:21		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	225	mg/L	5.0	5.0	1		12/01/23 10:03		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		12/01/23 10:03		
Alkalinity, Total as CaCO3	225	mg/L	5.0	5.0	1		12/01/23 10:03		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:36	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	139	mg/L	11.0	6.6	11		11/26/23 02:41	16887-00-6	

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**ANALYTICAL RESULTS**

Project: Hammond AP-2  
 Pace Project No.: 92700193

**Sample: HAM-PT-06**      **Lab ID: 92700193006**      Collected: 11/21/23 09:08      Received: 11/22/23 13:20      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
 Pace Analytical Services - Asheville

Fluoride	ND	mg/L	0.10	0.050	1		11/25/23 21:02	16984-48-8	
Sulfate	<b>537</b>	mg/L	11.0	5.5	11		11/26/23 02:41	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

**Sample: HAM-AP2-EB-01**      **Lab ID: 92700193007**      Collected: 11/21/23 16:27      Received: 11/22/23 13:20      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									
Manganese	ND	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 22:49	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 22:49	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	11/29/23 13:50	12/04/23 22:49	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	11/29/23 13:50	12/04/23 22:49	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 22:49	7439-95-4	
Iron	ND	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 12:19	7439-89-6	
<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	0.00054	1	12/04/23 11:17	12/06/23 14:47	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 14:47	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:47	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	12/04/23 11:17	12/07/23 16:13	7440-41-7	
Boron	<b>0.096</b>	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:47	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 14:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 14:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:47	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 14:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:47	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	12/04/23 16:00	12/05/23 10:57	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	25.0	25.0	1		11/28/23 12:21		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 21:11		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 21:11		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		11/30/23 21:11		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:36	18496-25-8	
<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		11/25/23 14:24	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-AP2-EB-01 Lab ID: 92700193007 Collected: 11/21/23 16:27 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	ND	mg/L	0.10	0.050	1		11/25/23 14:24	16984-48-8	M1,R1
Sulfate	ND	mg/L	1.0	0.50	1		11/25/23 14:24	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

**Sample: HAM-AP2-FB-01**      **Lab ID: 92700193008**      Collected: 11/21/23 16:15      Received: 11/22/23 13:20      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									
Iron	ND	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 12:23	7439-89-6	
Manganese	ND	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 22:54	7439-96-5	
Potassium	ND	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 22:54	7440-09-7	
Sodium	ND	mg/L	1.0	0.58	1	11/29/23 13:50	12/04/23 22:54	7440-23-5	
Calcium	ND	mg/L	1.0	0.12	1	11/29/23 13:50	12/04/23 22:54	7440-70-2	
Magnesium	ND	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 22:54	7439-95-4	
<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	0.00054	1	12/04/23 11:17	12/06/23 14:51	7440-36-0	
Arsenic	ND	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 14:51	7440-38-2	
Barium	ND	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:51	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000094	1	12/04/23 11:17	12/07/23 16:17	7440-41-7	
Boron	<b>0.041</b>	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:51	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:51	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 14:51	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 14:51	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:51	7439-92-1	
Lithium	ND	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:51	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:51	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 14:51	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:51	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	12/04/23 16:00	12/05/23 10:59	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	25.0	25.0	1		11/28/23 12:21		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 21:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		11/30/23 21:15		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		11/30/23 21:15		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:37	18496-25-8	
<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		11/25/23 14:09	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-AP2-FB-01 Lab ID: 92700193008 Collected: 11/21/23 16:15 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Fluoride	ND	mg/L	0.10	0.050	1		11/25/23 14:09	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		11/25/23 14:09	14808-79-8	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

**Sample:** HAM-AP2-FD-01      **Lab ID:** 92700193009      Collected: 11/21/23 00:00      Received: 11/22/23 13:20      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									
Manganese	10.4	mg/L	0.040	0.011	1	11/29/23 13:50	12/04/23 22:59	7439-96-5	
Potassium	10.4	mg/L	0.50	0.15	1	11/29/23 13:50	12/04/23 22:59	7440-09-7	
Magnesium	17.7	mg/L	0.050	0.012	1	11/29/23 13:50	12/04/23 22:59	7439-95-4	
Iron	6.0	mg/L	0.040	0.025	1	11/29/23 13:50	12/05/23 12:28	7439-89-6	
Sodium	203	mg/L	10.0	5.8	10	11/29/23 13:50	12/06/23 13:27	7440-23-5	
Calcium	204	mg/L	10.0	1.2	10	11/29/23 13:50	12/06/23 13:27	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	0.00054	1	12/04/23 11:17	12/06/23 14:55	7440-36-0	
Arsenic	0.0073J	mg/L	0.010	0.00084	1	12/04/23 11:17	12/06/23 14:55	7440-38-2	
Barium	0.050	mg/L	0.0050	0.00047	1	12/04/23 11:17	12/06/23 14:55	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00047	5	12/04/23 11:17	12/07/23 16:21	7440-41-7	D3
Boron	5.6	mg/L	0.040	0.012	1	12/04/23 11:17	12/06/23 14:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00010	1	12/04/23 11:17	12/06/23 14:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0019	1	12/04/23 11:17	12/06/23 14:55	7440-47-3	
Cobalt	0.030	mg/L	0.0050	0.00032	1	12/04/23 11:17	12/06/23 14:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00016	1	12/04/23 11:17	12/06/23 14:55	7439-92-1	
Lithium	0.0031J	mg/L	0.030	0.0016	1	12/04/23 11:17	12/06/23 14:55	7439-93-2	
Molybdenum	0.0015J	mg/L	0.010	0.00062	1	12/04/23 11:17	12/06/23 14:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.00096	1	12/04/23 11:17	12/06/23 14:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00038	1	12/04/23 11:17	12/06/23 14:55	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	12/05/23 16:00	12/06/23 10:12	7439-97-6	R1
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2015									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	1450	mg/L	25.0	25.0	1		11/28/23 12:21		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	456	mg/L	5.0	5.0	1		12/01/23 10:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		12/01/23 10:23		
Alkalinity, Total as CaCO3	456	mg/L	5.0	5.0	1		12/01/23 10:23		
<b>4500S2D Sulfide Water</b>									
Analytical Method: SM 4500-S2D-2011									
Pace Analytical Services - Asheville									
Sulfide	ND	mg/L	0.10	0.022	1		11/23/23 04:38	18496-25-8	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	120	mg/L	10.0	6.0	10		11/26/23 02:55	16887-00-6	

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### ANALYTICAL RESULTS

Project: Hammond AP-2

Pace Project No.: 92700193

Sample: HAM-AP2-FD-01 Lab ID: 92700193009 Collected: 11/21/23 00:00 Received: 11/22/23 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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**300.0 IC Anions 28 Days**

Analytical Method: EPA 300.0 Rev 2.1 1993  
Pace Analytical Services - Asheville

Fluoride	<b>0.086J</b>	mg/L	0.10	0.050	1		11/25/23 21:45	16984-48-8	
Sulfate	<b>466</b>	mg/L	10.0	5.0	10		11/26/23 02:55	14808-79-8	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

QC Batch:	816107	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008, 92700193009

METHOD BLANK:	4224079	Matrix:	Water
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Associated Lab Samples: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008, 92700193009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	12/04/23 21:21	
Iron	mg/L	ND	0.040	0.025	12/05/23 10:56	
Magnesium	mg/L	ND	0.050	0.012	12/04/23 21:21	
Manganese	mg/L	ND	0.040	0.011	12/04/23 21:21	
Potassium	mg/L	ND	0.50	0.15	12/04/23 21:21	
Sodium	mg/L	ND	1.0	0.58	12/04/23 21:21	

LABORATORY CONTROL SAMPLE: 4224080

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.95J	95	80-120	
Iron	mg/L	1	1.0	104	80-120	
Magnesium	mg/L	1	0.98	98	80-120	
Manganese	mg/L	1	1.0	100	80-120	
Potassium	mg/L	1	1.1	115	80-120	
Sodium	mg/L	1	1.1	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4224081 4224082

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92700191001 Result	Spike Conc.	Spike Conc.	MS Conc.								
Calcium	mg/L	121	1	1	125	124	366	212	75-125	1	20	M1	
Iron	mg/L	17.7	1	1	19.4	19.4	166	166	75-125	0	20	M1	
Magnesium	mg/L	15.1	1	1	16.4	16.2	132	116	75-125	1	20	M1	
Manganese	mg/L	4.5	1	1	5.5	5.5	102	98	75-125	1	20		
Potassium	mg/L	6.4	1	1	7.7	7.6	128	117	75-125	1	20	M1	
Sodium	mg/L	7.0	1	1	8.3	8.3	132	129	75-125	0	20	M1	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

QC Batch: 817033 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008, 92700193009

METHOD BLANK: 4228731 Matrix: Water  
 Associated Lab Samples: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008, 92700193009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00054	12/06/23 13:33	
Arsenic	mg/L	ND	0.010	0.00084	12/06/23 13:33	
Barium	mg/L	ND	0.0050	0.00047	12/06/23 13:33	
Beryllium	mg/L	ND	0.00050	0.000094	12/06/23 13:33	
Boron	mg/L	ND	0.040	0.012	12/06/23 13:33	
Cadmium	mg/L	ND	0.00050	0.00010	12/06/23 13:33	
Chromium	mg/L	ND	0.0050	0.0019	12/06/23 13:33	
Cobalt	mg/L	ND	0.0050	0.00032	12/06/23 13:33	
Lead	mg/L	ND	0.0010	0.00016	12/06/23 13:33	
Lithium	mg/L	ND	0.030	0.0016	12/06/23 13:33	
Molybdenum	mg/L	ND	0.010	0.00062	12/06/23 13:33	
Selenium	mg/L	ND	0.0050	0.00096	12/06/23 13:33	
Thallium	mg/L	ND	0.0010	0.00038	12/06/23 13:33	

LABORATORY CONTROL SAMPLE: 4228732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	105	80-120	
Arsenic	mg/L	0.1	0.10	103	80-120	
Barium	mg/L	0.1	0.11	105	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.11	105	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	103	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.11	105	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4228733 4228734

Parameter	Units	92700191002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4228733 4228734												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92700191002 Result	Spike Conc.	Spike Conc.	MS Result							
Arsenic	mg/L	0.28	0.1	0.1	0.39	0.39	104	101	75-125	1	20	
Barium	mg/L	0.051	0.1	0.1	0.16	0.16	106	105	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.087	0.086	87	86	75-125	0	20	
Boron	mg/L	1.1	1	1	1.9	1.9	85	82	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.093	0.090	92	90	75-125	2	20	
Cobalt	mg/L	0.028	0.1	0.1	0.12	0.12	93	92	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.094	95	94	75-125	2	20	
Lithium	mg/L	0.026J	0.1	0.1	0.12	0.12	91	91	75-125	1	20	
Molybdenum	mg/L	0.032	0.1	0.1	0.13	0.13	101	98	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	108	105	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.093	94	92	75-125	2	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

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QC Batch: 816979 Analysis Method: EPA 7470A  
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008

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METHOD BLANK: 4228480 Matrix: Water  
 Associated Lab Samples: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	12/05/23 09:44	

LABORATORY CONTROL SAMPLE: 4228481

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4228482 4228483

Parameter	Units	92700193001 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	0.0020	0.0020	78	78	75-125	1	20	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

QC Batch: 817299	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92700193009

METHOD BLANK: 4229911 Matrix: Water

Associated Lab Samples: 92700193009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	12/06/23 10:01	

LABORATORY CONTROL SAMPLE: 4229912

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4229913 4229914

Parameter	Units	4229913		4229914		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	92700193009 ND	0.0025	0.0025	0.0023	0.0019	93	76	75-125	21	20 R1

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

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QC Batch: 815475 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: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008, 92700193009

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METHOD BLANK: 4221243 Matrix: Water  
 Associated Lab Samples: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008, 92700193009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	11/28/23 12:18	

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LABORATORY CONTROL SAMPLE: 4221244

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	414	104	80-120	

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SAMPLE DUPLICATE: 4221245

Parameter	Units	92700191001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	566	566	0	10	

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SAMPLE DUPLICATE: 4221246

Parameter	Units	92700193007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

QC Batch:	816475	Analysis Method:	SM 2320B-2011
QC Batch Method:	SM 2320B-2011	Analysis Description:	2320B Alkalinity
		Laboratory:	Pace Analytical Services - Asheville
Associated Lab Samples:	92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008, 92700193009		

METHOD BLANK:	4226050	Matrix:	Water
Associated Lab Samples:	92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008, 92700193009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	11/30/23 19:45	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	11/30/23 19:45	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	11/30/23 19:45	

LABORATORY CONTROL SAMPLE: 4226051						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.6	103	80-120	

LABORATORY CONTROL SAMPLE: 4226052						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4226053												4226054	
Parameter	Units	92700193008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.6	50.8	102	100	80-120	2	25		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4226709												4226710	
Parameter	Units	92700193007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Alkalinity, Total as CaCO3	mg/L	ND	50	50	51.9	49.9	103	99	80-120	4	25		

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

QC Batch: 815251 Analysis Method: SM 4500-S2D-2011  
 QC Batch Method: SM 4500-S2D-2011 Analysis Description: 4500S2D Sulfide Water  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008

METHOD BLANK: 4220627 Matrix: Water  
 Associated Lab Samples: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006, 92700193007, 92700193008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	11/23/23 04:26	

LABORATORY CONTROL SAMPLE: 4220628

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.48	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4220629 4220630

Parameter	Units	92700186001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.51	0.51	102	102	80-120	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4220631 4220632

Parameter	Units	92700191003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	0.5	0.5	0.51	0.53	103	107	80-120	4	10	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

QC Batch: 815252

Analysis Method: SM 4500-S2D-2011

QC Batch Method: SM 4500-S2D-2011

Analysis Description: 4500S2D Sulfide Water

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92700193009

METHOD BLANK: 4220633

Matrix: Water

Associated Lab Samples: 92700193009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.10	0.022	11/23/23 04:37	

LABORATORY CONTROL SAMPLE: 4220634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	0.5	0.53	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4220635 4220636

Parameter	Units	4220635		4220636		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		92700193009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Sulfide	mg/L	ND	0.5	0.5	0.46	0.48	89	93	80-120	4	10	

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

QC Batch: 815300 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: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006

METHOD BLANK: 4220718 Matrix: Water  
 Associated Lab Samples: 92700193001, 92700193002, 92700193003, 92700193004, 92700193005, 92700193006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	11/25/23 13:12	
Fluoride	mg/L	ND	0.10	0.050	11/25/23 13:12	
Sulfate	mg/L	ND	1.0	0.50	11/25/23 13:12	

LABORATORY CONTROL SAMPLE: 4220719

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.8	104	90-110	
Fluoride	mg/L	2.5	2.6	105	90-110	
Sulfate	mg/L	50	52.1	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4220720 4220721

Parameter	Units	92700200001		MS		MSD		% Rec	% Rec	% Rec	Limits	RPD	Max	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result							
Chloride	mg/L	11.1	50	50	58.4	61.3	95	100	90-110	5	10			
Fluoride	mg/L	0.10	2.5	2.5	2.6	2.7	99	102	90-110	4	10			
Sulfate	mg/L	31.1	50	50	80.8	83.7	99	105	90-110	4	10			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4220722 4220723

Parameter	Units	92700191001		MS		MSD		% Rec	% Rec	% Rec	Limits	RPD	Max	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result							
Chloride	mg/L	17.6	50	50	68.6	68.9	102	103	90-110	0	10			
Fluoride	mg/L	0.36	2.5	2.5	2.8	2.9	99	100	90-110	0	10			
Sulfate	mg/L	248	50	50	290	290	84	84	90-110	0	10	M1		

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**QUALITY CONTROL DATA**

Project: Hammond AP-2

Pace Project No.: 92700193

QC Batch: 815301 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: 92700193007, 92700193008, 92700193009

METHOD BLANK: 4220724 Matrix: Water  
 Associated Lab Samples: 92700193007, 92700193008, 92700193009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	11/25/23 21:16	
Fluoride	mg/L	ND	0.10	0.050	11/25/23 21:16	
Sulfate	mg/L	ND	1.0	0.50	11/25/23 21:16	

LABORATORY CONTROL SAMPLE: 4220725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.1	104	90-110	
Fluoride	mg/L	2.5	2.5	102	90-110	
Sulfate	mg/L	50	52.4	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4220726 4220727

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92700193007 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	ND	50	50	50	49.8	50.7	100	101	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	3.4	2.5	134	102	90-110	28	10	M1,R1
Sulfate	mg/L	ND	50	50	50	50.2	50.8	100	102	90-110	1	10	

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## QUALIFIERS

Project: Hammond AP-2

Pace Project No.: 92700193

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

1g Sample residue exceeded method SM 2540C recommended 200 mg

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

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 AP-2

Pace Project No.: 92700193

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92700193001	HAM-PT-01	EPA 3010A	816107	EPA 6010D	816179
92700193002	HAM-PT-02	EPA 3010A	816107	EPA 6010D	816179
92700193003	HAM-PT-03	EPA 3010A	816107	EPA 6010D	816179
92700193004	HAM-PT-04	EPA 3010A	816107	EPA 6010D	816179
92700193005	HAM-PT-05	EPA 3010A	816107	EPA 6010D	816179
92700193006	HAM-PT-06	EPA 3010A	816107	EPA 6010D	816179
92700193007	HAM-AP2-EB-01	EPA 3010A	816107	EPA 6010D	816179
92700193008	HAM-AP2-FB-01	EPA 3010A	816107	EPA 6010D	816179
92700193009	HAM-AP2-FD-01	EPA 3010A	816107	EPA 6010D	816179
92700193001	HAM-PT-01	EPA 3005A	817033	EPA 6020B	817133
92700193002	HAM-PT-02	EPA 3005A	817033	EPA 6020B	817133
92700193003	HAM-PT-03	EPA 3005A	817033	EPA 6020B	817133
92700193004	HAM-PT-04	EPA 3005A	817033	EPA 6020B	817133
92700193005	HAM-PT-05	EPA 3005A	817033	EPA 6020B	817133
92700193006	HAM-PT-06	EPA 3005A	817033	EPA 6020B	817133
92700193007	HAM-AP2-EB-01	EPA 3005A	817033	EPA 6020B	817133
92700193008	HAM-AP2-FB-01	EPA 3005A	817033	EPA 6020B	817133
92700193009	HAM-AP2-FD-01	EPA 3005A	817033	EPA 6020B	817133
92700193001	HAM-PT-01	EPA 7470A	816979	EPA 7470A	817223
92700193002	HAM-PT-02	EPA 7470A	816979	EPA 7470A	817223
92700193003	HAM-PT-03	EPA 7470A	816979	EPA 7470A	817223
92700193004	HAM-PT-04	EPA 7470A	816979	EPA 7470A	817223
92700193005	HAM-PT-05	EPA 7470A	816979	EPA 7470A	817223
92700193006	HAM-PT-06	EPA 7470A	816979	EPA 7470A	817223
92700193007	HAM-AP2-EB-01	EPA 7470A	816979	EPA 7470A	817223
92700193008	HAM-AP2-FB-01	EPA 7470A	816979	EPA 7470A	817223
92700193009	HAM-AP2-FD-01	EPA 7470A	817299	EPA 7470A	817489
92700193001	HAM-PT-01	SM 2540C-2015	815475		
92700193002	HAM-PT-02	SM 2540C-2015	815475		
92700193003	HAM-PT-03	SM 2540C-2015	815475		
92700193004	HAM-PT-04	SM 2540C-2015	815475		
92700193005	HAM-PT-05	SM 2540C-2015	815475		
92700193006	HAM-PT-06	SM 2540C-2015	815475		
92700193007	HAM-AP2-EB-01	SM 2540C-2015	815475		
92700193008	HAM-AP2-FB-01	SM 2540C-2015	815475		
92700193009	HAM-AP2-FD-01	SM 2540C-2015	815475		
92700193001	HAM-PT-01	SM 2320B-2011	816475		
92700193002	HAM-PT-02	SM 2320B-2011	816475		
92700193003	HAM-PT-03	SM 2320B-2011	816475		
92700193004	HAM-PT-04	SM 2320B-2011	816475		
92700193005	HAM-PT-05	SM 2320B-2011	816475		
92700193006	HAM-PT-06	SM 2320B-2011	816475		
92700193007	HAM-AP2-EB-01	SM 2320B-2011	816475		
92700193008	HAM-AP2-FB-01	SM 2320B-2011	816475		
92700193009	HAM-AP2-FD-01	SM 2320B-2011	816475		
92700193001	HAM-PT-01	SM 4500-S2D-2011	815251		

### REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hammond AP-2

Pace Project No.: 92700193

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92700193002	HAM-PT-02	SM 4500-S2D-2011	815251		
92700193003	HAM-PT-03	SM 4500-S2D-2011	815251		
92700193004	HAM-PT-04	SM 4500-S2D-2011	815251		
92700193005	HAM-PT-05	SM 4500-S2D-2011	815251		
92700193006	HAM-PT-06	SM 4500-S2D-2011	815251		
92700193007	HAM-AP2-EB-01	SM 4500-S2D-2011	815251		
92700193008	HAM-AP2-FB-01	SM 4500-S2D-2011	815251		
92700193009	HAM-AP2-FD-01	SM 4500-S2D-2011	815252		
92700193001	HAM-PT-01	EPA 300.0 Rev 2.1 1993	815300		
92700193002	HAM-PT-02	EPA 300.0 Rev 2.1 1993	815300		
92700193003	HAM-PT-03	EPA 300.0 Rev 2.1 1993	815300		
92700193004	HAM-PT-04	EPA 300.0 Rev 2.1 1993	815300		
92700193005	HAM-PT-05	EPA 300.0 Rev 2.1 1993	815300		
92700193006	HAM-PT-06	EPA 300.0 Rev 2.1 1993	815300		
92700193007	HAM-AP2-EB-01	EPA 300.0 Rev 2.1 1993	815301		
92700193008	HAM-AP2-FB-01	EPA 300.0 Rev 2.1 1993	815301		
92700193009	HAM-AP2-FD-01	EPA 300.0 Rev 2.1 1993	815301		

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DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Knoxville

Sample Condition Upon Receipt

Client Name:

Project #

WO#: 92700193

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other: \_\_\_\_\_



92700193

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 11-23-22 JG

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:

IR Gun ID: 230

Type of Ice:  Wet  Blue  None

Cooler Temp: 3.3 Correction Factor: Add/Subtract (°C) 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): 3.3

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>        </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 type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_



DC#\_Title: ENV-FRM-HUN1-0083 v02\_Sample Condition Upon Receipt

Effective Date: 11/14/2022

WO#: 92700193

\*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

PM: BV

Due Date: 12/08/23

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

CLIENT: 92- GP-HAM

\*\*Bottom half of box is to list number of bottles

\*\*\*Check all unpreserved Nitrates for chlorine

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	2	1																										
2	2	1																										
3	2	1																										
4	2	1																										
5	2	1																										
6	2	1																										
7	2	1																										
8	2	1																										
9	2	1																										
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

<b>Section A</b> Required Client Information Company: GA Power Address: Atlanta GA Email To: SCS Contacts Phone: _____ Requested Due Date/TAT: 10 Day		<b>Section B</b> Required Project Information Report To: SCS Contacts Copy To: Geosyntec Contacts Purchase Order No.: GPC82474-0001 Project Name: Hammond AP-2 Project Number: _____		<b>Section C</b> Invoice Information Attention: Southern Co. Company Name: _____ Address: _____ Pace Quote Reference: Bonnie Vang Pace Project Manager: _____ Pace Profile #: 10839		<b>REGULATORY AGENCY</b> <input type="checkbox"/> NPOES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER Site Location: GA STATE: _____	
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ITEM #	Section D Required Client Information  Valid Matrix Codes DRINKING WATER DW WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WIP AIR AIR OTHER OT TSS TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.		
				DATE	TIME			DATE	TIME	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>					Methanol	Other
1	HAM-PT-01	WG G	G	11/21/2023	13:19	19	5	3	1	1	1	1	1	1	1	X	X	X	X	001
2	HAM-PT-02	WG G	G	11/21/2023	14:53	19	5	3	1	1	1	1	1	1	1	X	X	X	X	002
3	HAM-PT-03	WG G	G	11/21/2023	11:22	19	5	3	1	1	1	1	1	1	1	X	X	X	X	003
4	HAM-PT-04	WG G	G	11/21/2023	15:15	20	5	3	1	1	1	1	1	1	1	X	X	X	X	004
5	HAM-PT-05	WG G	G	11/21/2023	13:20	19	5	3	1	1	1	1	1	1	1	X	X	X	X	005
6	HAM-PT-06	WG G	G	11/21/2023	09:08	19	5	3	1	1	1	1	1	1	1	X	X	X	X	006
7	HAM-AP2-EB-01	WG G	G	11/21/2023	16:27	19	5	3	1	1	1	1	1	1	1	X	X	X	X	007
8	HAM-AP2-FB-01	WG G	G	11/21/2023	16:15	19	5	3	1	1	1	1	1	1	1	X	X	X	X	008
9	HAM-AP2-FD-01	WG G	G	11/21/2023	0000	19	5	3	1	1	1	1	1	1	1	X	X	X	X	009
10																				
11																				
12																				

<b>ADDITIONAL COMMENTS</b> Task Code: HAM-CH-CA-20231121 Relinquished by / Affiliation: Elizabeth Eason Geosyntec Date: 11/21/23 Time: 11:05 Accepted by / Affiliation: Stan Williams Pace Date: 11/21/23 Time: 13:28 Signature: Stan Williams Pace Date: 11/21/23 Time: 13:28		<b>SAMPLER NAME AND SIGNATURE</b> PRINT Name of SAMPLER: Hudson Kennedy, Zain Webb SIGNATURE of SAMPLER: [Signature] DATE Signed (MM/DD/YY): 11/21/23	
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Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07 15-Feb-2007

# Pilot Study Field Sampling Forms

July 2023

# Low-Flow Test Report:

Test Date / Time: 7/14/2023 2:27:39 PM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: INW-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 28 ft</b> <b>Total Depth: 38 ft</b> <b>Initial Depth to Water: 14.5 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 33 ft</b> <b>Estimated Total Volume Pumped: 5000 ml</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: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

73-93 deg F; cloudy

## 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	+/- 10	+/- 10	+/- 0.3	
7/14/2023 2:27 PM	00:00	6.32 pH	23.17 °C	1,741.8 µS/cm	0.18 mg/L	1.48 NTU	-61.8 mV	14.60 ft	200.00 ml/min
7/14/2023 2:32 PM	05:00	6.31 pH	22.78 °C	1,728.3 µS/cm	0.13 mg/L	1.82 NTU	-57.8 mV	14.60 ft	200.00 ml/min
7/14/2023 2:37 PM	10:00	6.30 pH	22.65 °C	1,720.3 µS/cm	0.11 mg/L	2.02 NTU	-61.8 mV	14.60 ft	200.00 ml/min
7/14/2023 2:42 PM	15:00	6.29 pH	22.45 °C	1,721.0 µS/cm	0.09 mg/L	1.98 NTU	-60.0 mV	14.60 ft	200.00 ml/min
7/14/2023 2:47 PM	20:00	6.28 pH	22.60 °C	1,717.1 µS/cm	0.08 mg/L	1.45 NTU	-52.7 mV	14.60 ft	200.00 ml/min
7/14/2023 2:52 PM	25:00	6.27 pH	22.77 °C	1,711.0 µS/cm	0.08 mg/L	1.44 NTU	-52.1 mV	14.60 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-INW-02	Grab.
HAM-AP2-FD-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 7/18/2023 12:54:24 PM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 11.2 ft</b> <b>Total Depth: 21.2 ft</b> <b>Initial Depth to Water: 10.2 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 16.2 ft</b> <b>Estimated Total Volume Pumped: 3750 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 150 ml/min</b> <b>Final Draw Down: 0.2 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

63-93 deg F Sunny

## 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	+/- 10	+/- 10	+/- 0.4	
7/18/2023 12:54 PM	00:00	4.66 pH	24.25 °C	1,950.9 µS/cm	1.50 mg/L	3.97 NTU	129.9 mV	10.40 ft	150.00 ml/min
7/18/2023 12:59 PM	05:00	4.63 pH	22.68 °C	1,946.7 µS/cm	0.66 mg/L	3.32 NTU	129.0 mV	10.40 ft	150.00 ml/min
7/18/2023 1:04 PM	10:00	4.63 pH	22.41 °C	1,951.2 µS/cm	0.50 mg/L	3.59 NTU	160.9 mV	10.40 ft	150.00 ml/min
7/18/2023 1:09 PM	15:00	4.64 pH	22.20 °C	1,946.9 µS/cm	0.49 mg/L	3.49 NTU	129.7 mV	10.40 ft	150.00 ml/min
7/18/2023 1:14 PM	20:00	4.62 pH	21.83 °C	1,955.0 µS/cm	0.47 mg/L	3.29 NTU	166.8 mV	10.40 ft	150.00 ml/min
7/18/2023 1:19 PM	25:00	4.63 pH	22.09 °C	1,953.8 µS/cm	0.46 mg/L	3.21 NTU	131.8 mV	10.40 ft	150.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 7/18/2023 2:04:10 PM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 10.8 ft</b> <b>Total Depth: 20.8 ft</b> <b>Initial Depth to Water: 10.1 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 15.8 ft</b> <b>Estimated Total Volume Pumped: 13176.667 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.1 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

63-93 deg F Sunny

## 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	+/- 10	+/- 10	+/- 0.3	
7/18/2023 2:04 PM	00:00	5.04 pH	27.82 °C	1,893.0 µS/cm	3.95 mg/L	3.88 NTU	146.0 mV	10.20 ft	100.00 ml/min
7/18/2023 2:49 PM	44:54	5.03 pH	36.70 °C	1,803.5 µS/cm	5.29 mg/L	3.91 NTU	159.3 mV	10.20 ft	100.00 ml/min
7/18/2023 2:54 PM	50:00	5.00 pH	26.89 °C	2,018.8 µS/cm	2.36 mg/L	4.68 NTU	148.6 mV	10.20 ft	100.00 ml/min
7/18/2023 2:59 PM	55:00	4.96 pH	30.07 °C	2,077.6 µS/cm	2.20 mg/L	4.90 NTU	125.0 mV	10.20 ft	100.00 ml/min
7/18/2023 3:04 PM	01:00:00	4.94 pH	32.38 °C	2,092.0 µS/cm	3.96 mg/L	3.74 NTU	120.1 mV	10.20 ft	100.00 ml/min
7/18/2023 3:55 PM	01:51:46	5.06 pH	33.37 °C	1,792.6 µS/cm	2.79 mg/L	3.83 NTU	147.8 mV	10.20 ft	100.00 ml/min
7/18/2023 4:00 PM	01:56:46	5.02 pH	30.24 °C	2,100.3 µS/cm	2.07 mg/L	4.50 NTU	127.3 mV	10.20 ft	100.00 ml/min
7/18/2023 4:05 PM	02:01:46	5.05 pH	28.02 °C	2,164.0 µS/cm	1.03 mg/L	4.43 NTU	151.1 mV	10.20 ft	100.00 ml/min
7/18/2023 4:10 PM	02:06:46	4.98 pH	30.39 °C	2,158.2 µS/cm	0.93 mg/L	4.31 NTU	150.3 mV	10.20 ft	100.00 ml/min
7/18/2023 4:15 PM	02:11:46	4.97 pH	31.50 °C	2,156.2 µS/cm	0.99 mg/L	3.98 NTU	148.3 mV	10.20 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-02	Grab.



# Low-Flow Test Report:

Test Date / Time: 7/18/2023 12:03:35 PM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-03</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 11.1 ft</b> <b>Total Depth: 21.1 ft</b> <b>Initial Depth to Water: 10.2 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 16.1 ft</b> <b>Estimated Total Volume Pumped: 5000 ml</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: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

63-93 deg F Sunny

## 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	+/- 10	+/- 10	+/- 0.3	
7/18/2023 12:03 PM	00:00	4.58 pH	23.50 °C	1,955.5 µS/cm	0.62 mg/L	3.35 NTU	186.7 mV	10.30 ft	200.00 ml/min
7/18/2023 12:08 PM	05:00	4.59 pH	21.63 °C	2,005.4 µS/cm	0.23 mg/L	3.59 NTU	202.5 mV	10.30 ft	200.00 ml/min
7/18/2023 12:13 PM	10:00	4.63 pH	21.34 °C	2,019.4 µS/cm	0.17 mg/L	3.29 NTU	118.8 mV	10.30 ft	200.00 ml/min
7/18/2023 12:18 PM	15:00	4.64 pH	21.04 °C	2,020.2 µS/cm	0.13 mg/L	4.73 NTU	127.6 mV	10.30 ft	200.00 ml/min
7/18/2023 12:23 PM	20:00	4.63 pH	20.85 °C	2,041.4 µS/cm	0.12 mg/L	3.92 NTU	98.4 mV	10.30 ft	200.00 ml/min
7/18/2023 12:28 PM	25:00	4.64 pH	21.13 °C	2,031.4 µS/cm	0.11 mg/L	3.74 NTU	110.2 mV	10.30 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-03	Grab.

# Low-Flow Test Report:

Test Date / Time: 7/14/2023 1:33:06 PM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-04</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.9 ft</b> <b>Total Depth: 35.9 ft</b> <b>Initial Depth to Water: 14.1 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.9 ft</b> <b>Estimated Total Volume Pumped: 5000 ml</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: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

73-93 deg F; cloudy

## 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	+/- 10	+/- 10	+/- 0.3	
7/14/2023 1:33 PM	00:00	6.28 pH	29.98 °C	2.06 µS/cm	7.62 mg/L	7.81 NTU	3.3 mV	14.20 ft	200.00 ml/min
7/14/2023 1:38 PM	05:00	6.31 pH	22.77 °C	1,710.6 µS/cm	0.15 mg/L	6.27 NTU	-48.3 mV	14.20 ft	200.00 ml/min
7/14/2023 1:43 PM	10:00	6.31 pH	21.60 °C	1,734.3 µS/cm	0.12 mg/L	4.05 NTU	-54.8 mV	14.20 ft	200.00 ml/min
7/14/2023 1:48 PM	15:00	6.30 pH	21.50 °C	1,735.7 µS/cm	0.11 mg/L	3.95 NTU	-65.1 mV	14.20 ft	200.00 ml/min
7/14/2023 1:53 PM	20:00	6.30 pH	21.91 °C	1,724.9 µS/cm	0.10 mg/L	3.40 NTU	-67.8 mV	14.20 ft	200.00 ml/min
7/14/2023 1:58 PM	25:00	6.30 pH	21.83 °C	1,714.9 µS/cm	0.08 mg/L	2.84 NTU	-70.5 mV	14.20 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-04	Grab.

# Low-Flow Test Report:

Test Date / Time: 7/14/2023 11:30:00 AM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-05</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 26 ft</b> <b>Total Depth: 36 ft</b> <b>Initial Depth to Water: 14.4 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 31 ft</b> <b>Estimated Total Volume Pumped: 17073.334 ml</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: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

73-93 deg F; sunny

## 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	+/- 10	+/- 10	+/- 0.3	
7/14/2023 11:30 AM	00:00	6.16 pH	22.55 °C	1,727.9 µS/cm	0.21 mg/L	14.80 NTU	17.8 mV	14.50 ft	200.00 ml/min
7/14/2023 11:35 AM	05:00	6.16 pH	22.74 °C	1,721.7 µS/cm	0.15 mg/L	13.30 NTU	16.2 mV	14.50 ft	200.00 ml/min
7/14/2023 11:40 AM	10:00	6.16 pH	22.41 °C	1,717.0 µS/cm	0.12 mg/L	12.60 NTU	16.1 mV	14.50 ft	200.00 ml/min
7/14/2023 11:45 AM	15:22	6.15 pH	22.10 °C	1,723.2 µS/cm	0.11 mg/L	13.20 NTU	13.2 mV	14.50 ft	200.00 ml/min
7/14/2023 11:50 AM	20:22	6.16 pH	22.36 °C	1,711.5 µS/cm	0.09 mg/L	11.40 NTU	10.2 mV	14.50 ft	200.00 ml/min
7/14/2023 11:55 AM	25:22	6.16 pH	21.92 °C	1,714.2 µS/cm	0.08 mg/L	11.20 NTU	11.4 mV	14.50 ft	200.00 ml/min
7/14/2023 12:00 PM	30:22	6.15 pH	21.96 °C	1,739.4 µS/cm	0.09 mg/L	12.20 NTU	5.8 mV	14.50 ft	200.00 ml/min
7/14/2023 12:05 PM	35:22	6.14 pH	22.02 °C	1,733.2 µS/cm	0.09 mg/L	13.16 NTU	5.6 mV	14.50 ft	200.00 ml/min
7/14/2023 12:10 PM	40:22	6.14 pH	22.85 °C	1,739.9 µS/cm	0.10 mg/L	12.85 NTU	6.7 mV	14.50 ft	200.00 ml/min
7/14/2023 12:15 PM	45:22	6.14 pH	23.40 °C	1,723.0 µS/cm	0.11 mg/L	12.20 NTU	6.3 mV	14.50 ft	200.00 ml/min
7/14/2023 12:20 PM	50:22	6.14 pH	23.22 °C	1,723.9 µS/cm	0.11 mg/L	11.30 NTU	1.9 mV	14.50 ft	200.00 ml/min
7/14/2023 12:25 PM	55:22	6.14 pH	22.88 °C	1,722.2 µS/cm	0.10 mg/L	9.51 NTU	5.9 mV	14.50 ft	200.00 ml/min
7/14/2023 12:30 PM	01:00:22	6.14 pH	22.81 °C	1,721.5 µS/cm	0.10 mg/L	7.56 NTU	5.3 mV	14.50 ft	200.00 ml/min

7/14/2023 12:35 PM	01:05:22	6.13 pH	22.86 °C	1,743.7 µS/cm	0.10 mg/L	6.63 NTU	3.0 mV	14.50 ft	200.00 ml/min
7/14/2023 12:40 PM	01:10:22	6.13 pH	23.08 °C	1,729.3 µS/cm	0.09 mg/L	6.08 NTU	1.8 mV	14.50 ft	200.00 ml/min
7/14/2023 12:45 PM	01:15:22	6.13 pH	22.80 °C	1,723.1 µS/cm	0.09 mg/L	5.66 NTU	6.4 mV	14.50 ft	200.00 ml/min
7/14/2023 12:50 PM	01:20:22	6.13 pH	22.95 °C	1,729.5 µS/cm	0.09 mg/L	5.40 NTU	3.9 mV	14.50 ft	200.00 ml/min
7/14/2023 12:55 PM	01:25:22	6.13 pH	23.73 °C	1,726.7 µS/cm	0.09 mg/L	4.76 NTU	7.9 mV	14.50 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-05	Grab.

# Low-Flow Test Report:

Test Date / Time: 7/14/2023 10:35:28 AM

Project: GW6581

Operator Name: Alana Neely

<b>Location Name: PT-06</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 26.3 ft</b> <b>Total Depth: 36.3 ft</b> <b>Initial Depth to Water: 14.2 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 31.3 ft</b> <b>Estimated Total Volume Pumped: 5343.333 ml</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: 884187</b>
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## Test Notes:

Five bottles: Full App III and IV and Geochem

## Weather Conditions:

73-93 deg F; cloudy

## 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	+/- 10	+/- 10	+/- 0.3	
7/14/2023 10:35 AM	00:00	6.09 pH	23.98 °C	1,670.5 µS/cm	0.37 mg/L	19.70 NTU	-17.9 mV	14.30 ft	200.00 ml/min
7/14/2023 10:40 AM	05:00	6.09 pH	23.13 °C	1,686.7 µS/cm	0.21 mg/L	9.67 NTU	-25.2 mV	14.30 ft	200.00 ml/min
7/14/2023 10:45 AM	10:00	6.09 pH	23.36 °C	1,683.9 µS/cm	0.16 mg/L	7.09 NTU	-24.5 mV	14.30 ft	200.00 ml/min
7/14/2023 10:50 AM	15:00	6.10 pH	22.99 °C	1,685.0 µS/cm	0.13 mg/L	4.11 NTU	-21.2 mV	14.30 ft	200.00 ml/min
7/14/2023 10:55 AM	20:00	6.09 pH	22.69 °C	1,682.4 µS/cm	0.12 mg/L	3.64 NTU	-20.1 mV	14.30 ft	200.00 ml/min
7/14/2023 11:00 AM	25:00	6.09 pH	22.95 °C	1,683.0 µS/cm	0.10 mg/L	2.77 NTU	-19.2 mV	14.30 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-06	Grab.

August 2023

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 1:01:23 PM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: INW-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.4 ft Total</b> <b>Depth: 23.5 ft</b> <b>Initial Depth to Water: 9.98 ft</b>	<b>Pump Type: peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.5 ft</b> <b>Estimated Total Volume Pumped: 3 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.72 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

5 bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Sunny, 76 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 1:01 PM	00:00	5.77 pH	23.81 °C	2,157.3 µS/cm	0.94 mg/L	2.01 NTU	-61.4 mV	10.70 ft	100.00 ml/min
8/9/2023 1:06 PM	05:00	5.87 pH	23.18 °C	2,141.3 µS/cm	0.47 mg/L	1.88 NTU	-105.9 mV	10.70 ft	100.00 ml/min
8/9/2023 1:11 PM	10:00	5.81 pH	23.29 °C	2,117.7 µS/cm	0.32 mg/L	1.62 NTU	-52.0 mV	10.70 ft	100.00 ml/min
8/9/2023 1:16 PM	15:00	5.84 pH	23.35 °C	2,140.0 µS/cm	0.27 mg/L	0.82 NTU	-59.1 mV	10.70 ft	100.00 ml/min
8/9/2023 1:21 PM	20:00	5.84 pH	23.40 °C	2,150.6 µS/cm	0.24 mg/L	0.52 NTU	-57.5 mV	10.70 ft	100.00 ml/min
8/9/2023 1:26 PM	25:00	5.86 pH	23.67 °C	2,178.8 µS/cm	0.22 mg/L	0.47 NTU	-60.8 mV	10.70 ft	100.00 ml/min
8/9/2023 1:31 PM	30:00	5.80 pH	23.92 °C	2,169.4 µS/cm	0.21 mg/L	0.42 NTU	-51.9 mV	10.70 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-INW-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 12:35:14 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: INW-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.16 ft</b> <b>Total Depth: 25.16 ft</b> <b>Initial Depth to Water: 14.81 m</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.16 ft</b> <b>Estimated Total Volume Pumped: 7.6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 200 ml/min</b> <b>Final Draw Down: 0.07 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
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## Test Notes:

5 bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Partly cloudy, 75 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
8/9/2023 12:35 PM	00:00	6.41 pH	21.34 °C	1,672.5 µS/cm	0.17 mg/L	0.42 NTU	-73.5 mV	14.84 ft	200.00 ml/min
8/9/2023 12:40 PM	05:00	6.42 pH	20.80 °C	1,667.8 µS/cm	0.13 mg/L	0.00 NTU	-8.6 mV	14.87 ft	200.00 ml/min
8/9/2023 12:45 PM	10:00	6.42 pH	20.79 °C	1,668.5 µS/cm	0.09 mg/L	0.00 NTU	3.0 mV	14.87 ft	200.00 ml/min
8/9/2023 12:50 PM	15:00	6.41 pH	21.06 °C	1,660.0 µS/cm	0.07 mg/L	0.00 NTU	2.9 mV	14.87 ft	200.00 ml/min
8/9/2023 12:55 PM	20:00	6.41 pH	21.05 °C	1,645.2 µS/cm	0.06 mg/L	0.00 NTU	18.6 mV	14.87 ft	200.00 ml/min
8/9/2023 1:00 PM	25:00	6.41 pH	21.06 °C	1,648.3 µS/cm	0.07 mg/L	0.00 NTU	23.1 mV	14.88 ft	200.00 ml/min
8/9/2023 1:05 PM	30:00	6.41 pH	21.02 °C	1,639.6 µS/cm	0.06 mg/L	0.00 NTU	26.3 mV	14.88 ft	200.00 ml/min

## Samples

Sample ID:	Description:
INW-02	Grab.



# Low-Flow Test Report:

Test Date / Time: 8/9/2023 11:28:35 AM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: PT-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.49 ft</b> <b>Total Depth: 23.49 ft</b> <b>Initial Depth to Water: 10.22 ft</b>	<b>Pump Type: peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.49 ft</b> <b>Estimated Total Volume Pumped: 4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.27 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Sunny, 75 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 11:28 AM	00:00	5.02 pH	22.23 °C	1,975.0 µS/cm	1.42 mg/L	10.82 NTU	122.1 mV	10.42 ft	100.00 ml/min
8/9/2023 11:33 AM	05:00	4.96 pH	21.11 °C	1,981.6 µS/cm	1.76 mg/L	10.29 NTU	74.7 mV	10.47 ft	100.00 ml/min
8/9/2023 11:38 AM	10:00	4.94 pH	20.74 °C	1,980.7 µS/cm	1.66 mg/L	8.50 NTU	89.4 mV	10.49 ft	100.00 ml/min
8/9/2023 11:43 AM	15:00	4.90 pH	20.84 °C	1,968.5 µS/cm	1.41 mg/L	9.03 NTU	88.6 mV	10.49 ft	100.00 ml/min
8/9/2023 11:48 AM	20:00	4.83 pH	21.06 °C	1,952.0 µS/cm	1.51 mg/L	3.92 NTU	87.6 mV	10.49 ft	100.00 ml/min
8/9/2023 11:53 AM	25:00	4.81 pH	21.15 °C	1,947.9 µS/cm	0.50 mg/L	4.52 NTU	88.6 mV	10.49 ft	100.00 ml/min
8/9/2023 11:58 AM	30:00	4.79 pH	21.00 °C	1,951.6 µS/cm	0.28 mg/L	2.73 NTU	90.8 mV	10.49 ft	100.00 ml/min
8/9/2023 12:03 PM	35:00	4.79 pH	20.93 °C	1,948.9 µS/cm	0.27 mg/L	3.25 NTU	65.7 mV	10.49 ft	100.00 ml/min
8/9/2023 12:08 PM	40:00	4.76 pH	21.01 °C	1,959.0 µS/cm	0.26 mg/L	0.89 NTU	91.2 mV	10.49 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 1:50:05 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: PT-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.4 ft</b> <b>Total Depth: 23.4 ft</b> <b>Initial Depth to Water: 10.15 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.4 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.51 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Sunny, 85 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 1:50 PM	00:00	5.23 pH	24.66 °C	2,089.6 µS/cm	0.47 mg/L	1.09 NTU	79.8 mV	10.55 ft	100.00 ml/min
8/9/2023 1:55 PM	05:00	5.26 pH	23.07 °C	2,097.7 µS/cm	0.32 mg/L	1.55 NTU	65.3 mV	10.57 ft	100.00 ml/min
8/9/2023 2:00 PM	10:00	5.19 pH	22.97 °C	2,034.6 µS/cm	0.31 mg/L	0.61 NTU	49.1 mV	10.58 ft	100.00 ml/min
8/9/2023 2:05 PM	15:00	5.16 pH	22.60 °C	2,011.2 µS/cm	0.27 mg/L	0.13 NTU	60.3 mV	10.60 ft	100.00 ml/min
8/9/2023 2:10 PM	20:00	5.13 pH	22.21 °C	2,009.5 µS/cm	0.26 mg/L	0.14 NTU	53.8 mV	10.62 ft	100.00 ml/min
8/9/2023 2:15 PM	25:00	5.09 pH	21.74 °C	2,010.1 µS/cm	0.27 mg/L	0.28 NTU	56.1 mV	10.64 ft	100.00 ml/min
8/9/2023 2:20 PM	30:00	5.06 pH	21.81 °C	1,992.8 µS/cm	0.22 mg/L	0.40 NTU	73.6 mV	10.66 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-02	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 10:02:17 AM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: PT-03</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 10.4 ft</b> <b>Total Depth: 23.62 ft</b> <b>Initial Depth to Water: 10.23 ft</b>	<b>Pump Type: peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 15.4 ft</b> <b>Estimated Total Volume Pumped: 4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.07 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Cloudy, 75 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 10:02 AM	00:00	4.65 pH	20.88 °C	1,880.2 µS/cm	0.75 mg/L	0.90 NTU	178.3 mV	10.30 ft	100.00 ml/min
8/9/2023 10:07 AM	05:00	4.67 pH	20.86 °C	1,919.5 µS/cm	0.46 mg/L	0.87 NTU	128.4 mV	10.30 ft	100.00 ml/min
8/9/2023 10:12 AM	10:00	4.69 pH	20.78 °C	1,933.4 µS/cm	1.58 mg/L	0.63 NTU	112.6 mV	10.30 ft	100.00 ml/min
8/9/2023 10:17 AM	15:00	4.73 pH	20.75 °C	1,945.4 µS/cm	1.57 mg/L	0.72 NTU	152.3 mV	10.30 ft	100.00 ml/min
8/9/2023 10:22 AM	20:00	4.77 pH	20.74 °C	1,945.7 µS/cm	1.51 mg/L	0.67 NTU	94.0 mV	10.30 ft	100.00 ml/min
8/9/2023 10:27 AM	25:00	4.79 pH	20.63 °C	1,950.0 µS/cm	0.48 mg/L	0.64 NTU	107.4 mV	10.30 ft	100.00 ml/min
8/9/2023 10:32 AM	30:00	4.78 pH	20.62 °C	1,954.6 µS/cm	0.26 mg/L	0.68 NTU	97.0 mV	10.30 ft	100.00 ml/min
8/9/2023 10:37 AM	35:00	4.81 pH	20.52 °C	1,951.1 µS/cm	0.24 mg/L	0.61 NTU	58.4 mV	10.30 ft	100.00 ml/min
8/9/2023 10:42 AM	40:00	4.80 pH	20.48 °C	1,953.0 µS/cm	0.23 mg/L	0.70 NTU	54.5 mV	10.30 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-03	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 1:52:17 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: PT-04</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 24.07 ft</b> <b>Total Depth: 34.07 ft</b> <b>Initial Depth to Water: 14.54 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 29.07 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: 0.05 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Partly cloudy, 75 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 10	+/- 10	+/- 0.3	
8/9/2023 1:52 PM	00:00	6.46 pH	22.05 °C	1,661.2 µS/cm	0.16 mg/L	12.00 NTU	-29.5 mV	14.59 ft	200.00 ml/min
8/9/2023 1:57 PM	05:00	6.42 pH	21.47 °C	1,663.2 µS/cm	0.11 mg/L	11.20 NTU	9.5 mV	14.59 ft	200.00 ml/min
8/9/2023 2:02 PM	10:00	6.42 pH	21.68 °C	1,652.3 µS/cm	0.09 mg/L	7.82 NTU	12.0 mV	14.59 ft	200.00 ml/min
8/9/2023 2:07 PM	15:00	6.42 pH	21.42 °C	1,670.1 µS/cm	0.08 mg/L	3.83 NTU	14.6 mV	14.59 ft	200.00 ml/min
8/9/2023 2:12 PM	20:00	6.43 pH	21.02 °C	1,655.1 µS/cm	0.07 mg/L	3.56 NTU	19.0 mV	14.59 ft	200.00 ml/min
8/9/2023 2:17 PM	25:00	6.43 pH	20.65 °C	1,655.7 µS/cm	0.06 mg/L	0.04 NTU	16.5 mV	14.59 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-04	Grab.
HAM-AP2-FD-07	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 4:59:22 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: PT-05</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.39 ft</b> <b>Total Depth: 35.39 ft</b> <b>Initial Depth to Water: 14.84 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.39 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: 0.07 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883530</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Sunny, 79 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	+/- 10	+/- 10	+/- 0.3	
8/9/2023 4:59 PM	00:00	6.37 pH	21.76 °C	1,709.8 µS/cm	0.16 mg/L	36.10 NTU	43.6 mV	14.87 ft	200.00 ml/min
8/9/2023 5:04 PM	05:00	6.37 pH	22.05 °C	1,729.1 µS/cm	0.14 mg/L	24.60 NTU	91.9 mV	14.90 ft	200.00 ml/min
8/9/2023 5:09 PM	10:00	6.37 pH	21.96 °C	1,738.9 µS/cm	0.13 mg/L	18.70 NTU	112.2 mV	14.91 ft	200.00 ml/min
8/9/2023 5:14 PM	15:00	6.37 pH	21.86 °C	1,714.7 µS/cm	0.11 mg/L	17.50 NTU	96.9 mV	14.91 ft	200.00 ml/min
8/9/2023 5:19 PM	20:00	6.37 pH	21.87 °C	1,720.7 µS/cm	0.10 mg/L	13.60 NTU	90.0 mV	14.91 ft	200.00 ml/min
8/9/2023 5:24 PM	25:00	6.37 pH	21.87 °C	1,705.7 µS/cm	0.08 mg/L	15.50 NTU	92.7 mV	14.91 ft	200.00 ml/min
8/9/2023 5:29 PM	30:00	6.37 pH	21.68 °C	1,706.7 µS/cm	0.07 mg/L	9.15 NTU	83.3 mV	14.91 ft	200.00 ml/min
8/9/2023 5:34 PM	35:00	6.36 pH	21.96 °C	1,710.0 µS/cm	0.07 mg/L	4.81 NTU	82.3 mV	14.91 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-05	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 3:18:14 PM

Project: GP-Plant Hammond

Operator Name: Anthony Szwast

<b>Location Name: PT-06</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 26 ft</b> <b>Total Depth: 35.22 ft</b> <b>Initial Depth to Water: 14.68 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 31 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: 883530</b>
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## Test Notes:

Five bottles: Baseline Sampling and Major Ions

## Weather Conditions:

Sunny, 77 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	+/- 10	+/- 10	+/- 0.3	
8/9/2023 3:18 PM	00:00	6.41 pH	24.08 °C	1,596.0 µS/cm	0.16 mg/L	22.70 NTU	34.3 mV	14.76 ft	200.00 ml/min
8/9/2023 3:23 PM	05:00	6.30 pH	22.45 °C	1,679.5 µS/cm	0.10 mg/L	26.90 NTU	76.9 mV	14.73 ft	200.00 ml/min
8/9/2023 3:28 PM	10:00	6.31 pH	21.58 °C	1,638.8 µS/cm	0.06 mg/L	26.60 NTU	95.0 mV	14.75 ft	200.00 ml/min
8/9/2023 3:33 PM	15:00	6.29 pH	21.33 °C	1,636.8 µS/cm	0.04 mg/L	9.62 NTU	92.8 mV	14.75 ft	200.00 ml/min
8/9/2023 3:38 PM	20:00	6.30 pH	21.10 °C	1,620.0 µS/cm	0.03 mg/L	6.62 NTU	99.6 mV	14.78 ft	200.00 ml/min
8/9/2023 3:43 PM	25:00	6.31 pH	21.23 °C	1,612.1 µS/cm	0.02 mg/L	2.30 NTU	99.4 mV	14.78 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-06	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 5:47:02 PM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: MW-55</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 16.0 ft</b> <b>Total Depth: 26.0 ft</b> <b>Initial Depth to Water: 17.45 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 21.0 ft</b> <b>Estimated Total Volume Pumped: 3 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.46 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

One bottle: Boron and Cobalt

## Weather Conditions:

Cloudy, 76 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 5:47 PM	00:00	6.36 pH	26.14 °C	2,050.2 µS/cm	1.99 mg/L	7.42 NTU	-1.7 mV	17.74 ft	100.00 ml/min
8/9/2023 5:52 PM	05:00	6.48 pH	23.88 °C	2,115.0 µS/cm	1.59 mg/L	5.88 NTU	-13.5 mV	17.80 ft	100.00 ml/min
8/9/2023 5:57 PM	10:00	6.52 pH	23.58 °C	2,112.4 µS/cm	1.19 mg/L	2.91 NTU	-39.4 mV	17.86 ft	100.00 ml/min
8/9/2023 6:02 PM	15:00	6.57 pH	23.54 °C	2,103.0 µS/cm	1.05 mg/L	2.78 NTU	-30.4 mV	17.90 ft	100.00 ml/min
8/9/2023 6:07 PM	20:00	6.61 pH	23.61 °C	2,120.1 µS/cm	0.38 mg/L	2.70 NTU	-60.5 mV	17.91 ft	100.00 ml/min
8/9/2023 6:12 PM	25:00	6.63 pH	23.54 °C	2,098.0 µS/cm	0.31 mg/L	2.71 NTU	-39.0 mV	17.91 ft	100.00 ml/min
8/9/2023 6:17 PM	30:00	6.66 pH	23.60 °C	2,083.0 µS/cm	0.30 mg/L	2.64 NTU	-67.5 mV	17.91 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-55	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 12:50:16 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-56</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 14.2 ft</b> <b>Total Depth: 24.2 ft</b> <b>Initial Depth to Water: 9.63 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 19.2 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 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

One bottle: Boron and Cobalt

## Weather Conditions:

Sunny, 85 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 12:50 PM	00:00	5.28 pH	21.66 °C	2,375.0 µS/cm	0.27 mg/L	83.40 NTU	99.1 mV	9.63 ft	100.00 ml/min
8/9/2023 12:55 PM	05:00	5.20 pH	21.14 °C	2,411.7 µS/cm	0.17 mg/L	109.70 NTU	121.8 mV	9.63 ft	100.00 ml/min
8/9/2023 1:00 PM	10:00	5.14 pH	21.19 °C	2,430.4 µS/cm	0.16 mg/L	101.30 NTU	122.5 mV	9.63 ft	100.00 ml/min
8/9/2023 1:05 PM	15:00	5.10 pH	21.30 °C	2,439.8 µS/cm	0.12 mg/L	27.20 NTU	93.0 mV	9.63 ft	100.00 ml/min
8/9/2023 1:10 PM	20:00	5.10 pH	21.39 °C	2,429.9 µS/cm	0.14 mg/L	7.88 NTU	133.3 mV	9.63 ft	100.00 ml/min
8/9/2023 1:15 PM	25:00	5.10 pH	21.59 °C	2,426.9 µS/cm	0.15 mg/L	4.66 NTU	158.3 mV	9.63 ft	100.00 ml/min
8/9/2023 1:20 PM	30:00	5.09 pH	21.55 °C	2,429.2 µS/cm	0.12 mg/L	2.52 NTU	188.4 mV	9.63 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-56	Grab.



# Low-Flow Test Report:

Test Date / Time: 8/9/2023 11:08:13 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-57</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 14.4 ft</b> <b>Total Depth: 24.4 ft</b> <b>Initial Depth to Water: 10.36 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 19.4 ft</b> <b>Estimated Total Volume Pumped: 9 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.1 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

One bottle: Boron and Cobalt

## Weather Conditions:

Cloudy, 80 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 11:08 AM	00:00	6.68 pH	20.22 °C	2,390.4 µS/cm	0.46 mg/L	17.00 NTU	-73.7 mV	10.46 ft	100.00 ml/min
8/9/2023 11:13 AM	05:00	6.74 pH	19.99 °C	2,391.3 µS/cm	0.30 mg/L	16.95 NTU	-97.3 mV	10.46 ft	100.00 ml/min
8/9/2023 11:18 AM	10:00	6.76 pH	19.75 °C	2,392.6 µS/cm	0.24 mg/L	14.30 NTU	-96.2 mV	10.46 ft	100.00 ml/min
8/9/2023 11:23 AM	15:00	6.76 pH	19.88 °C	2,407.2 µS/cm	0.17 mg/L	12.30 NTU	-63.1 mV	10.46 ft	100.00 ml/min
8/9/2023 11:28 AM	20:00	6.76 pH	19.86 °C	2,410.3 µS/cm	0.16 mg/L	11.20 NTU	-84.6 mV	10.46 ft	100.00 ml/min
8/9/2023 11:33 AM	25:00	6.75 pH	19.72 °C	2,412.8 µS/cm	0.16 mg/L	10.19 NTU	-81.6 mV	10.46 ft	100.00 ml/min
8/9/2023 11:38 AM	30:00	6.74 pH	19.59 °C	2,416.9 µS/cm	0.22 mg/L	9.85 NTU	-79.5 mV	10.46 ft	100.00 ml/min
8/9/2023 11:43 AM	35:00	6.73 pH	19.68 °C	2,421.6 µS/cm	0.19 mg/L	8.11 NTU	-75.4 mV	10.46 ft	100.00 ml/min
8/9/2023 11:48 AM	40:00	6.73 pH	19.85 °C	2,424.4 µS/cm	0.31 mg/L	8.00 NTU	-73.1 mV	10.46 ft	100.00 ml/min
8/9/2023 11:53 AM	45:00	6.72 pH	20.12 °C	2,415.6 µS/cm	0.38 mg/L	8.89 NTU	-68.0 mV	10.46 ft	100.00 ml/min
8/9/2023 11:58 AM	50:00	6.73 pH	19.99 °C	2,358.6 µS/cm	0.26 mg/L	6.43 NTU	-68.1 mV	10.46 ft	100.00 ml/min
8/9/2023 12:03 PM	55:00	6.72 pH	19.94 °C	2,327.6 µS/cm	0.21 mg/L	6.86 NTU	-68.2 mV	10.46 ft	100.00 ml/min
8/9/2023 12:08 PM	01:00:00	6.71 pH	19.99 °C	2,418.0 µS/cm	0.26 mg/L	6.43 NTU	-67.8 mV	10.46 ft	100.00 ml/min

8/9/2023 12:13 PM	01:05:00	6.72 pH	20.17 °C	2,408.8 µS/cm	0.28 mg/L	7.60 NTU	-58.5 mV	10.46 ft	100.00 ml/min
8/9/2023 12:18 PM	01:10:00	6.70 pH	20.21 °C	2,415.5 µS/cm	0.23 mg/L	5.83 NTU	-61.6 mV	10.46 ft	100.00 ml/min
8/9/2023 12:23 PM	01:15:00	6.70 pH	20.03 °C	2,410.2 µS/cm	0.24 mg/L	4.91 NTU	-63.7 mV	10.46 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-57	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 9:53:45 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: MW-58</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 16.95 ft</b> <b>Total Depth: 26.95 ft</b> <b>Initial Depth to Water: 11.91 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 21.45 ft</b> <b>Estimated Total Volume Pumped: 5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 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:

One bottle: Boron and Cobalt

## Weather Conditions:

Cloudy, 75 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 9:53 AM	00:00	5.58 pH	19.46 °C	1,309.0 µS/cm	0.56 mg/L	7.97 NTU	41.6 mV	12.05 ft	100.00 ml/min
8/9/2023 9:58 AM	05:00	5.45 pH	19.55 °C	1,364.8 µS/cm	0.55 mg/L	11.22 NTU	45.5 mV	12.05 ft	100.00 ml/min
8/9/2023 10:03 AM	10:00	5.43 pH	19.39 °C	1,423.7 µS/cm	0.53 mg/L	8.19 NTU	40.5 mV	12.05 ft	100.00 ml/min
8/9/2023 10:08 AM	15:00	5.38 pH	19.22 °C	1,498.4 µS/cm	0.45 mg/L	8.43 NTU	29.9 mV	12.05 ft	100.00 ml/min
8/9/2023 10:13 AM	20:00	5.35 pH	19.23 °C	1,528.1 µS/cm	0.44 mg/L	6.69 NTU	28.5 mV	12.05 ft	100.00 ml/min
8/9/2023 10:18 AM	25:00	5.23 pH	19.15 °C	1,546.1 µS/cm	0.55 mg/L	6.87 NTU	40.4 mV	12.05 ft	100.00 ml/min
8/9/2023 10:23 AM	30:00	5.21 pH	19.19 °C	1,548.2 µS/cm	0.37 mg/L	5.49 NTU	42.7 mV	12.05 ft	100.00 ml/min
8/9/2023 10:28 AM	35:00	5.23 pH	19.14 °C	1,524.8 µS/cm	0.44 mg/L	4.68 NTU	44.3 mV	12.05 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-58	Grab.

# Low-Flow Test Report:

Test Date / Time: 8/9/2023 3:26:17 PM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: MW-59</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 34.8 ft</b> <b>Total Depth: 42.91 ft</b> <b>Initial Depth to Water: 27.86 ft</b>	<b>Pump Type: Bladder</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 39.8 ft</b> <b>Estimated Total Volume Pumped: 8.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.38 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

One bottle: Boron and Cobalt

## Weather Conditions:

Sunny, 76 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/9/2023 3:26 PM	00:00	4.49 pH	23.75 °C	2,385.0 µS/cm	3.10 mg/L	5.12 NTU	225.8 mV	28.20 ft	100.00 ml/min
8/9/2023 3:31 PM	05:00	4.48 pH	23.75 °C	2,385.5 µS/cm	4.18 mg/L	4.26 NTU	218.9 mV	28.24 ft	100.00 ml/min
8/9/2023 3:36 PM	10:00	4.47 pH	24.33 °C	2,378.2 µS/cm	2.16 mg/L	3.54 NTU	213.0 mV	28.24 ft	100.00 ml/min
8/9/2023 3:41 PM	15:00	4.47 pH	24.37 °C	2,367.8 µS/cm	3.33 mg/L	3.37 NTU	205.4 mV	28.24 ft	100.00 ml/min
8/9/2023 3:46 PM	20:00	4.46 pH	24.38 °C	2,343.0 µS/cm	3.67 mg/L	3.21 NTU	205.4 mV	28.24 ft	100.00 ml/min
8/9/2023 3:51 PM	25:00	4.46 pH	24.03 °C	2,357.6 µS/cm	2.63 mg/L	3.11 NTU	207.4 mV	28.24 ft	100.00 ml/min
8/9/2023 3:56 PM	30:00	4.46 pH	24.33 °C	2,350.5 µS/cm	2.26 mg/L	3.17 NTU	206.2 mV	28.24 ft	100.00 ml/min
8/9/2023 4:01 PM	35:00	4.46 pH	23.76 °C	2,358.7 µS/cm	1.42 mg/L	3.05 NTU	209.3 mV	28.24 ft	100.00 ml/min
8/9/2023 4:06 PM	40:00	4.45 pH	23.66 °C	2,349.8 µS/cm	2.05 mg/L	2.99 NTU	207.0 mV	28.24 ft	100.00 ml/min
8/9/2023 4:11 PM	45:00	4.46 pH	23.52 °C	2,322.6 µS/cm	2.46 mg/L	2.84 NTU	210.3 mV	28.24 ft	100.00 ml/min
8/9/2023 4:16 PM	50:00	4.45 pH	23.19 °C	2,350.5 µS/cm	0.70 mg/L	2.42 NTU	217.8 mV	28.24 ft	100.00 ml/min
8/9/2023 4:21 PM	55:00	4.46 pH	22.67 °C	2,340.8 µS/cm	1.83 mg/L	2.57 NTU	220.9 mV	28.24 ft	100.00 ml/min
8/9/2023 4:26 PM	01:00:00	4.46 pH	22.21 °C	2,347.0 µS/cm	0.50 mg/L	2.60 NTU	224.3 mV	28.24 ft	100.00 ml/min

8/9/2023 4:31 PM	01:05:00	4.45 pH	21.92 °C	2,337.0 $\mu$ S/cm	0.95 mg/L	2.58 NTU	222.4 mV	28.24 ft	100.00 ml/min
8/9/2023 4:36 PM	01:10:00	4.44 pH	22.03 °C	2,364.4 $\mu$ S/cm	0.56 mg/L	2.33 NTU	318.4 mV	28.24 ft	100.00 ml/min
8/9/2023 4:41 PM	01:15:00	4.45 pH	21.98 °C	2,344.6 $\mu$ S/cm	0.53 mg/L	2.40 NTU	241.0 mV	28.24 ft	100.00 ml/min
8/9/2023 4:46 PM	01:20:00	4.44 pH	21.84 °C	2,355.5 $\mu$ S/cm	0.52 mg/L	2.38 NTU	320.3 mV	28.24 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-MW-59	Grab.

September 2023

# Low-Flow Test Report:

Test Date / Time: 9/19/2023 4:22:06 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: PT-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.49 ft</b> <b>Total Depth: 10.43 ft</b> <b>Initial Depth to Water: 10.43 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.49 ft</b> <b>Estimated Total Volume Pumped: 12 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.67 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 989619</b>
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## Test Notes:

## Weather Conditions:

Clear, 80 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/19/2023 4:22 PM	00:00	7.63 pH	22.85 °C	7,285.4 µS/cm	2.10 mg/L	53.10 NTU	40.4 mV	10.90 ft	200.00 ml/min
9/19/2023 4:27 PM	05:00	7.64 pH	22.41 °C	7,223.9 µS/cm	1.95 mg/L	47.40 NTU	45.1 mV	11.00 ft	200.00 ml/min
9/19/2023 4:32 PM	10:00	7.65 pH	21.99 °C	7,356.7 µS/cm	2.29 mg/L	40.40 NTU	60.5 mV	11.05 ft	200.00 ml/min
9/19/2023 4:37 PM	15:00	7.65 pH	21.77 °C	7,360.5 µS/cm	2.63 mg/L	30.80 NTU	62.1 mV	11.08 ft	200.00 ml/min
9/19/2023 4:42 PM	20:00	7.65 pH	21.59 °C	7,360.8 µS/cm	2.53 mg/L	30.05 NTU	65.1 mV	11.10 ft	200.00 ml/min
9/19/2023 4:47 PM	25:00	7.64 pH	21.53 °C	7,315.8 µS/cm	2.83 mg/L	25.10 NTU	66.4 mV	11.10 ft	200.00 ml/min
9/19/2023 4:52 PM	30:00	7.65 pH	21.39 °C	7,317.8 µS/cm	3.47 mg/L	21.20 NTU	66.1 mV	11.10 ft	200.00 ml/min
9/19/2023 4:57 PM	35:00	7.65 pH	21.30 °C	7,318.8 µS/cm	3.49 mg/L	17.50 NTU	66.5 mV	11.10 ft	200.00 ml/min
9/19/2023 5:02 PM	40:00	7.65 pH	21.27 °C	7,281.4 µS/cm	2.78 mg/L	18.60 NTU	66.0 mV	11.10 ft	200.00 ml/min
9/19/2023 5:07 PM	45:00	7.66 pH	21.21 °C	7,337.1 µS/cm	2.81 mg/L	16.70 NTU	65.8 mV	11.10 ft	200.00 ml/min
9/19/2023 5:12 PM	50:00	7.67 pH	21.27 °C	7,333.7 µS/cm	2.83 mg/L	16.40 NTU	65.2 mV	11.10 ft	200.00 ml/min
9/19/2023 5:17 PM	55:00	7.67 pH	21.36 °C	7,336.9 µS/cm	3.30 mg/L	13.10 NTU	64.5 mV	11.10 ft	200.00 ml/min
9/19/2023 5:22 PM	01:00:00	7.67 pH	21.32 °C	7,318.1 µS/cm	3.50 mg/L	12.60 NTU	63.7 mV	11.10 ft	200.00 ml/min

9/19/2023 5:27 PM	01:05:00	7.69 pH	21.36 °C	7,332.1 µS/cm	2.96 mg/L	11.50 NTU	63.0 mV	11.10 ft	200.00 ml/min
9/19/2023 5:32 PM	01:10:00	7.69 pH	21.36 °C	7,345.0 µS/cm	2.68 mg/L	9.99 NTU	62.2 mV	11.10 ft	200.00 ml/min
9/19/2023 5:37 PM	01:15:00	7.69 pH	21.36 °C	7,362.0 µS/cm	2.59 mg/L	9.53 NTU	61.4 mV	11.10 ft	200.00 ml/min
9/19/2023 5:42 PM	01:20:00	7.72 pH	21.42 °C	7,378.1 µS/cm	2.61 mg/L	8.16 NTU	60.6 mV	11.10 ft	200.00 ml/min
9/19/2023 5:47 PM	01:25:00	7.72 pH	21.47 °C	7,383.6 µS/cm	2.78 mg/L	7.35 NTU	59.9 mV	11.10 ft	200.00 ml/min
9/19/2023 5:52 PM	01:30:00	7.72 pH	21.43 °C	7,344.9 µS/cm	2.91 mg/L	6.77 NTU	45.3 mV	11.10 ft	200.00 ml/min
9/19/2023 5:57 PM	01:35:00	7.72 pH	21.40 °C	7,381.4 µS/cm	3.01 mg/L	6.95 NTU	56.7 mV	11.10 ft	200.00 ml/min
9/19/2023 6:02 PM	01:40:00	7.73 pH	21.30 °C	7,367.4 µS/cm	3.04 mg/L	5.23 NTU	57.5 mV	11.10 ft	200.00 ml/min
9/19/2023 6:07 PM	01:45:00	7.73 pH	21.18 °C	7,356.1 µS/cm	2.61 mg/L	4.98 NTU	57.2 mV	11.10 ft	200.00 ml/min
9/19/2023 6:12 PM	01:50:00	7.72 pH	21.11 °C	7,361.6 µS/cm	2.74 mg/L	4.80 NTU	57.0 mV	11.10 ft	200.00 ml/min
9/19/2023 6:17 PM	01:55:00	7.73 pH	21.03 °C	7,347.0 µS/cm	2.71 mg/L	4.34 NTU	56.5 mV	11.10 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-01	Grab.



# Low-Flow Test Report:

Test Date / Time: 9/19/2023 3:01:36 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: PT-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.4 ft</b> <b>Total Depth: 23.4 ft</b> <b>Initial Depth to Water: 10.27 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.4 ft</b> <b>Estimated Total Volume Pumped: 4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 1.83 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 989619</b>
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## Test Notes:

## Weather Conditions:

Clear, 80 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/19/2023 3:01 PM	00:00	7.46 pH	22.90 °C	6,820.6 µS/cm	0.35 mg/L	6.29 NTU	-111.9 mV	11.05 ft	200.00 ml/min
9/19/2023 3:06 PM	05:00	7.46 pH	22.21 °C	6,841.7 µS/cm	0.25 mg/L	3.84 NTU	-150.9 mV	11.30 ft	200.00 ml/min
9/19/2023 3:11 PM	10:00	7.46 pH	21.92 °C	6,794.1 µS/cm	0.21 mg/L	2.99 NTU	-95.0 mV	11.58 ft	200.00 ml/min
9/19/2023 3:16 PM	15:00	7.45 pH	21.81 °C	6,709.7 µS/cm	0.21 mg/L	3.48 NTU	-81.5 mV	11.68 ft	200.00 ml/min
9/19/2023 3:21 PM	20:00	7.42 pH	21.71 °C	6,467.3 µS/cm	0.36 mg/L	3.75 NTU	-113.9 mV	11.80 ft	200.00 ml/min
9/19/2023 3:26 PM	25:00	7.43 pH	21.63 °C	6,259.9 µS/cm	0.34 mg/L	2.30 NTU	-77.6 mV	11.91 ft	200.00 ml/min
9/19/2023 3:31 PM	30:00	7.41 pH	21.68 °C	6,114.4 µS/cm	0.25 mg/L	1.57 NTU	-121.2 mV	12.00 ft	200.00 ml/min
9/19/2023 3:36 PM	35:00	7.41 pH	22.09 °C	6,100.3 µS/cm	0.20 mg/L	1.75 NTU	-84.2 mV	12.10 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-02	Grab.

# Low-Flow Test Report:

Test Date / Time: 9/19/2023 3:34:01 PM

Project: GP-Plant Hammond

Operator Name: Jacob Tracy

<b>Location Name: PT-03</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10ft</b> <b>Top of Screen: 13.62 ft</b> <b>Total Depth: 23.62 ft</b> <b>Initial Depth to Water: 10.51 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 28.62 ft</b> <b>Estimated Total Volume Pumped: 26 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.10 ft</b>	<b>Instrument Used: Aqua TROLL 400 Serial Number: 884189</b>
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Test Notes:

## Weather Conditions:

Clear, 70 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/19/2023 3:34 PM	00:00	6.64 pH	21.65 °C	2417.0 µS/cm	1.46 mg/L	51 NTU	-22.1 mV	10.39 ft	100.00 ml/min
9/19/2023 3:39 PM	05:00	6.65 pH	22.09 °C	2408.9 µS/cm	0.37 mg/L	62 NTU	-22.0 mV	10.38 ft	100.00 ml/min
9/19/2023 3:43 PM	10:00	6.65 pH	22.09 °C	2398.4 µS/cm	4.27 mg/L	61.8 NTU	-36.3 mV	10.38 ft	100.00 ml/min
9/19/2023 3:48 PM	15:00	6.65 pH	21.94 °C	2392.1 µS/cm	3.70 mg/L	58.4 NTU	-38.2 mV	10.38 ft	100.00 ml/min
9/19/2023 3:53 PM	20:00	6.65 pH	21.91 °C	2404.7 µS/cm	2.55 mg/L	56.7 NTU	-42.0 mV	10.38 ft	100.00 ml/min
9/19/2023 3:58 PM	25:00	6.65 pH	21.83 °C	2395.6 µS/cm	0.95 mg/L	57.2 NTU	-44.1 mV	10.39 ft	100.00 ml/min
9/19/2023 4:03 PM	30:20	6.65 pH	21.70 °C	2397.7 µS/cm	2.89 mg/L	54.3 NTU	-45.3 mV	10.40 ft	100.00 ml/min
9/19/2023 4:08 PM	35:49	6.65 pH	21.61 °C	2385.0 µS/cm	1.85 mg/L	56.6 NTU	-46.8 mV	10.40 ft	100.00 ml/min
9/19/2023 4:13 PM	34:14	6.65 pH	21.60 °C	2376.7 µS/cm	2.42 mg/L	53.3 NTU	-48.2 mV	10.40 ft	100.00 ml/min
9/19/2023 4:18 PM	35:20	6.66 pH	21.72 °C	2359.8 µS/cm	2.69 mg/L	48.9 NTU	-49.2 mV	10.40 ft	100.00 ml/min
9/19/2023 4:23 PM	40:24	6.67 pH	21.51 °C	2351.6 µS/cm	2.55 mg/L	52.4 NTU	-57.7 mV	10.40 ft	100.00 ml/min
9/19/2023 4:28 PM	45:24	6.66 pH	21.39 °C	2338.9 µS/cm	2.38 mg/L	46.5 NTU	-52.5 mV	10.40 ft	100.00 ml/min
9/19/2023 4:33 PM	50:24	6.68 pH	21.07 °C	2310.0 µS/cm	2.05 mg/L	77.9 NTU	-52.3 mV	10.45 ft	200.00 ml/min
9/19/2023 4:38 PM	55:20	6.68 pH	20.31 °C	2295.7 µS/cm	2.10 mg/L	76.5 NTU	-52.9 mV	10.46 ft	200.00 ml/min
9/19/2023 4:43 PM	01:00:02	6.66 pH	20.45 °C	2297.0 µS/cm	2.25 mg/L	59.40 NTU	-53.0 mV	10.41 ft	100.00 ml/min
9/19/2023 4:48 PM	01:05:02	6.67 pH	20.54 °C	2287.4 µS/cm	2.07 mg/L	56.4 NTU	-53.3 mV	10.41 ft	100.00 ml/min
9/19/2023 4:53 PM	01:10:02	6.68 pH	20.52 °C	2306.5 µS/cm	3.17 mg/L	49.2 NTU	-61.8 mV	10.41 ft	100.00 ml/min
9/19/2023 4:58 PM	01:15:20	6.69 pH	20.51 °C	2294.9 µS/cm	1.76 mg/L	47.5 NTU	-64.0 mV	10.41 ft	100.00 ml/min

9/19/2023 5:03 PM	01:20:14	6.67 pH	20.43 °C	2282.7 µS/cm	0.31 mg/L	45.1 NTU	-64.7 mV	10.41 ft	100.00 ml/min
9/19/2023 5:08 PM	01:25:01	6.67 pH	20.49 °C	2284.9 µS/cm	2.23 mg/L	41.8 NTU	-64.4 mV	10.41 ft	100.00 ml/min
9/19/2023 5:13 PM	01:30:01	6.66 pH	20.71 °C	2334.9 µS/cm	3.51 mg/L	37.8 NTU	-55.8 mV	10.41 ft	100.00 ml/min
9/19/2023 5:18 PM	01:35:01	6.66 pH	20.68 °C	2266.6 µS/cm	1.86 mg/L	36.0 NTU	-54.8 mV	10.41 ft	100.00 ml/min
9/19/2023 5:23 PM	01:40:01	6.66 pH	20.62 °C	2262.4 µS/cm	0.13 mg/L	33.3 NTU	-62.2 mV	10.41 ft	100.00 ml/min
9/19/2023 5:28 PM	01:45:01	6.66 pH	20.69 °C	2265.9 µS/cm	3.67 mg/L	30.2 NTU	-63.7 mV	10.41 ft	100.00 ml/min
9/19/2023 5:33 PM	01:45:01	6.65 pH	20.67 °C	2243.1 µS/cm	0.19 mg/L	27.5 NTU	-56.2 mV	10.41 ft	100.00 ml/min
9/19/2023 5:38 PM	01:50:01	6.67 pH	20.62 °C	2245.1 µS/cm	2.28 mg/L	21.34 NTU	-63.5 mV	10.41 ft	100.00 ml/min
9/19/2023 5:43 PM	01:55:01	6.65 pH	20.81 °C	2235.5 µS/cm	1.75 mg/L	23.60 NTU	-56.0 mV	10.41 ft	100.00 ml/min
9/19/2023 5:48 PM	02:00:10	6.65 pH	20.87 °C	2255.0 µS/cm	2.85 mg/L	20.80 NTU	-54.5 mV	10.41 ft	100.00 ml/min
9/19/2023 5:53 PM	02:05:15	6.66 pH	20.72 °C	2222.1 µS/cm	2.87 mg/L	18.90 NTU	-61.7 mV	10.41 ft	100.00 ml/min
9/19/2023 5:58 PM	02:20:20	6.65 pH	20.68 °C	2265.8 µS/cm	2.84 mg/L	21.46 NTU	-54.5 mV	10.41 ft	100.00 ml/min
9/19/2023 6:03 PM	02:25:05	6.66 pH	20.48 °C	2205.3 µS/cm	2.72 mg/L	18.3 NTU	-61.7 mV	10.41 ft	100.00 ml/min
9/19/2023 6:08 PM	02:30:05	6.64 pH	20.40 °C	2198.4 µS/cm	2.63 mg/L	15.8 NTU	-54.2 mV	10.41 ft	100.00 ml/min
9/19/2023 6:13 PM	02:35:05	6.64 pH	20.35 °C	2196.6 µS/cm	1.86 mg/L	15.1 NTU	-52.4 mV	10.41 ft	100.00 ml/min
9/19/2023 6:18 PM	02:40:05	6.64 pH	20.40 °C	2222.9 µS/cm	1.82 mg/L	14.4 NTU	-52.1 mV	10.41 ft	100.00 ml/min
9/19/2023 6:23 PM	02:45:07	6.65 pH	20.52 °C	2224.0 µS/cm	0.43 mg/L	14.0 NTU	-50.7 mV	10.41 ft	100.00 ml/min
9/19/2023 6:28 PM	02:50:10	6.62 pH	20.39 °C	2215.3 µS/cm	0.07 mg/L	13.7 NTU	-49.9 mV	10.41 ft	100.00 ml/min
9/19/2023 6:33 PM	02:55:10	6.66 pH	20.20 °C	2217.0 µS/cm	0.23 mg/L	13.0 NTU	-42.0 mV	10.41 ft	100.00 ml/min
9/19/2023 6:38 PM	03:00:10	6.63 pH	20.22 °C	2206.3 µS/cm	0.26 mg/L	12.3 NTU	-53.8 mV	10.41 ft	100.00 ml/min
9/19/2023 6:43 PM	03:05:10	6.63 pH	20.26 °C	2226.3 µS/cm	0.23 mg/L	11.2 NTU	-57.5 mV	10.41 ft	100.00 ml/min
9/19/2023 6:48 PM	03:10:04	6.62 pH	20.22 °C	2223.9 µS/cm	0.26 mg/L	10.2 NTU	-50.1 mV	10.41 ft	100.00 ml/min
9/19/2023 6:53 PM	03:15:15	6.63 pH	20.25 °C	2224.0 µS/cm	0.53 mg/L	9.71 NTU	-58.1 mV	10.41 ft	100.00 ml/min
9/19/2023 6:58 PM	03:20:15	6.62 pH	20.15 °C	2215.3 µS/cm	0.73 mg/L	9.66 NTU	-59.4 mV	10.41 ft	100.00 ml/min
9/19/2023 7:03 PM	03:25:15	6.66 pH	20.13 °C	2217.0 µS/cm	0.67 mg/L	7.39 NTU	-59.6 mV	10.41 ft	100.00 ml/min
9/19/2023 7:08 PM	03:30:14	6.63 pH	20.17 °C	2206.3 µS/cm	0.61 mg/L	6.89 NTU	-50.2 mV	10.41 ft	100.00 ml/min
9/19/2023 7:13 PM	03:35:14	6.64 pH	20.11 °C	2200.4 µS/cm	0.54 mg/L	6.64 NTU	-48.3 mV	10.41 ft	100.00 ml/min
9/19/2023 7:18 PM	03:40:20	6.61 pH	20.05 °C	2203.5 µS/cm	0.52 mg/L	6.77 NTU	-47.3 mV	10.41 ft	100.00 ml/min
9/19/2023 7:23 PM	03:45:21	6.60 pH	20.09 °C	2199.4 µS/cm	0.54 mg/L	6.50 NTU	-46.7 mV	10.41 ft	100.00 ml/min
9/19/2023 7:28 PM	03:50:20	6.61 pH	19.99 °C	2201.1 µS/cm	0.6 mg/L	4.59 NTU	-46.3 mV	10.41 ft	100.00 ml/min

### Samples

Sample ID:	Description:
HAM-PT-03	Grab.

# Low-Flow Test Report:

Test Date / Time: 9/19/2023 9:51:48 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: PT-04</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 24.07 ft</b> <b>Total Depth: 34.07 ft</b> <b>Initial Depth to Water: 14.1 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 29.07 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: 0.07 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 989619</b>
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## Test Notes:

## Weather Conditions:

Clear, 70 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/19/2023 9:51 AM	00:00	6.92 pH	20.96 °C	2,999.4 µS/cm	0.12 mg/L	3.71 NTU	-67.4 mV	14.17 ft	200.00 ml/min
9/19/2023 9:56 AM	05:00	6.92 pH	21.04 °C	2,973.7 µS/cm	0.10 mg/L	3.82 NTU	-91.5 mV	14.17 ft	200.00 ml/min
9/19/2023 10:01 AM	10:00	6.92 pH	21.14 °C	2,942.0 µS/cm	0.09 mg/L	3.52 NTU	-73.4 mV	14.17 ft	200.00 ml/min
9/19/2023 10:06 AM	15:00	6.92 pH	21.09 °C	2,919.2 µS/cm	0.08 mg/L	2.53 NTU	-76.0 mV	14.17 ft	200.00 ml/min
9/19/2023 10:11 AM	20:00	6.92 pH	21.18 °C	2,900.3 µS/cm	0.08 mg/L	2.29 NTU	-77.8 mV	14.17 ft	200.00 ml/min
9/19/2023 10:16 AM	25:00	6.92 pH	21.27 °C	2,870.6 µS/cm	0.07 mg/L	1.88 NTU	-79.8 mV	14.17 ft	200.00 ml/min
9/19/2023 10:21 AM	30:00	6.92 pH	21.31 °C	2,865.3 µS/cm	0.07 mg/L	1.76 NTU	-81.5 mV	14.17 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-04	Grab.

# Low-Flow Test Report:

Test Date / Time: 9/19/2023 11:28:43 AM

Project: GP-Plant Hammond

Operator Name: Jacob Tracy

<b>Location Name: PT-05</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.3 ft</b> <b>Total Depth: 35.3 ft</b> <b>Initial Depth to Water: 14.48 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.22 ft</b> <b>Estimated Total Volume Pumped: 20 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.03 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
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## Test Notes:

## Weather Conditions:

Clear, 70 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/19/2023 11:28 AM	00:00	6.75 pH	22.00 °C	3,499.7 µS/cm	0.10 mg/L	109.00 NTU	8.8 mV	14.59 ft	200.00 ml/min
9/19/2023 11:33 AM	05:00	6.74 pH	22.00 °C	3,514.3 µS/cm	0.68 mg/L	92.70 NTU	5.0 mV	14.61 ft	200.00 ml/min
9/19/2023 11:38 AM	10:00	6.75 pH	21.94 °C	3,506.0 µS/cm	2.19 mg/L	80.70 NTU	2.0 mV	14.59 ft	200.00 ml/min
9/19/2023 11:43 AM	15:00	6.75 pH	22.05 °C	3,581.6 µS/cm	1.33 mg/L	64.50 NTU	0.5 mV	14.56 ft	200.00 ml/min
9/19/2023 11:48 AM	20:00	6.75 pH	22.09 °C	3,605.8 µS/cm	1.40 mg/L	57.70 NTU	-0.7 mV	14.55 ft	200.00 ml/min
9/19/2023 11:53 AM	25:00	6.76 pH	22.11 °C	3,643.5 µS/cm	1.07 mg/L	45.30 NTU	-4.1 mV	14.56 ft	200.00 ml/min
9/19/2023 11:59 AM	30:20	6.75 pH	22.16 °C	3,678.6 µS/cm	0.87 mg/L	39.10 NTU	-4.1 mV	14.56 ft	200.00 ml/min
9/19/2023 11:59 AM	30:49	6.76 pH	22.17 °C	3,634.9 µS/cm	0.84 mg/L	--	-2.4 mV	--	200.00 ml/min
9/19/2023 12:02 PM	34:14	6.76 pH	22.18 °C	3,698.2 µS/cm	0.56 mg/L	--	0.8 mV	--	200.00 ml/min
9/19/2023 12:04 PM	35:20	6.75 pH	22.16 °C	3,737.8 µS/cm	1.00 mg/L	--	-0.1 mV	--	200.00 ml/min
9/19/2023 12:06 PM	37:24	6.77 pH	22.18 °C	3,718.1 µS/cm	0.79 mg/L	--	-1.9 mV	--	200.00 ml/min
9/19/2023 12:11 PM	42:24	6.77 pH	22.47 °C	3,791.9 µS/cm	0.19 mg/L	--	-4.3 mV	--	200.00 ml/min
9/19/2023 12:16 PM	47:24	6.76 pH	22.89 °C	3,732.2 µS/cm	0.15 mg/L	34.80 NTU	-6.0 mV	14.57 ft	200.00 ml/min

9/19/2023 12:21 PM	53:02	6.77 pH	23.21 °C	3,715.8 µS/cm	0.14 mg/L	32.00 NTU	-8.6 mV	14.54 ft	200.00 ml/min
9/19/2023 12:26 PM	58:02	6.78 pH	23.28 °C	3,715.6 µS/cm	0.14 mg/L	23.90 NTU	-8.7 mV	14.54 ft	200.00 ml/min
9/19/2023 12:31 PM	01:03:02	6.77 pH	23.40 °C	3,678.2 µS/cm	0.12 mg/L	23.10 NTU	-12.0 mV	14.54 ft	200.00 ml/min
9/19/2023 12:36 PM	01:08:02	6.77 pH	23.56 °C	3,660.5 µS/cm	0.09 mg/L	20.20 NTU	-10.2 mV	14.53 ft	200.00 ml/min
9/19/2023 12:41 PM	01:13:02	6.78 pH	23.21 °C	3,776.6 µS/cm	0.16 mg/L	16.70 NTU	-10.7 mV	14.53 ft	200.00 ml/min
9/19/2023 12:46 PM	01:18:02	6.77 pH	23.28 °C	3,717.2 µS/cm	0.15 mg/L	11.20 NTU	-11.4 mV	14.51 ft	200.00 ml/min
9/19/2023 12:51 PM	01:23:02	6.77 pH	22.69 °C	3,733.4 µS/cm	0.13 mg/L	9.37 NTU	-12.0 mV	14.51 ft	200.00 ml/min
9/19/2023 12:56 PM	01:28:02	6.78 pH	22.44 °C	3,624.0 µS/cm	0.13 mg/L	8.64 NTU	-12.8 mV	14.52 ft	200.00 ml/min
9/19/2023 1:01 PM	01:33:02	6.76 pH	22.58 °C	3,714.8 µS/cm	0.14 mg/L	8.88 NTU	-13.7 mV	14.52 ft	200.00 ml/min
9/19/2023 1:06 PM	01:38:02	6.79 pH	22.51 °C	3,765.9 µS/cm	0.14 mg/L	8.08 NTU	-14.5 mV	14.52 ft	200.00 ml/min
9/19/2023 1:11 PM	01:43:02	6.81 pH	22.76 °C	3,768.9 µS/cm	0.07 mg/L	7.52 NTU	-15.1 mV	14.52 ft	200.00 ml/min
9/19/2023 1:16 PM	01:48:02	6.77 pH	23.03 °C	3,750.1 µS/cm	0.09 mg/L	6.41 NTU	-15.8 mV	14.52 ft	200.00 ml/min
9/19/2023 1:21 PM	01:53:02	6.79 pH	22.49 °C	3,762.2 µS/cm	0.09 mg/L	4.97 NTU	-16.8 mV	14.52 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-05	Grab.

# Low-Flow Test Report:

Test Date / Time: 9/19/2023 9:48:42 AM

Project: GP-Plant Hammond

Operator Name: Jacob Tracy

<b>Location Name: PT-06</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 225.22 ft</b> <b>Total Depth: 35.22 ft</b> <b>Initial Depth to Water: 14.29 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.22 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: 0.13 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
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## Test Notes:

## Weather Conditions:

Clear, 70 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/19/2023 9:48 AM	00:00	6.61 pH	19.69 °C	2,631.0 µS/cm	0.66 mg/L	0.34 NTU	27.8 mV	14.40 ft	200.00 ml/min
9/19/2023 9:53 AM	05:00	6.63 pH	19.96 °C	2,613.7 µS/cm	0.36 mg/L	0.27 NTU	19.1 mV	14.42 ft	200.00 ml/min
9/19/2023 9:58 AM	10:00	6.65 pH	20.06 °C	2,603.9 µS/cm	0.25 mg/L	0.98 NTU	14.0 mV	14.42 ft	200.00 ml/min
9/19/2023 10:03 AM	15:00	6.66 pH	20.09 °C	2,543.2 µS/cm	0.20 mg/L	0.54 NTU	10.9 mV	14.42 ft	200.00 ml/min
9/19/2023 10:08 AM	20:00	6.65 pH	20.21 °C	2,578.6 µS/cm	0.17 mg/L	0.58 NTU	8.4 mV	14.42 ft	200.00 ml/min
9/19/2023 10:13 AM	25:00	6.66 pH	20.36 °C	2,542.7 µS/cm	0.14 mg/L	0.63 NTU	6.4 mV	14.42 ft	200.00 ml/min
9/19/2023 10:18 AM	30:00	6.67 pH	20.48 °C	2,523.2 µS/cm	0.13 mg/L	0.33 NTU	4.8 mV	14.42 ft	200.00 ml/min
9/19/2023 10:23 AM	35:00	6.68 pH	20.56 °C	2,532.1 µS/cm	0.11 mg/L	0.31 NTU	3.3 mV	14.42 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-06	Grab.

# Low-Flow Test Report:

Test Date / Time: 9/26/2023 10:24:00 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: PT-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.49 ft</b> <b>Total Depth: 23.49 ft</b> <b>Initial Depth to Water: 10.55 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.49 ft</b> <b>Estimated Total Volume Pumped: 5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 1.2 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850751</b>
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## Test Notes:

## Weather Conditions:

Clear, 75 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/26/2023 10:24 AM	00:00	7.44 pH	20.55 °C	6,921.5 µS/cm	0.85 mg/L	5.47 NTU	26.4 mV	11.30 ft	100.00 ml/min
9/26/2023 10:29 AM	05:00	7.43 pH	20.47 °C	6,900.6 µS/cm	0.81 mg/L	7.96 NTU	33.1 mV	11.42 ft	100.00 ml/min
9/26/2023 10:34 AM	10:00	7.43 pH	20.51 °C	6,920.1 µS/cm	0.72 mg/L	12.90 NTU	38.5 mV	11.54 ft	100.00 ml/min
9/26/2023 10:39 AM	15:00	7.43 pH	20.53 °C	6,868.7 µS/cm	0.77 mg/L	11.10 NTU	45.7 mV	11.60 ft	100.00 ml/min
9/26/2023 10:44 AM	20:00	7.43 pH	20.51 °C	6,873.4 µS/cm	0.73 mg/L	10.10 NTU	45.6 mV	11.70 ft	100.00 ml/min
9/26/2023 10:49 AM	25:00	7.42 pH	20.48 °C	6,834.9 µS/cm	0.74 mg/L	7.45 NTU	53.8 mV	11.75 ft	100.00 ml/min
9/26/2023 10:54 AM	30:00	7.41 pH	20.48 °C	6,807.7 µS/cm	0.75 mg/L	7.26 NTU	58.8 mV	11.75 ft	100.00 ml/min
9/26/2023 10:59 AM	35:00	7.41 pH	20.48 °C	6,785.2 µS/cm	0.77 mg/L	5.20 NTU	55.2 mV	11.75 ft	100.00 ml/min
9/26/2023 11:04 AM	40:00	7.40 pH	20.51 °C	6,747.5 µS/cm	0.78 mg/L	4.22 NTU	65.0 mV	11.75 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-01	Grab.



# Low-Flow Test Report:

Test Date / Time: 9/26/2023 9:15:40 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: PT-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.4 ft</b> <b>Total Depth: 23.4 ft</b> <b>Initial Depth to Water: 10.43 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.4 ft</b> <b>Estimated Total Volume Pumped: 5.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 2.39 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850751</b>
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## Test Notes:

## Weather Conditions:

Overcast, 75 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/26/2023 9:15 AM	00:00	7.22 pH	19.99 °C	6,134.4 µS/cm	0.76 mg/L	4.67 NTU	-89.1 mV	12.10 ft	100.00 ml/min
9/26/2023 9:20 AM	05:00	7.21 pH	19.99 °C	6,019.0 µS/cm	0.25 mg/L	5.70 NTU	-116.2 mV	12.15 ft	100.00 ml/min
9/26/2023 9:25 AM	10:00	7.19 pH	20.00 °C	5,661.8 µS/cm	0.22 mg/L	5.22 NTU	-105.4 mV	12.55 ft	100.00 ml/min
9/26/2023 9:30 AM	15:00	7.16 pH	20.00 °C	5,174.9 µS/cm	0.26 mg/L	4.17 NTU	-103.2 mV	12.80 ft	100.00 ml/min
9/26/2023 9:35 AM	20:00	7.17 pH	20.00 °C	5,079.7 µS/cm	0.25 mg/L	3.89 NTU	-103.7 mV	12.82 ft	100.00 ml/min
9/26/2023 9:40 AM	25:00	7.19 pH	20.09 °C	5,457.5 µS/cm	0.20 mg/L	2.85 NTU	-107.1 mV	12.83 ft	100.00 ml/min
9/26/2023 9:45 AM	30:00	7.18 pH	20.06 °C	5,367.1 µS/cm	0.42 mg/L	1.32 NTU	-101.5 mV	12.82 ft	100.00 ml/min
9/26/2023 9:50 AM	35:00	7.18 pH	20.08 °C	5,433.3 µS/cm	0.34 mg/L	3.86 NTU	-98.0 mV	12.82 ft	100.00 ml/min
9/26/2023 9:55 AM	40:00	7.19 pH	20.10 °C	5,517.8 µS/cm	0.35 mg/L	1.22 NTU	-94.5 mV	12.82 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-02	Grab.

# Low-Flow Test Report:

Test Date / Time: 9/26/2023 9:15:43 AM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: PT-03</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.62 ft</b> <b>Total Depth: 23.62 ft</b> <b>Initial Depth to Water: 10.53 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.62 ft</b> <b>Estimated Total Volume Pumped: 11.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.09 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
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## Test Notes:

## Weather Conditions:

Overcast, 75 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/26/2023 9:15 AM	00:00	6.54 pH	19.77 °C	2,466.9 µS/cm	0.23 mg/L	8.59 NTU	39.9 mV	10.62 ft	100.00 ml/min
9/26/2023 9:20 AM	05:00	6.53 pH	19.70 °C	2,465.8 µS/cm	0.16 mg/L	8.30 NTU	25.5 mV	10.62 ft	100.00 ml/min
9/26/2023 9:25 AM	10:00	6.53 pH	19.66 °C	2,456.6 µS/cm	0.13 mg/L	7.96 NTU	19.3 mV	10.62 ft	100.00 ml/min
9/26/2023 9:30 AM	15:00	6.51 pH	19.65 °C	2,457.7 µS/cm	0.11 mg/L	7.73 NTU	14.3 mV	10.62 ft	100.00 ml/min
9/26/2023 9:35 AM	20:00	6.50 pH	19.64 °C	2,448.9 µS/cm	0.10 mg/L	7.17 NTU	9.7 mV	10.62 ft	100.00 ml/min
9/26/2023 9:40 AM	25:00	6.52 pH	19.64 °C	2,436.4 µS/cm	0.08 mg/L	8.02 NTU	4.7 mV	10.62 ft	100.00 ml/min
9/26/2023 9:45 AM	30:00	6.54 pH	19.63 °C	2,420.4 µS/cm	0.08 mg/L	10.10 NTU	-0.3 mV	10.62 ft	100.00 ml/min
9/26/2023 9:50 AM	35:00	6.55 pH	19.62 °C	2,406.5 µS/cm	0.07 mg/L	10.80 NTU	-5.1 mV	10.62 ft	100.00 ml/min
9/26/2023 9:55 AM	40:00	6.56 pH	19.62 °C	2,398.4 µS/cm	0.07 mg/L	10.50 NTU	-9.5 mV	10.62 ft	100.00 ml/min
9/26/2023 10:00 AM	45:00	6.56 pH	19.64 °C	2,392.9 µS/cm	0.06 mg/L	9.97 NTU	-13.3 mV	10.62 ft	100.00 ml/min
9/26/2023 10:05 AM	50:00	6.56 pH	19.68 °C	2,390.9 µS/cm	0.06 mg/L	9.45 NTU	-15.8 mV	10.62 ft	100.00 ml/min
9/26/2023 10:10 AM	55:00	6.56 pH	19.76 °C	2,384.0 µS/cm	0.06 mg/L	8.42 NTU	-18.1 mV	10.62 ft	100.00 ml/min
9/26/2023 10:15 AM	01:00:00	6.56 pH	19.79 °C	2,374.6 µS/cm	0.05 mg/L	7.57 NTU	-19.1 mV	10.62 ft	100.00 ml/min

9/26/2023 10:20 AM	01:05:00	6.56 pH	19.82 °C	2,372.2 µS/cm	0.05 mg/L	7.45 NTU	-20.6 mV	10.62 ft	100.00 ml/min
9/26/2023 10:25 AM	01:10:00	6.56 pH	19.84 °C	2,369.7 µS/cm	0.05 mg/L	7.27 NTU	-22.7 mV	10.62 ft	100.00 ml/min
9/26/2023 10:30 AM	01:15:00	6.56 pH	19.89 °C	2,365.1 µS/cm	0.05 mg/L	6.81 NTU	-24.1 mV	10.62 ft	100.00 ml/min
9/26/2023 10:35 AM	01:20:00	6.57 pH	19.93 °C	2,354.1 µS/cm	0.05 mg/L	6.28 NTU	-24.6 mV	10.62 ft	100.00 ml/min
9/26/2023 10:40 AM	01:25:00	6.56 pH	19.97 °C	2,354.6 µS/cm	0.04 mg/L	5.62 NTU	-24.2 mV	10.62 ft	100.00 ml/min
9/26/2023 10:45 AM	01:30:00	6.57 pH	20.04 °C	2,343.0 µS/cm	0.04 mg/L	5.51 NTU	-24.5 mV	10.62 ft	100.00 ml/min
9/26/2023 10:50 AM	01:35:00	6.57 pH	20.05 °C	2,343.9 µS/cm	0.04 mg/L	5.29 NTU	-25.6 mV	10.62 ft	100.00 ml/min
9/26/2023 10:55 AM	01:40:00	6.56 pH	20.05 °C	2,343.6 µS/cm	0.04 mg/L	5.28 NTU	-25.5 mV	10.62 ft	100.00 ml/min
9/26/2023 11:00 AM	01:45:00	6.57 pH	20.07 °C	2,337.3 µS/cm	0.04 mg/L	4.82 NTU	-25.8 mV	10.62 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-03	Grab.

# Low-Flow Test Report:

Test Date / Time: 9/26/2023 12:45:49 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: PT-04</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 24.07 ft</b> <b>Total Depth: 34.07 ft</b> <b>Initial Depth to Water: 14.25 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 29.07 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: 0.05 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850751</b>
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## Test Notes:

## Weather Conditions:

Clear, 80 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/26/2023 12:45 PM	00:00	6.87 pH	23.34 °C	2,707.7 µS/cm	1.67 mg/L	7.08 NTU	-47.7 mV	14.30 ft	200.00 ml/min
9/26/2023 12:50 PM	05:00	6.89 pH	22.59 °C	2,712.8 µS/cm	1.40 mg/L	5.35 NTU	-47.6 mV	14.30 ft	200.00 ml/min
9/26/2023 12:55 PM	10:00	6.87 pH	22.31 °C	2,707.0 µS/cm	0.51 mg/L	4.31 NTU	-48.7 mV	14.30 ft	200.00 ml/min
9/26/2023 1:00 PM	15:00	6.88 pH	22.36 °C	2,710.8 µS/cm	0.82 mg/L	3.26 NTU	-49.9 mV	14.30 ft	200.00 ml/min
9/26/2023 1:05 PM	20:00	6.88 pH	22.31 °C	2,663.5 µS/cm	0.97 mg/L	2.30 NTU	-73.2 mV	14.30 ft	200.00 ml/min
9/26/2023 1:10 PM	25:00	6.87 pH	22.63 °C	2,581.9 µS/cm	0.85 mg/L	2.38 NTU	-52.0 mV	14.30 ft	200.00 ml/min
9/26/2023 1:15 PM	30:00	6.85 pH	22.39 °C	2,677.2 µS/cm	0.50 mg/L	2.35 NTU	-50.9 mV	14.30 ft	200.00 ml/min
9/26/2023 1:20 PM	35:00	6.84 pH	22.89 °C	2,620.5 µS/cm	2.81 mg/L	2.28 NTU	-51.1 mV	14.30 ft	200.00 ml/min
9/26/2023 1:25 PM	40:00	6.85 pH	22.67 °C	2,633.9 µS/cm	0.27 mg/L	2.36 NTU	-51.3 mV	14.30 ft	200.00 ml/min
9/26/2023 1:30 PM	45:00	6.85 pH	22.91 °C	2,623.3 µS/cm	0.24 mg/L	2.30 NTU	-74.2 mV	14.30 ft	200.00 ml/min
9/26/2023 1:35 PM	50:00	6.84 pH	22.94 °C	2,579.5 µS/cm	0.12 mg/L	2.73 NTU	-74.3 mV	14.30 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-04	Grab.

Created using VuSitu from In-Situ, Inc.

# Low-Flow Test Report:

Test Date / Time: 9/26/2023 1:57:52 PM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: PT-05</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.39 ft</b> <b>Total Depth: 35.39 ft</b> <b>Initial Depth to Water: 14.58 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.39 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.04 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
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## Test Notes:

## Weather Conditions:

Sunny, 80 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/26/2023 1:57 PM	00:00	6.76 pH	27.28 °C	3,205.7 µS/cm	0.86 mg/L	23.90 NTU	-21.6 mV	14.60 ft	100.00 ml/min
9/26/2023 2:02 PM	05:00	6.71 pH	24.15 °C	3,520.4 µS/cm	0.23 mg/L	26.80 NTU	-16.6 mV	14.62 ft	100.00 ml/min
9/26/2023 2:07 PM	10:00	6.71 pH	24.17 °C	3,647.7 µS/cm	0.16 mg/L	18.60 NTU	-13.6 mV	14.62 ft	100.00 ml/min
9/26/2023 2:12 PM	15:00	6.75 pH	24.15 °C	3,861.5 µS/cm	0.13 mg/L	17.70 NTU	-14.8 mV	14.62 ft	100.00 ml/min
9/26/2023 2:17 PM	20:00	6.74 pH	24.01 °C	3,862.5 µS/cm	0.12 mg/L	12.30 NTU	-14.4 mV	14.62 ft	100.00 ml/min
9/26/2023 2:22 PM	25:00	6.75 pH	24.11 °C	3,952.5 µS/cm	0.11 mg/L	8.72 NTU	-12.2 mV	14.62 ft	100.00 ml/min
9/26/2023 2:27 PM	30:00	6.75 pH	24.06 °C	3,971.1 µS/cm	0.09 mg/L	7.81 NTU	-11.0 mV	14.62 ft	100.00 ml/min
9/26/2023 2:32 PM	35:00	6.73 pH	24.28 °C	3,889.3 µS/cm	0.09 mg/L	6.39 NTU	-11.5 mV	14.62 ft	100.00 ml/min
9/26/2023 2:37 PM	40:00	6.76 pH	24.25 °C	3,881.3 µS/cm	0.08 mg/L	5.03 NTU	-12.1 mV	14.62 ft	100.00 ml/min
9/26/2023 2:42 PM	45:00	6.74 pH	24.20 °C	3,880.0 µS/cm	0.08 mg/L	4.98 NTU	-12.0 mV	14.62 ft	100.00 ml/min

## Samples

Sample ID:	Description:
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HAM-PT-05	Grab.
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Created using VuSitu from In-Situ, Inc.

# Low-Flow Test Report:

Test Date / Time: 9/26/2023 12:50:22 PM

Project: GP-Plant Hammond

Operator Name: C. Cain

<b>Location Name: PT-06</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.22 ft</b> <b>Total Depth: 35.22 ft</b> <b>Initial Depth to Water: 14.38 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.22 ft</b> <b>Estimated Total Volume Pumped: 3 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.08 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
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## Test Notes:

## Weather Conditions:

Sunny, 80 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
9/26/2023 12:50 PM	00:00	6.56 pH	26.80 °C	2,411.2 µS/cm	1.95 mg/L	5.47 NTU	-8.0 mV	14.42 ft	100.00 ml/min
9/26/2023 12:55 PM	05:00	6.58 pH	22.91 °C	2,643.9 µS/cm	0.22 mg/L	3.56 NTU	-22.0 mV	14.43 ft	100.00 ml/min
9/26/2023 1:00 PM	10:00	6.60 pH	22.81 °C	2,687.3 µS/cm	0.12 mg/L	6.60 NTU	-24.0 mV	14.43 ft	100.00 ml/min
9/26/2023 1:05 PM	15:00	6.59 pH	22.67 °C	2,700.7 µS/cm	0.10 mg/L	7.38 NTU	-24.2 mV	14.45 ft	100.00 ml/min
9/26/2023 1:10 PM	20:00	6.61 pH	22.85 °C	2,693.7 µS/cm	0.09 mg/L	4.73 NTU	-23.8 mV	14.45 ft	100.00 ml/min
9/26/2023 1:15 PM	25:00	6.62 pH	22.70 °C	2,682.3 µS/cm	0.08 mg/L	2.49 NTU	-23.5 mV	14.46 ft	100.00 ml/min
9/26/2023 1:20 PM	30:00	6.61 pH	22.90 °C	2,699.5 µS/cm	0.08 mg/L	0.60 NTU	-23.2 mV	14.46 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-06	Grab.



October 2023

# Low-Flow Test Report:

Test Date / Time: 10/3/2023 12:17:12 PM

Project: GP-Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.49 ft</b> <b>Total Depth: 23.49 ft</b> <b>Initial Depth to Water: 10.81 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 18.49 ft</b> <b>Estimated Total Volume Pumped: 5.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 1.1 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear. 75 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/3/2023 12:17 PM	00:00	7.34 pH	20.93 °C	6,563.6 µS/cm	1.53 mg/L	15.80 NTU	17.0 mV	10.81 ft	100.00 ml/min
10/3/2023 12:22 PM	05:00	7.35 pH	20.93 °C	6,401.7 µS/cm	2.18 mg/L	14.30 NTU	20.5 mV	11.77 ft	100.00 ml/min
10/3/2023 12:27 PM	10:00	7.31 pH	20.88 °C	6,335.3 µS/cm	2.72 mg/L	14.60 NTU	21.7 mV	11.83 ft	100.00 ml/min
10/3/2023 12:32 PM	15:00	7.31 pH	20.80 °C	6,267.3 µS/cm	2.45 mg/L	11.00 NTU	21.5 mV	11.87 ft	100.00 ml/min
10/3/2023 12:37 PM	20:00	7.30 pH	20.80 °C	6,166.8 µS/cm	2.42 mg/L	7.27 NTU	22.8 mV	11.91 ft	100.00 ml/min
10/3/2023 12:42 PM	25:00	7.29 pH	20.89 °C	6,122.9 µS/cm	3.10 mg/L	8.04 NTU	23.1 mV	11.91 ft	100.00 ml/min
10/3/2023 12:47 PM	30:00	7.27 pH	20.93 °C	6,038.6 µS/cm	3.50 mg/L	6.31 NTU	23.7 mV	11.91 ft	100.00 ml/min
10/3/2023 12:52 PM	35:00	7.28 pH	20.97 °C	5,979.9 µS/cm	3.28 mg/L	5.34 NTU	25.0 mV	11.91 ft	100.00 ml/min
10/3/2023 12:57 PM	40:00	7.27 pH	20.95 °C	5,873.1 µS/cm	3.37 mg/L	4.35 NTU	25.7 mV	11.91 ft	100.00 ml/min
10/3/2023 1:02 PM	45:00	7.26 pH	21.04 °C	5,773.1 µS/cm	3.25 mg/L	4.42 NTU	26.5 mV	11.91 ft	100.00 ml/min
10/3/2023 1:07 PM	50:00	7.24 pH	21.20 °C	5,686.2 µS/cm	3.07 mg/L	3.97 NTU	27.5 mV	11.91 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-01	Grab.

Created using VuSitu from In-Situ, Inc.

# Low-Flow Test Report:

Test Date / Time: 10/3/2023 10:52:25 AM

Project: GP-Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.4 ft</b> <b>Total Depth: 23.4 ft</b> <b>Initial Depth to Water: 10.74 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.4 ft</b> <b>Estimated Total Volume Pumped: 4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 2.81 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear, 72 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	
10/3/2023 10:52 AM	00:00	7.08 pH	20.57 °C	5,568.5 µS/cm	0.15 mg/L	2.59 NTU	-68.5 mV	10.74 ft	100.00 ml/min
10/3/2023 10:57 AM	05:00	7.09 pH	20.48 °C	5,428.5 µS/cm	0.10 mg/L	1.73 NTU	-83.8 mV	11.56 ft	100.00 ml/min
10/3/2023 11:02 AM	10:00	7.07 pH	20.48 °C	4,915.8 µS/cm	0.15 mg/L	3.52 NTU	-78.0 mV	12.38 ft	100.00 ml/min
10/3/2023 11:07 AM	15:00	7.05 pH	20.43 °C	4,574.7 µS/cm	0.06 mg/L	2.78 NTU	-67.1 mV	13.01 ft	100.00 ml/min
10/3/2023 11:12 AM	20:00	7.06 pH	20.40 °C	4,557.4 µS/cm	0.05 mg/L	2.99 NTU	-69.8 mV	13.30 ft	100.00 ml/min
10/3/2023 11:17 AM	25:00	7.07 pH	20.39 °C	4,619.6 µS/cm	0.05 mg/L	2.98 NTU	-71.9 mV	13.43 ft	100.00 ml/min
10/3/2023 11:22 AM	30:00	7.08 pH	20.39 °C	4,622.1 µS/cm	0.05 mg/L	3.56 NTU	-73.4 mV	13.55 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-02	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/3/2023 10:44:01 AM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: PT-03</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.67 ft</b> <b>Total Depth: 23.67 ft</b> <b>Initial Depth to Water: 10.77 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.62 ft</b> <b>Estimated Total Volume Pumped: 11 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.06 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear, 72 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	
10/3/2023 10:44 AM	00:00	6.70 pH	19.81 °C	2,152.6 µS/cm	0.20 mg/L	11.10 NTU	-21.2 mV	10.83 ft	100.00 ml/min
10/3/2023 10:49 AM	05:00	6.71 pH	19.81 °C	2,161.2 µS/cm	0.16 mg/L	12.40 NTU	-38.5 mV	10.83 ft	100.00 ml/min
10/3/2023 10:54 AM	10:00	6.74 pH	19.77 °C	2,158.3 µS/cm	0.14 mg/L	13.90 NTU	-22.2 mV	10.83 ft	100.00 ml/min
10/3/2023 10:59 AM	15:00	6.75 pH	19.77 °C	2,153.6 µS/cm	0.13 mg/L	14.90 NTU	-24.3 mV	10.83 ft	100.00 ml/min
10/3/2023 11:04 AM	20:00	6.76 pH	19.77 °C	2,147.6 µS/cm	0.12 mg/L	15.10 NTU	-49.8 mV	10.83 ft	100.00 ml/min
10/3/2023 11:09 AM	25:00	6.77 pH	19.77 °C	2,148.8 µS/cm	0.11 mg/L	14.30 NTU	-29.3 mV	10.83 ft	100.00 ml/min
10/3/2023 11:14 AM	30:00	6.77 pH	19.80 °C	2,141.8 µS/cm	0.11 mg/L	15.90 NTU	-29.3 mV	10.83 ft	100.00 ml/min
10/3/2023 11:19 AM	35:00	6.77 pH	19.83 °C	2,139.8 µS/cm	0.11 mg/L	13.50 NTU	-31.0 mV	10.83 ft	100.00 ml/min
10/3/2023 11:24 AM	40:00	6.78 pH	19.85 °C	2,134.6 µS/cm	0.10 mg/L	15.40 NTU	-28.8 mV	10.83 ft	100.00 ml/min
10/3/2023 11:29 AM	45:00	6.78 pH	19.86 °C	2,134.2 µS/cm	0.10 mg/L	12.20 NTU	-27.6 mV	10.83 ft	100.00 ml/min
10/3/2023 11:34 AM	50:00	6.78 pH	19.90 °C	2,127.6 µS/cm	0.10 mg/L	12.10 NTU	-27.3 mV	10.83 ft	100.00 ml/min
10/3/2023 11:39 AM	55:00	6.77 pH	19.94 °C	2,121.4 µS/cm	0.09 mg/L	10.70 NTU	-51.4 mV	10.83 ft	100.00 ml/min
10/3/2023 11:44 AM	01:00:00	6.77 pH	19.95 °C	2,127.9 µS/cm	0.09 mg/L	12.50 NTU	-28.3 mV	10.83 ft	100.00 ml/min

10/3/2023 11:49 AM	01:05:00	6.77 pH	20.13 °C	2,111.1 µS/cm	0.09 mg/L	8.20 NTU	-53.3 mV	10.83 ft	100.00 ml/min
10/3/2023 11:54 AM	01:10:00	6.76 pH	20.12 °C	2,115.0 µS/cm	0.09 mg/L	8.58 NTU	-28.4 mV	10.83 ft	100.00 ml/min
10/3/2023 11:59 AM	01:15:00	6.76 pH	20.09 °C	2,111.8 µS/cm	0.09 mg/L	7.72 NTU	-53.3 mV	10.83 ft	100.00 ml/min
10/3/2023 12:04 PM	01:20:00	6.76 pH	20.07 °C	2,115.5 µS/cm	0.09 mg/L	5.77 NTU	-28.0 mV	10.83 ft	100.00 ml/min
10/3/2023 12:09 PM	01:25:00	6.76 pH	20.05 °C	2,110.5 µS/cm	0.08 mg/L	6.66 NTU	-28.4 mV	10.83 ft	100.00 ml/min
10/3/2023 12:14 PM	01:30:00	6.76 pH	20.08 °C	2,105.1 µS/cm	0.08 mg/L	6.84 NTU	-53.9 mV	10.83 ft	100.00 ml/min
10/3/2023 12:19 PM	01:35:00	6.76 pH	20.11 °C	2,103.1 µS/cm	0.08 mg/L	5.77 NTU	-28.1 mV	10.83 ft	100.00 ml/min
10/3/2023 12:24 PM	01:40:00	6.76 pH	20.08 °C	2,100.1 µS/cm	0.08 mg/L	5.52 NTU	-52.2 mV	10.83 ft	100.00 ml/min
10/3/2023 12:29 PM	01:45:00	6.76 pH	20.21 °C	2,093.5 µS/cm	0.08 mg/L	4.22 NTU	-26.9 mV	10.83 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-03	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/3/2023 3:06:26 PM

Project: GP-Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-04</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 24.07 ft</b> <b>Total Depth: 34.07 ft</b> <b>Initial Depth to Water: 14.24 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 29.07 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: 0.09 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear. 80 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/3/2023 3:06 PM	00:00	6.84 pH	23.68 °C	2,545.1 µS/cm	2.88 mg/L	4.17 NTU	-55.1 mV	14.24 ft	200.00 ml/min
10/3/2023 3:11 PM	05:00	6.86 pH	22.69 °C	2,666.4 µS/cm	2.89 mg/L	3.55 NTU	-53.4 mV	14.33 ft	200.00 ml/min
10/3/2023 3:16 PM	10:00	6.87 pH	22.36 °C	2,524.7 µS/cm	3.95 mg/L	3.49 NTU	-52.3 mV	14.33 ft	200.00 ml/min
10/3/2023 3:21 PM	15:00	6.87 pH	22.27 °C	2,533.5 µS/cm	1.25 mg/L	2.66 NTU	-60.2 mV	14.33 ft	200.00 ml/min
10/3/2023 3:26 PM	20:00	6.88 pH	22.09 °C	2,518.4 µS/cm	1.47 mg/L	2.36 NTU	-46.7 mV	14.33 ft	200.00 ml/min
10/3/2023 3:31 PM	25:00	6.88 pH	21.84 °C	2,502.0 µS/cm	1.32 mg/L	2.43 NTU	-58.1 mV	14.33 ft	200.00 ml/min
10/3/2023 3:36 PM	30:00	6.88 pH	21.60 °C	2,414.9 µS/cm	1.15 mg/L	1.71 NTU	-50.4 mV	14.33 ft	200.00 ml/min
10/3/2023 3:41 PM	35:00	6.88 pH	21.76 °C	2,475.0 µS/cm	1.13 mg/L	1.64 NTU	-58.7 mV	14.33 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-04	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/3/2023 2:33:28 PM

Project: GP-Plant Hammond

Operator Name: Thomas Kessler

<b>Location Name: PT-05</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.39 ft</b> <b>Total Depth: 35.39 ft</b> <b>Initial Depth to Water: 14.52 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 30.39 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: 0.05 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850724</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear, 80 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/3/2023 2:33 PM	00:00	6.83 pH	23.25 °C	3,560.7 µS/cm	0.28 mg/L	37.60 NTU	-13.0 mV	14.57 ft	200.00 ml/min
10/3/2023 2:38 PM	05:00	6.85 pH	22.58 °C	3,503.3 µS/cm	0.17 mg/L	44.00 NTU	-22.2 mV	14.57 ft	200.00 ml/min
10/3/2023 2:43 PM	10:00	6.85 pH	22.40 °C	3,393.2 µS/cm	0.14 mg/L	40.70 NTU	-7.2 mV	14.57 ft	200.00 ml/min
10/3/2023 2:48 PM	15:00	6.85 pH	22.31 °C	3,425.9 µS/cm	0.06 mg/L	34.70 NTU	-16.3 mV	14.57 ft	200.00 ml/min
10/3/2023 2:53 PM	20:00	6.86 pH	22.21 °C	3,398.1 µS/cm	0.06 mg/L	31.30 NTU	-2.8 mV	14.57 ft	200.00 ml/min
10/3/2023 2:58 PM	25:00	6.86 pH	22.35 °C	3,408.3 µS/cm	0.05 mg/L	31.80 NTU	-1.7 mV	14.57 ft	200.00 ml/min
10/3/2023 3:03 PM	30:00	6.85 pH	22.08 °C	3,525.8 µS/cm	0.05 mg/L	31.10 NTU	-12.3 mV	14.57 ft	200.00 ml/min
10/3/2023 3:08 PM	35:00	6.86 pH	22.40 °C	3,517.3 µS/cm	0.04 mg/L	23.30 NTU	-11.1 mV	14.57 ft	200.00 ml/min
10/3/2023 3:13 PM	40:00	6.86 pH	22.13 °C	3,553.5 µS/cm	0.04 mg/L	22.20 NTU	1.2 mV	14.57 ft	200.00 ml/min
10/3/2023 3:18 PM	45:00	6.88 pH	22.18 °C	3,598.6 µS/cm	0.04 mg/L	17.60 NTU	0.9 mV	14.57 ft	200.00 ml/min
10/3/2023 3:23 PM	50:00	6.89 pH	21.91 °C	3,571.4 µS/cm	0.10 mg/L	17.10 NTU	-10.8 mV	14.57 ft	200.00 ml/min
10/3/2023 3:28 PM	55:00	6.89 pH	22.25 °C	3,635.9 µS/cm	0.08 mg/L	17.80 NTU	0.3 mV	14.57 ft	200.00 ml/min
10/3/2023 3:33 PM	01:00:00	6.89 pH	22.22 °C	3,616.6 µS/cm	0.07 mg/L	11.90 NTU	0.1 mV	14.57 ft	200.00 ml/min



10/3/2023 3:38 PM	01:05:00	6.90 pH	22.13 °C	3,587.1 µS/cm	0.05 mg/L	7.37 NTU	0.1 mV	14.57 ft	200.00 ml/min
10/3/2023 3:43 PM	01:10:00	6.90 pH	21.91 °C	3,602.5 µS/cm	0.05 mg/L	8.59 NTU	-0.3 mV	14.57 ft	200.00 ml/min
10/3/2023 3:48 PM	01:15:00	6.91 pH	22.21 °C	3,696.4 µS/cm	0.04 mg/L	9.70 NTU	-1.1 mV	14.57 ft	200.00 ml/min
10/3/2023 3:53 PM	01:20:00	6.90 pH	22.44 °C	3,703.2 µS/cm	0.04 mg/L	6.03 NTU	-2.0 mV	14.57 ft	200.00 ml/min
10/3/2023 3:58 PM	01:25:00	6.92 pH	22.26 °C	3,797.8 µS/cm	0.04 mg/L	5.14 NTU	2.9 mV	14.57 ft	200.00 ml/min
10/3/2023 4:03 PM	01:30:00	6.93 pH	21.86 °C	3,743.9 µS/cm	0.04 mg/L	4.12 NTU	-1.9 mV	14.57 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-05	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/3/2023 4:51:57 PM

Project: GP-Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-06</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.16 ft</b> <b>Total Depth: 35.16 ft</b> <b>Initial Depth to Water: 14.55 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 30.16 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 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 884189</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear. 85 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/3/2023 4:51 PM	00:00	6.66 pH	22.68 °C	2,190.4 µS/cm	0.16 mg/L	3.21 NTU	-3.4 mV	14.55 ft	200.00 ml/min
10/3/2023 4:56 PM	05:00	6.65 pH	22.11 °C	2,259.4 µS/cm	0.09 mg/L	3.28 NTU	-10.9 mV	14.55 ft	200.00 ml/min
10/3/2023 5:01 PM	10:00	6.65 pH	21.92 °C	2,205.7 µS/cm	0.06 mg/L	2.30 NTU	-9.0 mV	14.55 ft	200.00 ml/min
10/3/2023 5:06 PM	15:00	6.63 pH	21.77 °C	2,139.3 µS/cm	0.05 mg/L	1.11 NTU	-8.3 mV	14.55 ft	200.00 ml/min
10/3/2023 5:11 PM	20:00	6.62 pH	21.64 °C	2,103.8 µS/cm	0.04 mg/L	2.20 NTU	-8.2 mV	14.55 ft	200.00 ml/min
10/3/2023 5:16 PM	25:00	6.63 pH	21.35 °C	2,095.8 µS/cm	0.03 mg/L	1.59 NTU	-8.4 mV	14.55 ft	200.00 ml/min
10/3/2023 5:21 PM	30:00	6.63 pH	21.23 °C	2,029.5 µS/cm	0.04 mg/L	2.65 NTU	-9.0 mV	14.55 ft	200.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-06	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/10/2023 4:39:11 PM

Project: GP-Plant Hammond

Operator Name: Jacob Tracy

<b>Location Name: PT-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.49 ft</b> <b>Total Depth: 23.49 ft</b> <b>Initial Depth to Water: 11.86 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.49 ft</b> <b>Estimated Total Volume Pumped: 2.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.13 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966105</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear, 72 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	
10/10/2023 4:39 PM	00:00	7.13 pH	23.79 °C	5,673.4 µS/cm	0.65 mg/L	3.43 NTU	34.6 mV	11.76 ft	100.00 ml/min
10/10/2023 4:44 PM	05:00	7.13 pH	22.92 °C	5,744.2 µS/cm	0.66 mg/L	1.73 NTU	29.6 mV	11.71 ft	100.00 ml/min
10/10/2023 4:49 PM	10:00	7.12 pH	22.80 °C	5,709.8 µS/cm	0.65 mg/L	2.42 NTU	31.4 mV	11.73 ft	100.00 ml/min
10/10/2023 4:54 PM	15:00	7.10 pH	22.62 °C	5,656.1 µS/cm	0.51 mg/L	2.17NTU	33.2 mV	11.73 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/10/2023 12:30:12 PM

Project: GP-Plant Hammond

Operator Name: Jacob Tracy

<b>Location Name: PT-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.4 ft</b> <b>Total Depth: 23.4 ft</b> <b>Initial Depth to Water: 11.6 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 13.4 ft</b> <b>Estimated Total Volume Pumped: 20.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.43 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966105</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear, 72 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	
10/10/2023 12:30 PM	00:00	6.27 pH	21.41 °C	1,614.2 µS/cm	4.67 mg/L	4.03 NTU	105.3 mV	12.06 ft	100.00 ml/min
10/10/2023 12:35 PM	05:00	6.27 pH	21.51 °C	1,619.6 µS/cm	5.18 mg/L	3.32 NTU	124.7 mV	12.06 ft	100.00 ml/min
10/10/2023 12:40 PM	10:00	6.34 pH	21.50 °C	1,408.0 µS/cm	5.72 mg/L	2.59 NTU	140.6 mV	12.03 ft	100.00 ml/min
10/10/2023 12:45 PM	15:00	6.53 pH	21.55 °C	1,663.6 µS/cm	6.24 mg/L	2.50 NTU	72.7 mV	12.03 ft	100.00 ml/min
10/10/2023 12:50 PM	20:00	6.64 pH	21.62 °C	1,909.7 µS/cm	6.60 mg/L	1.51 NTU	65.4 mV	12.03 ft	100.00 ml/min
10/10/2023 12:55 PM	25:00	6.76 pH	21.64 °C	1,973.9 µS/cm	6.32 mg/L	1.58 NTU	44.8 mV	12.03 ft	100.00 ml/min
10/10/2023 1:00 PM	30:00	6.95 pH	21.71 °C	2,187.1 µS/cm	6.37 mg/L	1.47 NTU	24.9 mV	12.03 ft	100.00 ml/min
10/10/2023 1:05 PM	35:00	7.13 pH	21.91 °C	2,445.5 µS/cm	6.49 mg/L	1.39 NTU	-0.6 mV	12.03 ft	100.00 ml/min
10/10/2023 1:10 PM	40:00	7.27 pH	22.30 °C	2,751.6 µS/cm	6.55 mg/L	1.37 NTU	-4.1 mV	12.03 ft	100.00 ml/min
10/10/2023 1:15 PM	45:00	7.38 pH	23.03 °C	3,173.1 µS/cm	6.57 mg/L	1.41 NTU	-45.3 mV	12.03 ft	100.00 ml/min
10/10/2023 1:20 PM	50:00	7.44 pH	23.34 °C	3,619.9 µS/cm	6.48 mg/L	3.50 NTU	-43.6 mV	12.03 ft	100.00 ml/min
10/10/2023 1:25 PM	55:00	7.49 pH	23.38 °C	4,071.8 µS/cm	6.46 mg/L	4.20 NTU	-77.5 mV	12.03 ft	100.00 ml/min
10/10/2023 1:30 PM	01:00:00	7.51 pH	23.71 °C	4,260.6 µS/cm	6.42 mg/L	6.00 NTU	-58.5 mV	12.03 ft	100.00 ml/min

10/10/2023 1:35 PM	01:05:00	7.50 pH	23.27 °C	4,313.0 µS/cm	6.28 mg/L	6.66 NTU	-86.3 mV	12.03 ft	100.00 ml/min
10/10/2023 1:40 PM	01:10:00	7.51 pH	22.89 °C	4,315.6 µS/cm	6.31 mg/L	6.76 NTU	-64.1 mV	12.03 ft	100.00 ml/min
10/10/2023 1:45 PM	01:15:00	7.52 pH	22.62 °C	4,362.3 µS/cm	6.34 mg/L	6.65 NTU	-92.6 mV	12.03 ft	100.00 ml/min
10/10/2023 1:50 PM	01:20:00	7.53 pH	22.59 °C	4,377.2 µS/cm	6.36 mg/L	6.91 NTU	-95.1 mV	12.03 ft	100.00 ml/min
10/10/2023 1:55 PM	01:25:00	7.54 pH	22.44 °C	4,394.6 µS/cm	6.40 mg/L	7.32 NTU	-72.1 mV	12.03 ft	100.00 ml/min
10/10/2023 2:00 PM	01:30:00	7.54 pH	22.49 °C	4,432.7 µS/cm	6.38 mg/L	7.84 NTU	-98.0 mV	12.03 ft	100.00 ml/min
10/10/2023 2:05 PM	01:35:00	7.55 pH	22.56 °C	4,437.7 µS/cm	6.41 mg/L	7.86 NTU	-76.0 mV	12.03 ft	100.00 ml/min
10/10/2023 2:10 PM	01:40:00	7.54 pH	22.87 °C	4,454.7 µS/cm	6.36 mg/L	7.98 NTU	-100.4 mV	12.03 ft	100.00 ml/min
10/10/2023 2:15 PM	01:45:00	7.56 pH	22.75 °C	4,452.5 µS/cm	6.44 mg/L	8.22 NTU	-79.0 mV	12.03 ft	100.00 ml/min
10/10/2023 2:20 PM	01:50:00	7.59 pH	22.89 °C	4,490.3 µS/cm	6.62 mg/L	8.63 NTU	-102.5 mV	12.03 ft	100.00 ml/min
10/10/2023 2:25 PM	01:55:00	7.58 pH	22.89 °C	4,484.2 µS/cm	6.60 mg/L	8.98 NTU	-80.2 mV	12.03 ft	100.00 ml/min
10/10/2023 2:30 PM	02:00:00	7.60 pH	22.84 °C	4,504.9 µS/cm	6.67 mg/L	9.32 NTU	-103.1 mV	12.03 ft	100.00 ml/min
10/10/2023 2:35 PM	02:05:00	7.57 pH	22.89 °C	4,514.0 µS/cm	6.55 mg/L	10.01 NTU	-81.6 mV	12.03 ft	100.00 ml/min
10/10/2023 2:40 PM	02:10:00	7.58 pH	22.71 °C	4,523.2 µS/cm	6.60 mg/L	10.64 NTU	-102.7 mV	12.03 ft	100.00 ml/min
10/10/2023 2:45 PM	02:15:00	7.57 pH	22.66 °C	4,521.9 µS/cm	6.59 mg/L	11.70 NTU	-81.1 mV	12.03 ft	100.00 ml/min
10/10/2023 2:50 PM	02:20:00	7.57 pH	22.61 °C	4,522.5 µS/cm	6.59 mg/L	11.45 NTU	-102.7 mV	12.03 ft	100.00 ml/min
10/10/2023 2:55 PM	02:25:00	7.54 pH	22.35 °C	4,540.8 µS/cm	6.40 mg/L	11.70 NTU	-104.4 mV	12.03 ft	100.00 ml/min
10/10/2023 3:00 PM	02:30:00	7.56 pH	22.41 °C	4,541.3 µS/cm	6.49 mg/L	10.32 NTU	-103.1 mV	12.03 ft	100.00 ml/min
10/10/2023 3:05 PM	02:35:00	7.56 pH	22.40 °C	4,536.1 µS/cm	6.50 mg/L	10.17 NTU	-83.2 mV	12.03 ft	100.00 ml/min
10/10/2023 3:10 PM	02:40:00	7.55 pH	22.55 °C	4,541.9 µS/cm	6.48 mg/L	10.54 NTU	-83.9 mV	12.03 ft	100.00 ml/min
10/10/2023 3:15 PM	02:45:00	7.57 pH	22.66 °C	4,552.5 µS/cm	6.61 mg/L	10.07 NTU	-79.6 mV	12.03 ft	100.00 ml/min
10/10/2023 3:20 PM	02:50:00	7.50 pH	22.74 °C	4,557.9 µS/cm	6.32 mg/L	9.69 NTU	-81.1 mV	12.03 ft	100.00 ml/min
10/10/2023 3:25 PM	02:55:00	7.51 pH	22.73 °C	4,558.5 µS/cm	6.40 mg/L	6.48 NTU	-82.1 mV	12.03 ft	100.00 ml/min
10/10/2023 3:30 PM	03:00:00	7.51 pH	22.73 °C	4,568.3 µS/cm	6.37 mg/L	6.71 NTU	-81.3 mV	12.03 ft	100.00 ml/min
10/10/2023 3:35 PM	03:05:00	7.52 pH	22.86 °C	4,573.3 µS/cm	6.39 mg/L	6.34 NTU	-81.9 mV	12.03 ft	100.00 ml/min
10/10/2023 3:40 PM	03:10:00	7.53 pH	23.08 °C	4,590.8 µS/cm	6.46 mg/L	6.07 NTU	-100.4 mV	12.03 ft	100.00 ml/min
10/10/2023 3:45 PM	03:15:00	7.53 pH	23.01 °C	4,590.1 µS/cm	6.53 mg/L	4.86 NTU	-99.8 mV	12.03 ft	100.00 ml/min

**Samples**

Sample ID:	Description:
HAM-PT-02	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/10/2023 10:14:49 AM

Project: GW6581

Operator Name: Jacob Tracy

<b>Location Name: PT-03</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.62 ft</b> <b>Total Depth: 23.62 ft</b> <b>Initial Depth to Water: 10.86 m</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Poly</b> <b>Pump Intake From TOC: 18.62 ft</b> <b>Estimated Total Volume Pumped: 5.8 Liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.1 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 966105</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear, 72 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	
10/10/2023 10:14 AM	00:00	6.58 pH	18.48 °C	2,083.4 µS/cm	0.70 mg/L	7.45 NTU	25.2 mV	10.93 ft	100.00 ml/min
10/10/2023 10:19 AM	05:00	6.60 pH	19.32 °C	2,061.1 µS/cm	0.59 mg/L	7.04 NTU	8.9 mV	10.95 ft	100.00 ml/min
10/10/2023 10:24 AM	10:00	6.60 pH	19.34 °C	1,010.4 µS/cm	2.17 mg/L	5.98 NTU	9.0 mV	10.96 ft	100.00 ml/min
10/10/2023 10:29 AM	14:24	6.62 pH	19.41 °C	2,044.1 µS/cm	0.16 mg/L	5.47 NTU	-14.9 mV	10.96 ft	100.00 ml/min
10/10/2023 10:34 AM	19:24	6.62 pH	19.39 °C	2,054.6 µS/cm	0.15 mg/L	5.54 NTU	-3.2 mV	10.96 ft	100.00 ml/min
10/10/2023 10:37 AM	23:03	6.62 pH	19.40 °C	2,044.1 µS/cm	0.15 mg/L	4.38 NTU	-21.1 mV	10.96 ft	100.00 ml/min
10/10/2023 10:42 AM	28:03	6.62 pH	19.41 °C	2,049.7 µS/cm	0.13 mg/L	3.92 NTU	-6.8 mV	10.96 ft	100.00 ml/min
10/10/2023 10:47 AM	33:03	6.62 pH	19.43 °C	2,043.9 µS/cm	0.12 mg/L	3.42 NTU	-28.1 mV	10.96 ft	100.00 ml/min
10/10/2023 10:52 AM	38:03	6.62 pH	19.47 °C	2,048.0 µS/cm	0.12 mg/L	3.22 NTU	-11.0 mV	10.96 ft	100.00 ml/min
10/10/2023 10:57 AM	43:03	6.63 pH	19.49 °C	2,044.0 µS/cm	0.12 mg/L	3.62 NTU	-11.7 mV	10.96 ft	100.00 ml/min
10/10/2023 11:02 AM	48:03	6.64 pH	19.50 °C	2,040.6 µS/cm	0.12 mg/L	3.58 NTU	-37.6 mV	10.96 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-03	Grab.
HAM-AP2-FD-01	Grab.

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# Low-Flow Test Report:

Test Date / Time: 10/10/2023 9:32:32 AM

Project: GP-Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-04</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 24.07 ft</b> <b>Total Depth: 34.07 ft</b> <b>Initial Depth to Water: 14.27 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 29.07 ft</b> <b>Estimated Total Volume Pumped: 22.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.03 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear. 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	
10/10/2023 9:32 AM	00:00	6.91 pH	15.44 °C	1.28 µS/cm	4.96 mg/L	2.16 NTU	177.9 mV	14.27 ft	100.00 ml/min
10/10/2023 9:37 AM	05:00	6.77 pH	15.93 °C	2.24 µS/cm	7.04 mg/L	2.15 NTU	173.9 mV	14.30 ft	100.00 ml/min
10/10/2023 9:42 AM	10:00	6.62 pH	17.86 °C	1.59 µS/cm	5.14 mg/L	2.18 NTU	166.5 mV	14.30 ft	100.00 ml/min
10/10/2023 9:47 AM	15:00	6.67 pH	20.63 °C	15.02 µS/cm	4.58 mg/L	2.07 NTU	145.2 mV	14.30 ft	100.00 ml/min
10/10/2023 9:52 AM	20:00	6.41 pH	23.17 °C	1.70 µS/cm	4.07 mg/L	1.80 NTU	152.9 mV	14.30 ft	100.00 ml/min
10/10/2023 9:57 AM	25:00	6.51 pH	24.87 °C	5.42 µS/cm	1.78 mg/L	1.71 NTU	126.0 mV	14.30 ft	100.00 ml/min
10/10/2023 10:02 AM	30:00	6.38 pH	24.43 °C	38.62 µS/cm	1.65 mg/L	1.25 NTU	117.9 mV	14.30 ft	100.00 ml/min
10/10/2023 10:07 AM	35:00	6.53 pH	26.35 °C	7.13 µS/cm	2.17 mg/L	1.30 NTU	121.0 mV	14.30 ft	100.00 ml/min
10/10/2023 10:12 AM	40:00	6.36 pH	27.80 °C	1.13 µS/cm	4.70 mg/L	1.35 NTU	141.1 mV	14.30 ft	100.00 ml/min
10/10/2023 10:17 AM	45:00	6.26 pH	27.20 °C	2.30 µS/cm	3.25 mg/L	1.53 NTU	131.3 mV	14.30 ft	100.00 ml/min
10/10/2023 10:22 AM	50:00	6.12 pH	26.17 °C	0.82 µS/cm	4.19 mg/L	1.41 NTU	131.0 mV	14.30 ft	100.00 ml/min
10/10/2023 10:27 AM	55:00	6.08 pH	25.34 °C	0.62 µS/cm	5.05 mg/L	1.34 NTU	129.8 mV	14.30 ft	100.00 ml/min
10/10/2023 10:32 AM	01:00:00	6.10 pH	24.74 °C	1.14 µS/cm	3.67 mg/L	1.64 NTU	122.0 mV	14.30 ft	100.00 ml/min

10/10/2023 10:37 AM	01:05:00	6.08 pH	24.33 °C	2.31 µS/cm	4.59 mg/L	1.47 NTU	140.0 mV	14.30 ft	100.00 ml/min
10/10/2023 10:42 AM	01:10:00	6.07 pH	24.06 °C	0.98 µS/cm	6.00 mg/L	1.10 NTU	105.4 mV	14.30 ft	100.00 ml/min
10/10/2023 10:47 AM	01:15:00	6.06 pH	23.92 °C	0.71 µS/cm	6.52 mg/L	1.03 NTU	87.7 mV	14.30 ft	100.00 ml/min
10/10/2023 10:52 AM	01:20:00	5.99 pH	23.97 °C	0.63 µS/cm	6.76 mg/L	1.29 NTU	62.1 mV	14.30 ft	100.00 ml/min
10/10/2023 10:57 AM	01:25:00	5.98 pH	24.01 °C	0.59 µS/cm	5.62 mg/L	1.22 NTU	53.2 mV	14.30 ft	100.00 ml/min
10/10/2023 11:02 AM	01:30:00	5.97 pH	24.17 °C	1.97 µS/cm	4.68 mg/L	1.27 NTU	42.7 mV	14.30 ft	100.00 ml/min
10/10/2023 11:07 AM	01:35:00	5.90 pH	24.33 °C	1.45 µS/cm	3.68 mg/L	2.03 NTU	42.0 mV	14.30 ft	100.00 ml/min
10/10/2023 11:12 AM	01:40:00	5.87 pH	24.55 °C	1.47 µS/cm	4.26 mg/L	1.61 NTU	40.9 mV	14.30 ft	100.00 ml/min
10/10/2023 11:17 AM	01:45:00	5.80 pH	24.87 °C	2.98 µS/cm	3.52 mg/L	1.15 NTU	36.0 mV	14.30 ft	100.00 ml/min
10/10/2023 11:22 AM	01:50:00	5.69 pH	25.19 °C	1.00 µS/cm	3.94 mg/L	1.14 NTU	36.0 mV	14.30 ft	100.00 ml/min
10/10/2023 11:27 AM	01:55:00	5.69 pH	25.46 °C	1.08 µS/cm	4.77 mg/L	0.80 NTU	40.1 mV	14.30 ft	100.00 ml/min
10/10/2023 11:32 AM	02:00:00	5.75 pH	25.74 °C	0.74 µS/cm	4.90 mg/L	1.23 NTU	36.9 mV	14.30 ft	100.00 ml/min
10/10/2023 11:37 AM	02:05:00	5.67 pH	26.06 °C	1.27 µS/cm	4.43 mg/L	0.82 NTU	36.7 mV	14.30 ft	100.00 ml/min
10/10/2023 11:42 AM	02:10:00	5.59 pH	26.18 °C	1.34 µS/cm	4.42 mg/L	1.33 NTU	34.8 mV	14.30 ft	100.00 ml/min
10/10/2023 11:47 AM	02:15:00	5.48 pH	26.32 °C	0.90 µS/cm	4.32 mg/L	1.32 NTU	36.3 mV	14.30 ft	100.00 ml/min
10/10/2023 11:52 AM	02:20:00	5.45 pH	26.46 °C	1.11 µS/cm	4.08 mg/L	1.22 NTU	34.2 mV	14.30 ft	100.00 ml/min
10/10/2023 11:57 AM	02:25:00	5.47 pH	26.60 °C	1.21 µS/cm	4.50 mg/L	1.11 NTU	35.9 mV	14.30 ft	100.00 ml/min
10/10/2023 12:02 PM	02:30:00	5.43 pH	26.74 °C	0.75 µS/cm	4.85 mg/L	1.17 NTU	31.8 mV	14.30 ft	100.00 ml/min
10/10/2023 12:07 PM	02:35:00	5.43 pH	26.86 °C	2.29 µS/cm	4.80 mg/L	1.27 NTU	29.8 mV	14.30 ft	100.00 ml/min
10/10/2023 12:12 PM	02:40:00	5.43 pH	26.98 °C	1.45 µS/cm	3.63 mg/L	1.04 NTU	23.1 mV	14.30 ft	100.00 ml/min
10/10/2023 12:17 PM	02:45:00	5.41 pH	27.13 °C	1.58 µS/cm	4.04 mg/L	1.18 NTU	25.6 mV	14.30 ft	100.00 ml/min
10/10/2023 12:22 PM	02:50:00	5.38 pH	27.27 °C	0.88 µS/cm	5.13 mg/L	0.93 NTU	25.8 mV	14.30 ft	100.00 ml/min
10/10/2023 12:27 PM	02:55:00	5.35 pH	27.39 °C	0.52 µS/cm	5.06 mg/L	0.83 NTU	27.0 mV	14.30 ft	100.00 ml/min
10/10/2023 12:32 PM	03:00:00	5.09 pH	27.58 °C	0.49 µS/cm	5.27 mg/L	1.56 NTU	27.1 mV	14.30 ft	100.00 ml/min
10/10/2023 12:37 PM	03:05:00	5.05 pH	27.80 °C	0.48 µS/cm	5.48 mg/L	1.17 NTU	24.8 mV	14.30 ft	100.00 ml/min
10/10/2023 12:42 PM	03:10:00	5.01 pH	28.02 °C	0.46 µS/cm	5.67 mg/L	1.34 NTU	26.9 mV	14.30 ft	100.00 ml/min
10/10/2023 12:47 PM	03:15:00	5.01 pH	28.27 °C	1.08 µS/cm	5.22 mg/L	1.72 NTU	23.9 mV	14.30 ft	100.00 ml/min
10/10/2023 12:52 PM	03:20:00	4.99 pH	28.50 °C	0.65 µS/cm	5.60 mg/L	1.30 NTU	23.4 mV	14.30 ft	100.00 ml/min
10/10/2023 12:57 PM	03:25:00	4.95 pH	28.83 °C	0.47 µS/cm	5.78 mg/L	1.23 NTU	23.8 mV	14.30 ft	100.00 ml/min

10/10/2023 1:02 PM	03:30:00	4.92 pH	29.20 °C	0.44 µS/cm	5.81 mg/L	1.61 NTU	11.0 mV	14.30 ft	100.00 ml/min
10/10/2023 1:07 PM	03:35:00	4.90 pH	29.34 °C	0.45 µS/cm	5.90 mg/L	1.88 NTU	22.6 mV	14.30 ft	100.00 ml/min
10/10/2023 1:12 PM	03:40:00	4.91 pH	29.53 °C	0.45 µS/cm	5.85 mg/L	1.20 NTU	22.4 mV	14.30 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-04	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/10/2023 4:04:34 PM

Project: GP-Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-05</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.39 ft</b> <b>Total Depth: 35.39 ft</b> <b>Initial Depth to Water: 14.57 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 30.39 ft</b> <b>Estimated Total Volume Pumped: 13 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.08 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clea., 85 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/10/2023 4:04 PM	00:00	6.49 pH	21.60 °C	3,765.0 µS/cm	0.14 mg/L	4.00 NTU	-62.8 mV	14.57 ft	100.00 ml/min
10/10/2023 4:09 PM	05:00	6.48 pH	21.50 °C	3,853.7 µS/cm	0.11 mg/L	43.10 NTU	-65.4 mV	14.61 ft	100.00 ml/min
10/10/2023 4:14 PM	10:00	6.50 pH	21.46 °C	3,836.9 µS/cm	0.09 mg/L	40.90 NTU	-114.7 mV	14.65 ft	100.00 ml/min
10/10/2023 4:19 PM	15:00	6.50 pH	21.51 °C	3,902.7 µS/cm	0.07 mg/L	38.60 NTU	-109.5 mV	14.65 ft	100.00 ml/min
10/10/2023 4:24 PM	20:00	6.48 pH	21.56 °C	3,952.6 µS/cm	0.07 mg/L	30.50 NTU	-96.1 mV	14.65 ft	100.00 ml/min
10/10/2023 4:29 PM	25:00	6.50 pH	21.46 °C	3,992.3 µS/cm	0.06 mg/L	28.30 NTU	-44.2 mV	14.65 ft	100.00 ml/min
10/10/2023 4:34 PM	30:00	6.51 pH	20.95 °C	4,020.5 µS/cm	0.06 mg/L	25.70 NTU	-79.6 mV	14.65 ft	100.00 ml/min
10/10/2023 4:39 PM	35:00	6.51 pH	20.84 °C	4,083.3 µS/cm	0.06 mg/L	22.60 NTU	-79.3 mV	14.65 ft	100.00 ml/min
10/10/2023 4:42 PM	37:51	6.52 pH	21.08 °C	4,076.4 µS/cm	0.06 mg/L	18.30 NTU	-44.4 mV	14.65 ft	100.00 ml/min
10/10/2023 4:47 PM	42:51	6.52 pH	21.24 °C	4,070.5 µS/cm	0.05 mg/L	16.00 NTU	-75.5 mV	14.65 ft	100.00 ml/min
10/10/2023 4:52 PM	47:51	6.52 pH	21.24 °C	4,097.9 µS/cm	0.05 mg/L	16.60 NTU	-39.4 mV	14.65 ft	100.00 ml/min
10/10/2023 4:57 PM	52:51	6.53 pH	21.28 °C	4,140.5 µS/cm	0.05 mg/L	12.20 NTU	-84.1 mV	14.65 ft	100.00 ml/min
10/10/2023 5:02 PM	57:51	6.55 pH	21.07 °C	4,120.1 µS/cm	0.05 mg/L	12.60 NTU	-46.1 mV	14.65 ft	100.00 ml/min

10/10/2023 5:07 PM	01:02:51	6.54 pH	21.12 °C	4,179.7 µS/cm	0.06 mg/L	10.32 NTU	-47.4 mV	14.65 ft	100.00 ml/min
10/10/2023 5:12 PM	01:07:51	6.55 pH	20.88 °C	4,166.0 µS/cm	0.05 mg/L	11.59 NTU	-99.6 mV	14.65 ft	100.00 ml/min
10/10/2023 5:17 PM	01:12:51	6.56 pH	20.59 °C	4,237.7 µS/cm	0.05 mg/L	9.75 NTU	-107.9 mV	14.65 ft	100.00 ml/min
10/10/2023 5:22 PM	01:17:51	6.57 pH	20.50 °C	4,263.6 µS/cm	0.05 mg/L	9.16 NTU	-111.3 mV	14.65 ft	100.00 ml/min
10/10/2023 5:27 PM	01:22:51	6.58 pH	20.45 °C	4,252.8 µS/cm	0.05 mg/L	8.70 NTU	-117.0 mV	14.65 ft	100.00 ml/min
10/10/2023 5:32 PM	01:27:51	6.59 pH	20.35 °C	4,288.2 µS/cm	0.06 mg/L	9.88 NTU	-65.1 mV	14.65 ft	100.00 ml/min
10/10/2023 5:37 PM	01:32:51	6.59 pH	20.27 °C	4,271.1 µS/cm	0.05 mg/L	8.44 NTU	-64.5 mV	14.65 ft	100.00 ml/min
10/10/2023 5:42 PM	01:37:51	6.60 pH	20.19 °C	4,241.7 µS/cm	0.05 mg/L	6.13 NTU	-121.7 mV	14.65 ft	100.00 ml/min
10/10/2023 5:47 PM	01:42:51	6.61 pH	20.17 °C	4,328.6 µS/cm	0.05 mg/L	6.85 NTU	-67.9 mV	14.65 ft	100.00 ml/min
10/10/2023 5:50 PM	01:45:27	6.61 pH	20.15 °C	4,325.3 µS/cm	0.05 mg/L	5.67 NTU	-68.9 mV	14.65 ft	100.00 ml/min
10/10/2023 5:55 PM	01:50:27	6.61 pH	20.13 °C	4,364.5 µS/cm	0.05 mg/L	4.59 NTU	-125.1 mV	14.65 ft	100.00 ml/min
10/10/2023 6:00 PM	01:55:27	6.62 pH	20.09 °C	4,390.6 µS/cm	0.05 mg/L	4.68 NTU	-129.3 mV	14.65 ft	100.00 ml/min
10/10/2023 6:05 PM	02:00:27	6.62 pH	20.06 °C	4,390.1 µS/cm	0.05 mg/L	3.86 NTU	-129.7 mV	14.65 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-05	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/10/2023 2:38:02 PM

Project: GP-Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-06</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.22 ft</b> <b>Total Depth: 35.22 ft</b> <b>Initial Depth to Water: 14.38 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 30.22 ft</b> <b>Estimated Total Volume Pumped: 4.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.02 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 883553</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear, 85 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/10/2023 2:38 PM	00:00	4.28 pH	32.23 °C	1.58 µS/cm	6.07 mg/L	3.36 NTU	82.6 mV	14.38 ft	100.00 ml/min
10/10/2023 2:43 PM	05:00	4.24 pH	34.75 °C	0.79 µS/cm	4.82 mg/L	3.14 NTU	71.8 mV	14.40 ft	100.00 ml/min
10/10/2023 2:48 PM	10:00	4.24 pH	36.35 °C	0.49 µS/cm	4.17 mg/L	2.22 NTU	42.0 mV	14.40 ft	100.00 ml/min
10/10/2023 2:53 PM	15:00	4.37 pH	37.10 °C	0.28 µS/cm	3.82 mg/L	1.96 NTU	42.4 mV	14.40 ft	100.00 ml/min
10/10/2023 2:58 PM	20:00	6.15 pH	30.64 °C	2,377.3 µS/cm	3.54 mg/L	2.50 NTU	64.4 mV	14.40 ft	100.00 ml/min
10/10/2023 3:03 PM	25:00	6.30 pH	22.60 °C	2,534.8 µS/cm	0.32 mg/L	1.67 NTU	21.6 mV	14.40 ft	100.00 ml/min
10/10/2023 3:08 PM	30:00	6.31 pH	22.42 °C	2,523.7 µS/cm	0.10 mg/L	2.52 NTU	11.7 mV	14.40 ft	100.00 ml/min
10/10/2023 3:13 PM	35:00	6.32 pH	22.58 °C	2,580.5 µS/cm	0.11 mg/L	4.26 NTU	9.1 mV	14.40 ft	100.00 ml/min
10/10/2023 3:18 PM	40:00	6.32 pH	22.41 °C	2,538.1 µS/cm	0.08 mg/L	4.44 NTU	5.6 mV	14.40 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-06	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/24/2023 4:26:37 PM

Project: GP-Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.49 ft</b> <b>Total Depth: 23.49 ft</b> <b>Initial Depth to Water: 11.44 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 18.49 ft</b> <b>Estimated Total Volume Pumped: 3.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.35 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 877800</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear, 80 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/24/2023 4:26 PM	00:00	7.00 pH	22.67 °C	6,670.9 µS/cm	0.24 mg/L	4.78 NTU	-42.9 mV	11.79 ft	100.00 ml/min
10/24/2023 4:31 PM	05:00	7.01 pH	22.04 °C	6,690.8 µS/cm	0.18 mg/L	5.01 NTU	-66.0 mV	11.79 ft	100.00 ml/min
10/24/2023 4:36 PM	10:00	7.01 pH	21.69 °C	6,682.9 µS/cm	0.15 mg/L	4.83 NTU	-38.3 mV	11.79 ft	100.00 ml/min
10/24/2023 4:41 PM	15:00	7.01 pH	21.44 °C	6,658.7 µS/cm	0.14 mg/L	4.14 NTU	-36.7 mV	11.79 ft	100.00 ml/min
10/24/2023 4:46 PM	20:00	7.01 pH	21.29 °C	6,622.7 µS/cm	0.13 mg/L	4.74 NTU	-35.5 mV	11.79 ft	100.00 ml/min
10/24/2023 4:51 PM	25:00	7.00 pH	21.15 °C	6,620.7 µS/cm	0.13 mg/L	4.49 NTU	-33.5 mV	11.79 ft	100.00 ml/min
10/24/2023 4:56 PM	30:00	7.00 pH	21.11 °C	6,566.1 µS/cm	0.12 mg/L	4.70 NTU	-31.5 mV	11.79 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/24/2023 4:49:37 PM

Project: GP-Plant Hammond

Operator Name: Hudson Kennedy

<b>Location Name: PT-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.40 ft</b> <b>Total Depth: 23.40 ft</b> <b>Initial Depth to Water: 11.29 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 18.40 ft</b> <b>Estimated Total Volume Pumped: 3 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 1.89 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850735</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Sunny, 70 Degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
10/24/2023 4:49 PM	00:00	6.93 pH	21.48 °C	5,091.3 µS/cm	0.45 mg/L	5.50 NTU	-136.9 mV	12.42 ft	100.00 ml/min
10/24/2023 4:54 PM	05:00	6.93 pH	21.23 °C	5,086.5 µS/cm	0.34 mg/L	3.86 NTU	-135.7 mV	12.62 ft	100.00 ml/min
10/24/2023 4:59 PM	10:00	6.95 pH	21.33 °C	5,046.1 µS/cm	0.28 mg/L	3.69 NTU	-137.3 mV	12.79 ft	100.00 ml/min
10/24/2023 5:04 PM	15:00	6.92 pH	21.25 °C	4,974.9 µS/cm	0.26 mg/L	4.06 NTU	-131.9 mV	12.91 ft	100.00 ml/min
10/24/2023 5:09 PM	20:00	6.92 pH	21.02 °C	4,915.5 µS/cm	0.23 mg/L	2.74 NTU	-129.3 mV	13.02 ft	100.00 ml/min
10/24/2023 5:14 PM	25:00	6.93 pH	20.83 °C	4,860.4 µS/cm	0.21 mg/L	4.36 NTU	-126.8 mV	13.14 ft	100.00 ml/min
10/24/2023 5:19 PM	30:00	6.91 pH	20.79 °C	4,755.2 µS/cm	0.20 mg/L	3.44 NTU	-122.1 mV	13.18 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-02	Grab.
HAM-AP2-FD-01	Grab.



# Low-Flow Test Report:

Test Date / Time: 10/24/2023 3:03:07 PM

Project: GP-Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-03</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 13.62 ft</b> <b>Total Depth: 23.62 ft</b> <b>Initial Depth to Water: 11.35 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 18.62 ft</b> <b>Estimated Total Volume Pumped: 4 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.07 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 877800</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Clear, 80 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/24/2023 3:03 PM	00:00	6.61 pH	21.51 °C	2,076.4 µS/cm	0.26 mg/L	0.56 NTU	-35.2 mV	11.42 ft	100.00 ml/min
10/24/2023 3:08 PM	05:00	6.58 pH	21.16 °C	2,081.8 µS/cm	0.20 mg/L	0.44 NTU	-60.5 mV	11.42 ft	100.00 ml/min
10/24/2023 3:13 PM	10:00	6.57 pH	21.01 °C	2,083.6 µS/cm	0.16 mg/L	0.55 NTU	-24.9 mV	11.42 ft	100.00 ml/min
10/24/2023 3:18 PM	15:00	6.57 pH	20.95 °C	2,082.3 µS/cm	0.14 mg/L	1.34 NTU	-22.5 mV	11.42 ft	100.00 ml/min
10/24/2023 3:23 PM	20:00	6.57 pH	20.89 °C	2,077.8 µS/cm	0.12 mg/L	0.33 NTU	-21.8 mV	11.42 ft	100.00 ml/min
10/24/2023 3:28 PM	25:00	6.56 pH	20.77 °C	2,077.6 µS/cm	0.11 mg/L	0.31 NTU	-20.4 mV	11.42 ft	100.00 ml/min
10/24/2023 3:33 PM	30:00	6.54 pH	20.71 °C	2,073.8 µS/cm	0.10 mg/L	0.42 NTU	-19.4 mV	11.42 ft	100.00 ml/min
10/24/2023 3:38 PM	35:00	6.51 pH	20.62 °C	2,075.1 µS/cm	0.10 mg/L	0.48 NTU	-14.4 mV	11.42 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-03	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/24/2023 10:15:32 AM

Project: GP-Plant Hammond

Operator Name: Hudson Kennedy

<b>Location Name: PT-04</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 24.07 ft</b> <b>Total Depth: 34.07 ft</b> <b>Initial Depth to Water: 14.24 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 29.07 ft</b> <b>Estimated Total Volume Pumped: 3.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.13 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850735</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Sunny, 55 Degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
10/24/2023 10:15 AM	00:00	6.83 pH	19.97 °C	2,567.0 µS/cm	0.45 mg/L	2.82 NTU	-61.0 mV	14.37 ft	100.00 ml/min
10/24/2023 10:20 AM	05:00	6.84 pH	20.03 °C	2,559.9 µS/cm	0.37 mg/L	1.63 NTU	-84.1 mV	14.37 ft	100.00 ml/min
10/24/2023 10:25 AM	10:00	6.86 pH	20.63 °C	2,528.0 µS/cm	0.28 mg/L	1.85 NTU	-73.8 mV	14.37 ft	100.00 ml/min
10/24/2023 10:30 AM	15:00	6.85 pH	20.79 °C	2,520.1 µS/cm	0.23 mg/L	0.69 NTU	-78.4 mV	14.37 ft	100.00 ml/min
10/24/2023 10:35 AM	20:00	6.84 pH	21.01 °C	2,496.7 µS/cm	0.21 mg/L	1.59 NTU	-83.1 mV	14.37 ft	100.00 ml/min
10/24/2023 10:40 AM	25:00	6.84 pH	21.19 °C	2,483.1 µS/cm	0.20 mg/L	1.70 NTU	-87.7 mV	14.37 ft	100.00 ml/min
10/24/2023 10:45 AM	30:00	6.84 pH	21.37 °C	2,472.2 µS/cm	0.18 mg/L	0.79 NTU	-90.6 mV	14.37 ft	100.00 ml/min
10/24/2023 10:50 AM	35:00	6.83 pH	21.55 °C	2,466.5 µS/cm	0.18 mg/L	0.95 NTU	-92.0 mV	14.37 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-04	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/24/2023 11:40:07 AM

Project: GP-Plant Hammond

Operator Name: Hudson Kennedy

<b>Location Name: PT-05</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.39 ft</b> <b>Total Depth: 35.39 ft</b> <b>Initial Depth to Water: 14.71 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 30.39 ft</b> <b>Estimated Total Volume Pumped: 23.5 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.03 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850735</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Sunny, 60 Degrees F

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 5	
10/24/2023 11:40 AM	00:00	6.77 pH	21.82 °C	2,927.6 µS/cm	0.36 mg/L	59.00 NTU	-112.1 mV	14.73 ft	100.00 ml/min
10/24/2023 11:45 AM	05:00	6.76 pH	21.77 °C	2,993.0 µS/cm	0.28 mg/L	52.30 NTU	-111.6 mV	14.74 ft	100.00 ml/min
10/24/2023 11:50 AM	10:00	6.76 pH	21.73 °C	2,995.1 µS/cm	0.21 mg/L	58.30 NTU	-113.0 mV	14.74 ft	100.00 ml/min
10/24/2023 11:55 AM	15:00	6.76 pH	21.84 °C	2,979.3 µS/cm	0.19 mg/L	56.90 NTU	-112.2 mV	14.74 ft	100.00 ml/min
10/24/2023 12:00 PM	20:00	6.75 pH	21.86 °C	2,974.6 µS/cm	0.17 mg/L	59.70 NTU	-148.1 mV	14.74 ft	100.00 ml/min
10/24/2023 12:05 PM	25:00	6.74 pH	22.00 °C	3,148.4 µS/cm	0.15 mg/L	56.00 NTU	-98.8 mV	14.74 ft	100.00 ml/min
10/24/2023 12:10 PM	30:00	6.74 pH	22.09 °C	3,218.6 µS/cm	0.13 mg/L	55.50 NTU	-91.8 mV	14.74 ft	100.00 ml/min
10/24/2023 12:15 PM	35:00	6.74 pH	22.13 °C	3,207.8 µS/cm	0.13 mg/L	50.10 NTU	-123.4 mV	14.74 ft	100.00 ml/min
10/24/2023 12:20 PM	40:00	6.74 pH	22.26 °C	3,229.0 µS/cm	0.13 mg/L	48.60 NTU	-88.5 mV	14.74 ft	100.00 ml/min
10/24/2023 12:25 PM	45:00	6.74 pH	22.33 °C	3,200.1 µS/cm	0.13 mg/L	42.60 NTU	-85.8 mV	14.74 ft	100.00 ml/min
10/24/2023 12:30 PM	50:00	6.74 pH	22.31 °C	3,193.2 µS/cm	0.13 mg/L	41.20 NTU	-85.2 mV	14.74 ft	100.00 ml/min
10/24/2023 12:35 PM	55:00	6.74 pH	22.30 °C	3,214.3 µS/cm	0.12 mg/L	37.60 NTU	-83.6 mV	14.74 ft	100.00 ml/min
10/24/2023 12:40 PM	01:00:00	6.74 pH	22.29 °C	3,175.5 µS/cm	0.12 mg/L	35.50 NTU	-81.4 mV	14.74 ft	100.00 ml/min

10/24/2023 12:45 PM	01:05:00	6.74 pH	22.39 °C	3,142.6 µS/cm	0.12 mg/L	32.40 NTU	-80.2 mV	14.74 ft	100.00 ml/min
10/24/2023 12:50 PM	01:10:00	6.74 pH	22.59 °C	3,171.2 µS/cm	0.13 mg/L	34.70 NTU	-76.8 mV	14.74 ft	100.00 ml/min
10/24/2023 12:55 PM	01:15:00	6.74 pH	22.71 °C	3,139.5 µS/cm	0.12 mg/L	24.40 NTU	-72.6 mV	14.74 ft	100.00 ml/min
10/24/2023 1:00 PM	01:20:00	6.74 pH	22.48 °C	3,131.1 µS/cm	0.11 mg/L	21.70 NTU	-72.2 mV	14.74 ft	100.00 ml/min
10/24/2023 1:05 PM	01:25:00	6.75 pH	22.38 °C	3,182.4 µS/cm	0.10 mg/L	26.10 NTU	-71.6 mV	14.74 ft	100.00 ml/min
10/24/2023 1:10 PM	01:30:00	6.74 pH	22.48 °C	3,240.6 µS/cm	0.10 mg/L	23.00 NTU	-70.6 mV	14.74 ft	100.00 ml/min
10/24/2023 1:15 PM	01:35:00	6.75 pH	22.57 °C	3,243.9 µS/cm	0.09 mg/L	22.10 NTU	-97.7 mV	14.74 ft	100.00 ml/min
10/24/2023 1:20 PM	01:40:00	6.75 pH	22.52 °C	3,247.5 µS/cm	0.09 mg/L	23.20 NTU	-68.4 mV	14.74 ft	100.00 ml/min
10/24/2023 1:25 PM	01:45:00	6.75 pH	22.58 °C	3,221.8 µS/cm	0.08 mg/L	23.80 NTU	-67.2 mV	14.74 ft	100.00 ml/min
10/24/2023 1:30 PM	01:50:00	6.75 pH	22.40 °C	3,219.5 µS/cm	0.08 mg/L	25.00 NTU	-65.0 mV	14.74 ft	100.00 ml/min
10/24/2023 1:35 PM	01:55:00	6.76 pH	22.49 °C	3,174.8 µS/cm	0.07 mg/L	22.00 NTU	-86.4 mV	14.74 ft	100.00 ml/min
10/24/2023 1:40 PM	02:00:00	6.77 pH	22.45 °C	3,292.6 µS/cm	0.10 mg/L	21.10 NTU	-54.9 mV	14.74 ft	100.00 ml/min
10/24/2023 1:45 PM	02:05:00	6.77 pH	22.48 °C	3,292.2 µS/cm	0.19 mg/L	20.10 NTU	-48.3 mV	14.74 ft	100.00 ml/min
10/24/2023 1:50 PM	02:10:00	6.77 pH	22.56 °C	3,302.9 µS/cm	0.16 mg/L	17.50 NTU	-69.5 mV	14.74 ft	100.00 ml/min
10/24/2023 1:55 PM	02:15:00	6.77 pH	22.36 °C	3,367.2 µS/cm	0.11 mg/L	15.60 NTU	-46.8 mV	14.74 ft	100.00 ml/min
10/24/2023 2:00 PM	02:20:00	6.77 pH	22.47 °C	3,293.7 µS/cm	0.13 mg/L	15.10 NTU	-45.6 mV	14.74 ft	100.00 ml/min
10/24/2023 2:05 PM	02:25:00	6.77 pH	22.88 °C	3,301.2 µS/cm	0.10 mg/L	13.90 NTU	-44.8 mV	14.74 ft	100.00 ml/min
10/24/2023 2:10 PM	02:30:00	6.77 pH	22.44 °C	3,312.2 µS/cm	0.08 mg/L	13.20 NTU	-45.3 mV	14.74 ft	100.00 ml/min
10/24/2023 2:15 PM	02:35:00	6.78 pH	21.84 °C	3,314.4 µS/cm	0.08 mg/L	11.70 NTU	-45.1 mV	14.74 ft	100.00 ml/min
10/24/2023 2:20 PM	02:40:00	6.79 pH	22.58 °C	3,381.2 µS/cm	0.20 mg/L	11.40 NTU	-42.7 mV	14.74 ft	100.00 ml/min
10/24/2023 2:25 PM	02:45:00	6.78 pH	22.69 °C	3,364.8 µS/cm	0.22 mg/L	11.20 NTU	-40.7 mV	14.74 ft	100.00 ml/min
10/24/2023 2:30 PM	02:50:00	6.79 pH	22.94 °C	3,374.3 µS/cm	0.22 mg/L	8.64 NTU	-39.6 mV	14.74 ft	100.00 ml/min
10/24/2023 2:35 PM	02:55:00	6.79 pH	22.93 °C	3,361.7 µS/cm	0.23 mg/L	8.56 NTU	-39.2 mV	14.74 ft	100.00 ml/min
10/24/2023 2:40 PM	03:00:00	6.79 pH	22.83 °C	3,411.3 µS/cm	0.23 mg/L	11.40 NTU	-38.5 mV	14.74 ft	100.00 ml/min
10/24/2023 2:45 PM	03:05:00	6.78 pH	23.07 °C	3,414.4 µS/cm	0.22 mg/L	7.97 NTU	-37.2 mV	14.74 ft	100.00 ml/min
10/24/2023 2:50 PM	03:10:00	6.78 pH	22.58 °C	3,363.5 µS/cm	0.23 mg/L	7.69 NTU	-38.3 mV	14.74 ft	100.00 ml/min
10/24/2023 2:55 PM	03:15:00	6.79 pH	22.48 °C	3,357.1 µS/cm	0.17 mg/L	5.99 NTU	-58.0 mV	14.74 ft	100.00 ml/min
10/24/2023 3:00 PM	03:20:00	6.79 pH	22.98 °C	3,346.5 µS/cm	0.09 mg/L	6.47 NTU	-38.5 mV	14.74 ft	100.00 ml/min
10/24/2023 3:05 PM	03:25:00	6.79 pH	23.07 °C	3,330.3 µS/cm	0.07 mg/L	6.30 NTU	-38.9 mV	14.74 ft	100.00 ml/min

10/24/2023 3:10 PM	03:30:00	6.79 pH	23.16 °C	3,433.3 µS/cm	0.12 mg/L	5.81 NTU	-55.5 mV	14.74 ft	100.00 ml/min
10/24/2023 3:15 PM	03:35:00	6.79 pH	22.94 °C	3,344.0 µS/cm	0.09 mg/L	5.64 NTU	-37.3 mV	14.74 ft	100.00 ml/min
10/24/2023 3:20 PM	03:40:00	6.79 pH	22.94 °C	3,414.2 µS/cm	0.09 mg/L	5.31 NTU	-35.7 mV	14.74 ft	100.00 ml/min
10/24/2023 3:25 PM	03:45:00	6.79 pH	22.94 °C	3,374.9 µS/cm	0.15 mg/L	5.29 NTU	-35.7 mV	14.74 ft	100.00 ml/min
10/24/2023 3:30 PM	03:50:00	6.80 pH	23.02 °C	3,396.9 µS/cm	0.16 mg/L	4.75 NTU	-35.2 mV	14.74 ft	100.00 ml/min
10/24/2023 3:35 PM	03:55:00	6.80 pH	22.95 °C	3,405.3 µS/cm	0.18 mg/L	4.86 NTU	-34.6 mV	14.74 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-05	Grab.

# Low-Flow Test Report:

Test Date / Time: 10/24/2023 10:57:55 AM

Project: GP-Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-06</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.22 ft</b> <b>Total Depth: 35.22 ft</b> <b>Initial Depth to Water: 14.51 ft</b>	<b>Pump Type: Peri</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 30.22 ft</b> <b>Estimated Total Volume Pumped: 8 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.04 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 877800</b>
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## Test Notes:

Two bottles: Metals and Alk.

## Weather Conditions:

Cloudy, 60 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/24/2023 10:57 AM	00:00	6.73 pH	20.80 °C	2,215.7 µS/cm	1.66 mg/L	1.04 NTU	-8.9 mV	14.55 ft	100.00 ml/min
10/24/2023 11:02 AM	05:00	6.73 pH	20.91 °C	2,213.5 µS/cm	1.64 mg/L	1.00 NTU	-8.0 mV	14.55 ft	100.00 ml/min
10/24/2023 11:07 AM	10:00	6.73 pH	21.02 °C	2,200.4 µS/cm	0.82 mg/L	1.69 NTU	-8.7 mV	14.55 ft	100.00 ml/min
10/24/2023 11:12 AM	15:00	6.73 pH	21.11 °C	2,192.0 µS/cm	1.70 mg/L	1.10 NTU	-9.1 mV	14.55 ft	100.00 ml/min
10/24/2023 11:17 AM	20:00	6.73 pH	21.10 °C	2,193.1 µS/cm	1.58 mg/L	1.21 NTU	-8.6 mV	14.55 ft	100.00 ml/min
10/24/2023 11:22 AM	25:00	6.73 pH	21.20 °C	2,178.0 µS/cm	2.06 mg/L	1.37 NTU	-8.4 mV	14.55 ft	100.00 ml/min
10/24/2023 11:27 AM	30:00	6.74 pH	21.15 °C	2,186.5 µS/cm	1.48 mg/L	1.17 NTU	-8.0 mV	14.55 ft	100.00 ml/min
10/24/2023 11:32 AM	35:00	6.73 pH	21.15 °C	2,158.1 µS/cm	1.15 mg/L	1.25 NTU	-8.7 mV	14.55 ft	100.00 ml/min
10/24/2023 11:37 AM	40:00	6.74 pH	21.06 °C	2,169.8 µS/cm	1.21 mg/L	0.93 NTU	-8.7 mV	14.55 ft	100.00 ml/min
10/24/2023 11:42 AM	45:00	6.74 pH	20.95 °C	2,261.7 µS/cm	1.36 mg/L	1.81 NTU	-8.6 mV	14.55 ft	100.00 ml/min
10/24/2023 11:47 AM	50:00	6.74 pH	21.15 °C	2,192.3 µS/cm	0.91 mg/L	1.68 NTU	-9.1 mV	14.55 ft	100.00 ml/min
10/24/2023 11:52 AM	55:00	6.74 pH	21.20 °C	2,169.8 µS/cm	1.24 mg/L	3.97 NTU	-9.7 mV	14.55 ft	100.00 ml/min
10/24/2023 11:57 AM	01:00:00	6.74 pH	21.31 °C	2,186.6 µS/cm	0.79 mg/L	3.63 NTU	-7.9 mV	14.55 ft	100.00 ml/min

10/24/2023 12:02 PM	01:05:00	6.74 pH	21.38 °C	2,186.9 µS/cm	1.06 mg/L	2.92 NTU	-7.9 mV	14.55 ft	100.00 ml/min
10/24/2023 12:07 PM	01:10:00	6.74 pH	21.40 °C	2,190.9 µS/cm	0.95 mg/L	2.66 NTU	-8.1 mV	14.55 ft	100.00 ml/min
10/24/2023 12:12 PM	01:15:00	6.74 pH	21.56 °C	2,159.5 µS/cm	1.08 mg/L	2.75 NTU	-5.9 mV	14.55 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-06	Grab.

November 2023



# Low-Flow Test Report:

Test Date / Time: 11/21/2023 12:44:35 PM

Project: Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-01</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 10.20 ft</b> <b>Total Depth: 20.20 ft</b> <b>Initial Depth to Water: 13.01 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 15.20 ft</b> <b>Estimated Total Volume Pumped: 6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.20 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850735</b>
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## Test Notes:

5 bottles: App. III & IV (No RADs) and Major Ions.

## Weather Conditions:

Rain, 60 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
11/21/2023 12:44 PM	00:00	6.89 pH	19.17 °C	4,595.9 µS/cm	0.22 mg/L	3.28 NTU	-148.9 mV	13.21 ft	100.00 ml/min
11/21/2023 12:49 PM	05:00	6.87 pH	19.21 °C	4,523.0 µS/cm	0.29 mg/L	4.01 NTU	-130.5 mV	13.21 ft	100.00 ml/min
11/21/2023 12:54 PM	10:00	6.86 pH	19.20 °C	4,509.8 µS/cm	0.25 mg/L	3.09 NTU	-126.0 mV	13.21 ft	100.00 ml/min
11/21/2023 12:59 PM	15:00	6.85 pH	19.20 °C	4,449.5 µS/cm	0.19 mg/L	2.90 NTU	-121.8 mV	13.21 ft	100.00 ml/min
11/21/2023 1:04 PM	20:00	6.84 pH	19.19 °C	4,395.5 µS/cm	0.22 mg/L	2.29 NTU	-118.2 mV	13.21 ft	100.00 ml/min
11/21/2023 1:09 PM	25:00	6.83 pH	19.19 °C	4,343.7 µS/cm	0.20 mg/L	2.04 NTU	-115.2 mV	13.21 ft	100.00 ml/min
11/21/2023 1:14 PM	30:00	6.83 pH	19.19 °C	4,318.1 µS/cm	0.13 mg/L	2.26 NTU	-111.5 mV	13.21 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 11/21/2023 1:57:39 PM

Project: Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-02</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 10.30 ft</b> <b>Total Depth: 20.30 ft</b> <b>Initial Depth to Water: 12.32 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 15.30 ft</b> <b>Estimated Total Volume Pumped: 6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 1.41 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850735</b>
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## Test Notes:

5 bottles: App. III & IV (No RADs) and Major Ions.

## Weather Conditions:

Rain, 60 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
11/21/2023 1:57 PM	00:00	6.49 pH	19.39 °C	3,143.3 µS/cm	2.69 mg/L	6.54 NTU	-98.4 mV	13.73 ft	100.00 ml/min
11/21/2023 2:02 PM	05:00	6.63 pH	19.41 °C	3,395.7 µS/cm	2.44 mg/L	6.33 NTU	-121.8 mV	13.73 ft	100.00 ml/min
11/21/2023 2:07 PM	10:00	6.63 pH	19.41 °C	3,331.7 µS/cm	1.70 mg/L	7.79 NTU	-121.2 mV	13.73 ft	100.00 ml/min
11/21/2023 2:12 PM	15:00	6.69 pH	19.34 °C	3,440.0 µS/cm	1.46 mg/L	9.30 NTU	-124.9 mV	13.73 ft	100.00 ml/min
11/21/2023 2:17 PM	20:00	6.70 pH	19.32 °C	3,435.0 µS/cm	1.16 mg/L	8.38 NTU	-123.4 mV	13.73 ft	100.00 ml/min
11/21/2023 2:22 PM	25:00	6.69 pH	19.37 °C	3,423.1 µS/cm	0.97 mg/L	5.73 NTU	-122.8 mV	13.73 ft	100.00 ml/min
11/21/2023 2:27 PM	30:00	6.70 pH	19.41 °C	3,496.1 µS/cm	0.66 mg/L	4.85 NTU	-124.0 mV	13.73 ft	100.00 ml/min
11/21/2023 2:32 PM	35:00	6.72 pH	19.41 °C	3,528.5 µS/cm	0.75 mg/L	6.22 NTU	-124.6 mV	13.73 ft	100.00 ml/min
11/21/2023 2:37 PM	40:00	6.72 pH	19.37 °C	3,534.0 µS/cm	0.25 mg/L	4.21 NTU	-123.7 mV	13.73 ft	100.00 ml/min
11/21/2023 2:42 PM	45:00	6.74 pH	19.33 °C	3,573.9 µS/cm	0.21 mg/L	3.21 NTU	-122.1 mV	13.73 ft	100.00 ml/min
11/21/2023 2:47 PM	50:00	6.76 pH	19.30 °C	3,659.6 µS/cm	0.19 mg/L	2.45 NTU	-121.4 mV	13.73 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-02	Grab.

Created using VuSitu from In-Situ, Inc.

# Low-Flow Test Report:

Test Date / Time: 11/21/2023 10:22:17 AM

Project: Plant Hammond

Operator Name: Zain Webb

<b>Location Name: PT-03</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 12.30 ft</b> <b>Total Depth: 22.30 ft</b> <b>Initial Depth to Water: 12.40 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 17.30 ft</b> <b>Estimated Total Volume Pumped: 6 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.02 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 850735</b>
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## Test Notes:

5 bottles: App. III & IV (No RADs) and Major Ions.

## Weather Conditions:

Rain, 60 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
11/21/2023 10:22 AM	00:00	5.28 pH	18.48 °C	2,121.0 µS/cm	3.51 mg/L	3.27 NTU	165.2 mV	12.42 ft	100.00 ml/min
11/21/2023 10:27 AM	05:00	5.30 pH	18.57 °C	2,117.5 µS/cm	3.19 mg/L	2.82 NTU	140.0 mV	12.42 ft	100.00 ml/min
11/21/2023 10:32 AM	10:00	5.31 pH	18.61 °C	2,112.6 µS/cm	2.43 mg/L	2.61 NTU	129.6 mV	12.42 ft	100.00 ml/min
11/21/2023 10:37 AM	15:00	5.32 pH	18.61 °C	2,105.9 µS/cm	1.92 mg/L	3.41 NTU	122.1 mV	12.42 ft	100.00 ml/min
11/21/2023 10:42 AM	20:00	5.32 pH	18.62 °C	2,115.1 µS/cm	2.39 mg/L	2.51 NTU	117.7 mV	12.42 ft	100.00 ml/min
11/21/2023 10:47 AM	25:00	5.32 pH	18.62 °C	2,112.8 µS/cm	2.12 mg/L	2.98 NTU	113.6 mV	12.42 ft	100.00 ml/min
11/21/2023 10:52 AM	30:00	5.33 pH	18.64 °C	2,098.6 µS/cm	1.78 mg/L	2.78 NTU	109.9 mV	12.42 ft	100.00 ml/min
11/21/2023 10:57 AM	35:00	5.33 pH	18.65 °C	2,103.0 µS/cm	1.81 mg/L	2.41 NTU	102.6 mV	12.42 ft	100.00 ml/min
11/21/2023 11:02 AM	40:00	5.33 pH	18.65 °C	2,102.8 µS/cm	2.04 mg/L	3.46 NTU	99.0 mV	12.42 ft	100.00 ml/min
11/21/2023 11:07 AM	45:00	5.33 pH	18.65 °C	2,096.9 µS/cm	0.28 mg/L	2.56 NTU	94.8 mV	12.42 ft	100.00 ml/min
11/21/2023 11:12 AM	50:00	5.34 pH	18.67 °C	2,104.9 µS/cm	0.26 mg/L	3.59 NTU	89.5 mV	12.42 ft	100.00 ml/min
11/21/2023 11:17 AM	55:00	5.33 pH	18.70 °C	2,105.1 µS/cm	0.34 mg/L	1.64 NTU	85.3 mV	12.42 ft	100.00 ml/min

**Samples**

Sample ID:	Description:
HAM-PT-03	Grab.

# Low-Flow Test Report:

Test Date / Time: 11/21/2023 2:39:33 PM

Project: Plant Hammond

Operator Name: Hudson Kennedy

<b>Location Name: PT-04</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 24.10 ft</b> <b>Total Depth: 34.10 ft</b> <b>Initial Depth to Water: 14.53 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 16.00 ft</b> <b>Estimated Total Volume Pumped: 3 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 877800</b>
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## Test Notes:

5 bottles: App. III & IV (No RADs) and Major Ions.

## Weather Conditions:

Rainy, 67 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	
11/21/2023 2:39 PM	00:00	7.15 pH	20.07 °C	1,846.4 µS/cm	0.82 mg/L	6.30 NTU	-36.1 mV	14.53 ft	100.00 ml/min
11/21/2023 2:44 PM	05:00	7.14 pH	20.04 °C	1,850.4 µS/cm	0.59 mg/L	4.83 NTU	-51.5 mV	14.53 ft	100.00 ml/min
11/21/2023 2:49 PM	10:00	7.10 pH	20.00 °C	1,881.7 µS/cm	0.28 mg/L	5.63 NTU	-57.0 mV	14.53 ft	100.00 ml/min
11/21/2023 2:54 PM	15:00	6.94 pH	19.95 °C	1,888.7 µS/cm	0.23 mg/L	3.20 NTU	-103.0 mV	14.53 ft	100.00 ml/min
11/21/2023 2:59 PM	20:00	6.87 pH	19.86 °C	1,869.4 µS/cm	0.21 mg/L	2.99 NTU	-127.0 mV	14.53 ft	100.00 ml/min
11/21/2023 3:04 PM	25:00	6.87 pH	19.86 °C	1,866.2 µS/cm	0.20 mg/L	3.79 NTU	-131.6 mV	14.53 ft	100.00 ml/min
11/21/2023 3:09 PM	30:00	6.87 pH	19.87 °C	1,863.1 µS/cm	0.19 mg/L	4.05 NTU	-132.1 mV	14.53 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-04	Grab.
HAM-AP2-FD-01	Grab.

# Low-Flow Test Report:

Test Date / Time: 11/21/2023 9:42:42 AM

Project: Plant Hammond

Operator Name: Hudson Kennedy

<b>Location Name: PT-05</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.40 ft</b> <b>Total Depth: 35.40 ft</b> <b>Initial Depth to Water: 14.82 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 16.00 ft</b> <b>Estimated Total Volume Pumped: 21 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.06 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 877800</b>
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## Test Notes:

5 bottles: App. III & IV (No RADs) and Major Ions.

## Weather Conditions:

Rainy, 60 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
11/21/2023 9:42 AM	00:00	6.98 pH	19.24 °C	1,787.1 µS/cm	2.35 mg/L	5.19 NTU	-101.8 mV	14.87 ft	100.00 ml/min
11/21/2023 9:47 AM	05:00	6.93 pH	19.61 °C	1,778.2 µS/cm	1.92 mg/L	7.43 NTU	-163.9 mV	14.88 ft	100.00 ml/min
11/21/2023 9:52 AM	10:00	6.89 pH	19.64 °C	1,807.2 µS/cm	1.68 mg/L	6.89 NTU	-117.7 mV	14.88 ft	100.00 ml/min
11/21/2023 9:57 AM	15:00	6.86 pH	19.59 °C	1,932.1 µS/cm	1.71 mg/L	9.66 NTU	-109.5 mV	14.88 ft	100.00 ml/min
11/21/2023 10:02 AM	20:00	6.85 pH	19.54 °C	1,997.3 µS/cm	1.51 mg/L	12.50 NTU	-151.9 mV	14.88 ft	100.00 ml/min
11/21/2023 10:07 AM	25:00	6.87 pH	19.43 °C	2,060.1 µS/cm	1.40 mg/L	17.10 NTU	-150.7 mV	14.88 ft	100.00 ml/min
11/21/2023 10:12 AM	30:00	6.91 pH	19.37 °C	2,349.6 µS/cm	0.71 mg/L	50.70 NTU	-66.4 mV	14.88 ft	100.00 ml/min
11/21/2023 10:17 AM	35:00	6.86 pH	19.27 °C	2,401.0 µS/cm	0.19 mg/L	84.30 NTU	-145.1 mV	14.88 ft	100.00 ml/min
11/21/2023 10:22 AM	40:00	6.84 pH	19.25 °C	2,430.8 µS/cm	0.19 mg/L	96.40 NTU	-95.6 mV	14.88 ft	100.00 ml/min
11/21/2023 10:27 AM	45:00	6.82 pH	19.21 °C	2,460.4 µS/cm	0.18 mg/L	93.40 NTU	-145.6 mV	14.88 ft	100.00 ml/min
11/21/2023 10:28 AM	45:42	6.81 pH	19.21 °C	2,473.0 µS/cm	0.18 mg/L	--	-92.7 mV	14.88 ft	100.00 ml/min
11/21/2023 10:33 AM	50:42	6.78 pH	19.23 °C	2,592.8 µS/cm	0.17 mg/L	93.60 NTU	-91.6 mV	14.88 ft	100.00 ml/min
11/21/2023 10:35 AM	53:00	6.79 pH	19.24 °C	2,750.9 µS/cm	0.17 mg/L	--	-87.7 mV	14.88 ft	100.00 ml/min

11/21/2023 10:40 AM	58:00	6.82 pH	19.23 °C	2,868.3 µS/cm	0.17 mg/L	112.00 NTU	-77.9 mV	14.88 ft	100.00 ml/min
11/21/2023 10:45 AM	01:03:00	6.85 pH	19.28 °C	2,929.1 µS/cm	0.16 mg/L	143.00 NTU	-117.7 mV	14.88 ft	100.00 ml/min
11/21/2023 10:50 AM	01:08:00	6.86 pH	19.28 °C	2,956.1 µS/cm	0.16 mg/L	172.00 NTU	-114.6 mV	14.88 ft	100.00 ml/min
11/21/2023 10:55 AM	01:13:00	6.86 pH	19.22 °C	2,959.3 µS/cm	0.16 mg/L	123.00 NTU	-111.6 mV	14.88 ft	100.00 ml/min
11/21/2023 11:00 AM	01:18:00	6.86 pH	19.19 °C	2,959.0 µS/cm	0.17 mg/L	131.00 NTU	-67.1 mV	14.88 ft	100.00 ml/min
11/21/2023 11:05 AM	01:23:00	6.86 pH	19.21 °C	2,959.3 µS/cm	0.18 mg/L	120.00 NTU	-108.4 mV	14.88 ft	100.00 ml/min
11/21/2023 11:10 AM	01:28:00	6.86 pH	19.24 °C	2,967.8 µS/cm	0.18 mg/L	110.00 NTU	-107.2 mV	14.88 ft	100.00 ml/min
11/21/2023 11:15 AM	01:33:00	6.86 pH	19.26 °C	2,996.3 µS/cm	0.19 mg/L	108.00 NTU	-106.9 mV	14.88 ft	100.00 ml/min
11/21/2023 11:20 AM	01:38:00	6.86 pH	19.28 °C	2,999.8 µS/cm	0.18 mg/L	109.00 NTU	-65.7 mV	14.88 ft	100.00 ml/min
11/21/2023 11:25 AM	01:43:00	6.87 pH	19.32 °C	3,016.8 µS/cm	0.17 mg/L	87.50 NTU	-65.9 mV	14.88 ft	100.00 ml/min
11/21/2023 11:30 AM	01:48:00	6.88 pH	19.33 °C	3,033.0 µS/cm	0.17 mg/L	79.50 NTU	-103.9 mV	14.88 ft	100.00 ml/min
11/21/2023 11:35 AM	01:53:00	6.88 pH	19.33 °C	3,026.0 µS/cm	0.16 mg/L	78.10 NTU	-61.2 mV	14.88 ft	100.00 ml/min
11/21/2023 11:40 AM	01:58:00	6.88 pH	19.34 °C	3,024.1 µS/cm	0.16 mg/L	73.90 NTU	-60.0 mV	14.88 ft	100.00 ml/min
11/21/2023 11:45 AM	02:03:00	6.88 pH	19.35 °C	3,016.2 µS/cm	0.16 mg/L	58.40 NTU	-99.6 mV	14.88 ft	100.00 ml/min
11/21/2023 11:50 AM	02:08:00	6.89 pH	19.35 °C	3,019.3 µS/cm	0.16 mg/L	48.00 NTU	-98.6 mV	14.88 ft	100.00 ml/min
11/21/2023 11:55 AM	02:13:00	6.89 pH	19.35 °C	3,018.6 µS/cm	0.16 mg/L	54.20 NTU	-58.4 mV	14.88 ft	100.00 ml/min
11/21/2023 12:00 PM	02:18:00	6.89 pH	19.33 °C	3,021.5 µS/cm	0.16 mg/L	51.30 NTU	-97.1 mV	14.88 ft	100.00 ml/min
11/21/2023 12:05 PM	02:23:00	6.89 pH	19.33 °C	3,030.5 µS/cm	0.16 mg/L	38.50 NTU	-57.2 mV	14.88 ft	100.00 ml/min
11/21/2023 12:10 PM	02:28:00	6.89 pH	19.34 °C	3,033.3 µS/cm	0.16 mg/L	30.30 NTU	-55.4 mV	14.88 ft	100.00 ml/min
11/21/2023 12:15 PM	02:33:00	6.90 pH	19.35 °C	3,027.2 µS/cm	0.16 mg/L	28.00 NTU	-91.4 mV	14.88 ft	100.00 ml/min
11/21/2023 12:17 PM	02:34:35	6.90 pH	19.36 °C	3,028.4 µS/cm	0.16 mg/L	--	-53.9 mV	14.88 ft	100.00 ml/min
11/21/2023 12:22 PM	02:39:35	6.90 pH	19.37 °C	3,037.7 µS/cm	0.16 mg/L	27.60 NTU	-88.9 mV	14.88 ft	100.00 ml/min
11/21/2023 12:27 PM	02:44:35	6.90 pH	19.38 °C	3,035.7 µS/cm	0.16 mg/L	21.30 NTU	-51.4 mV	14.88 ft	100.00 ml/min
11/21/2023 12:32 PM	02:49:35	6.90 pH	19.36 °C	3,039.9 µS/cm	0.16 mg/L	25.10 NTU	-86.4 mV	14.88 ft	100.00 ml/min
11/21/2023 12:37 PM	02:54:35	6.90 pH	19.37 °C	3,038.2 µS/cm	0.16 mg/L	18.20 NTU	-49.4 mV	14.88 ft	100.00 ml/min
11/21/2023 12:42 PM	02:59:35	6.90 pH	19.37 °C	3,040.2 µS/cm	0.16 mg/L	17.00 NTU	-85.1 mV	14.88 ft	100.00 ml/min
11/21/2023 12:47 PM	03:04:35	6.90 pH	19.42 °C	3,035.7 µS/cm	0.16 mg/L	13.90 NTU	-47.9 mV	14.88 ft	100.00 ml/min
11/21/2023 12:52 PM	03:09:35	6.91 pH	19.42 °C	3,034.8 µS/cm	0.16 mg/L	16.10 NTU	-82.3 mV	14.88 ft	100.00 ml/min
11/21/2023 12:54 PM	03:11:24	6.90 pH	19.42 °C	3,032.7 µS/cm	0.16 mg/L	--	-47.5 mV	14.88 ft	100.00 ml/min



11/21/2023 12:59 PM	03:16:24	6.90 pH	19.43 °C	3,033.3 µS/cm	0.16 mg/L	9.64 NTU	-79.6 mV	14.88 ft	100.00 ml/min
11/21/2023 1:04 PM	03:21:24	6.90 pH	19.42 °C	3,029.7 µS/cm	0.16 mg/L	6.44 NTU	-44.4 mV	14.88 ft	100.00 ml/min
11/21/2023 1:09 PM	03:26:24	6.90 pH	19.42 °C	3,027.5 µS/cm	0.16 mg/L	7.54 NTU	-44.3 mV	14.88 ft	100.00 ml/min
11/21/2023 1:14 PM	03:31:24	6.90 pH	19.42 °C	3,040.4 µS/cm	0.16 mg/L	4.54 NTU	-44.0 mV	14.88 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-05	Grab.

# Low-Flow Test Report:

Test Date / Time: 11/21/2023 8:33:10 AM

Project: Plant Hammond

Operator Name: Hudson Kennedy

<b>Location Name: PT-06</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 25.80 ft</b> <b>Total Depth: 35.80 ft</b> <b>Initial Depth to Water: 14.67 ft</b>	<b>Pump Type: Peristaltic</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 20.80 ft</b> <b>Estimated Total Volume Pumped:</b> <b>3 liter</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 100 ml/min</b> <b>Final Draw Down: 0.01 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 877800</b>
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## Test Notes:

5 bottles: App. III & IV (No RADs) and Major Ions.

## Weather Conditions:

Rainy, 60 degrees F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
11/21/2023 8:33 AM	00:00	6.51 pH	19.28 °C	1,642.8 µS/cm	0.42 mg/L	2.01 NTU	-101.4 mV	14.69 ft	100.00 ml/min
11/21/2023 8:38 AM	05:00	6.53 pH	19.06 °C	1,609.8 µS/cm	0.44 mg/L	1.92 NTU	-124.0 mV	14.68 ft	100.00 ml/min
11/21/2023 8:43 AM	10:00	6.52 pH	19.02 °C	1,614.0 µS/cm	0.44 mg/L	2.32 NTU	-77.4 mV	14.68 ft	100.00 ml/min
11/21/2023 8:48 AM	15:00	6.52 pH	19.01 °C	1,613.6 µS/cm	0.38 mg/L	2.71 NTU	-75.4 mV	14.68 ft	100.00 ml/min
11/21/2023 8:53 AM	20:00	6.52 pH	19.02 °C	1,618.0 µS/cm	0.37 mg/L	2.89 NTU	-74.0 mV	14.68 ft	100.00 ml/min
11/21/2023 8:58 AM	25:00	6.51 pH	19.01 °C	1,636.9 µS/cm	0.35 mg/L	2.00 NTU	-71.6 mV	14.68 ft	100.00 ml/min
11/21/2023 9:03 AM	30:00	6.48 pH	19.02 °C	1,661.9 µS/cm	0.32 mg/L	2.57 NTU	-73.4 mV	14.68 ft	100.00 ml/min

## Samples

Sample ID:	Description:
HAM-PT-06	Grab.

# Calibration Reports

July 2023

EQUIPMENT CALIBRATION LOG

Field Technician: Amanda Neely

Date: 2/13/23

Time (start): 0850

Time (finish): 0910

SmartTroll SN: 884187

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: 73-91, sunny

Facility and Unit: Piant+Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	25.72	4490	4122.4	4487.6	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)			4.00	4.02	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	25.7	7.00	7.35	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check			-	-	7.00	-	-	+/- 0.1 SU
pH (10)	21320202 12/23	25.5	10.00	10.3	10.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check			-	-	10.00	-	-	+/- 0.1 SU
ORP (mV)	21390144 11/23	24.72	228	215.4	227.7	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	101.11%	100.00%	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.20	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.71	0.81	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	11.30	9.99	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Neely

Date: 7/14/23

Time (start): 0730

Time (finish): 0745

smarTroll SN: 884187

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: 73-93°, Cloudy

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	27.25	4490	4508.8	4486.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)			4.00	4.03	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	27.01	7.00	7.36	6.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	-	-	7.00	-	-	+/- 0.1 SU	Yes No	
pH (10)	21320202 12/23	26.31	10.00	9.73	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	-	-	10.00	-	-	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	25.73	228	222.6	228.1	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	98.43%	100.54%	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.21	0.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.55	0.70	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	11.53	10.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Alana Welly

Date: 7/17/23

Time (start): 0855

Time (finish): 0915

SmartTroll SN: 884187

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: 66-93°, sunny

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	25.52	4490	4440.8	4492.1	+/- 5%	<input checked="" type="radio"/> Yes <input type="radio"/> No	
pH (4)			4.00	4.05	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes <input type="radio"/> No	
pH (7)	2210893 11/23	25.45	7.00	7.32	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			-	-	7.00	-	-	+/- 0.1 SU
pH (10)	21320202 12/23	24.03	10.00	9.03	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check			-	-	10.00	-	-	+/- 0.1 SU
ORP (mV)	21390144 11/23	23.02	228	227.0	228.0	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100	100.421	100.25	+/- 6% saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0	0.14	0.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.00	0.70	0.95	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.00	11.51	10.01	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: Mana Neely

Date: 7/18/23

Time (start): 0755

Time (finish): 0810

smarTroll SN: 884187

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: 67-93° sunny

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	23.95	4490	4490.7	4490.8	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)			4.00	4.04	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	23.68	7.00	7.35	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check			-	-	7.00	-	-	+/- 0.1 SU
pH (10)	2132002 12/23	23.28	10.00	9.48	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check			-	-	10.00	-	-	+/- 0.1 SU
ORP (mV)	21390144 11/23	22.72	228	226.3	228.1	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	100.00%	100.00%	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.22	0.06	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.40	0.94	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	11.38	9.90	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	



EQUIPMENT CALIBRATION LOG

Field Technician: Alana Kelly

Date: 7/19/23

Time (start): 0745

Time (finish): 0800

smarTroll SN: 684187

Turbidity Meter Type: LaMotte 2020we

SN: 7009-1416

Weather Conditions: 68-93° cloudy

Facility and Unit: Plant Hammond Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	24.77	4490	4479.0	4485.6	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)			4.00	4.03	3.99	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	-	-	4.00	-	-	+/- 0.1 SU	Yes No	
pH (7)	22145893 11/23	24.65	7.00	7.38	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check			-	-	7.00	-	-	+/- 0.1 SU
pH (10)	21320702 12/23	24.27	10.00	9.64	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check			-	-	10.00	-	-	+/- 0.1 SU
ORP (mV)	21390144 11/23	23.89	228	222.5	228.1	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	98.7	100.017	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	0.44	0.00	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	0.69	0.94	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	11.08	9.99	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

August 2023

EQUIPMENT CALIBRATION LOG

Field Technician: C-CAIN Date: 8/9/23 Time (start): 0815 Time (finish): 0845  
 smarTroll SN: 883553 Turbidity Meter Type: Laette 2001 SN: 421-7623  
 Weather Conditions: Fog 68 Facility and Unit: Plant Hammond Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	22.78	<del>457.8</del> 4490 457.8 4490/9/23	4573.5	4490	+/- 5 %	<input checked="" type="checkbox"/> Yes No	
pH (4)			4.0	4.07	4.0	+/- 0.1 SU	Yes No	
Mid-Day pH (4) check	// "	—	4.0	4.02	—	+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	23.43	7.0	7.05	7.0	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (7) check	// "	—	7.0	7.0	—	+/- 0.1 SU	Yes No	
pH (10)	22110130 8/23	23.75	10.0	10.05	10	+/- 0.1 SU	<input checked="" type="checkbox"/> Yes No	
Mid-Day pH (10) check	// "	—	10.0	10.03	—	+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/23	23.81	228	227.1	228	+/- 20mV	<input checked="" type="checkbox"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	95.23	100	+/- 6 % saturation	<input checked="" type="checkbox"/> Yes No	
Turbidity 0 NTU			0	0.00	0.00	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 1 NTU			1	1.43	1.13	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	
Turbidity 10 NTU			10	10.75	10	+/- 0.5 NTU	<input checked="" type="checkbox"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: A. Szewast

Date: 8/9/2023

Time (start): 1145

Time (finish): 1205

smarTroll SN: 883530

Turbidity Meter Type: LaMotte 2020t

SN: 4739-2623

Weather Conditions: Partly cloudy, 73°F

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153	24.50	4490	4250.9	4490.0	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	11/2023		4.00	4.45	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check						+/- 0.1 SU	Yes No	
pH (7)	2216893 11/2023	24.85	7.00	7.32	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check						+/- 0.1 SU	Yes No	
pH (10)	21320202 12/2023	25.05	10.00	10.54	10.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check						+/- 0.1 SU	Yes No	
ORP (mV)	21390144 11/2023	25.06	228.0	225.9	228.0	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100.00 101.24 8-1-2023	101.24	100.0	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0.00	0.00	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1.00	1.08	—	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10.00	10.7	9.59	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

EQUIPMENT CALIBRATION LOG

Field Technician: Elisabeth McDonnell

Date: 8/9/23

Time (start): 830

Time (finish): 850

smarTroll SN: 989630

Turbidity Meter Type: La Motte 2020t

SN: 4109-2623

Weather Conditions: 70, cloudy

Facility and Unit: Plant Hammond

Project No.: GW6581

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	22250153 11/23	23.18				+/- 5 %	Yes No	
pH (4)			4.00	3.99	4.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (4) check	↓					+/- 0.1 SU	Yes No	
pH (7)	2216893 11/23	23.48	7.0	6.85	7.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (7) check			↓				+/- 0.1 SU	Yes No
pH (10)	21320202 12/23	23.70	10.0	10.0	10.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Mid-Day pH (10) check			↓				+/- 0.1 SU	Yes No
ORP (mV)	21390149 11/23	23.85	228	230.90	228	+/- 20mV	<input checked="" type="radio"/> Yes <input type="radio"/> No	
DO (%) (1pt, 100% water saturated air cal)			100%	102.36%	100%	+/- 6 % saturation	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 0 NTU			0.0	0.0	0.0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 1 NTU			1.0	1.0	1.0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Turbidity 10 NTU			10.0	11.1	10.4	+/- 0.5 NTU	<input checked="" type="radio"/> Yes <input type="radio"/> No	

EQUIPMENT CALIBRATION LOG

Field Technician: Thomas Kesler

Date: 8/14/23

Time (start): 0800

Time (finish): 0825

smarTroll SN: 850729

Turbidity Meter Type: LeMotte 2020me

SN: 1475-21011

Weather Conditions: Partly 75°

Facility and Unit: Plant Hammond

Project No: GLCS81

Calibration log

	Standard Lot # / Date of Expiration	Temp of Standard (°C)	Value of Standard	Initial Reading	Post-Cal Reading	Acceptable Range	Pass?	Comments
Specific Conductance (µS/cm)	2275053 11/23	21.91	4490	4562	4490	+/- 5 %	<input checked="" type="radio"/> Yes No	
pH (4)	11/23		4	4.04	4.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (4) check	↓	29	4	4.03	—	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
pH (7)	2216893 11/23	22.77	7.00 7.00	7.05	7.00	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (7) check	↓	29	7	6.98	—	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
pH (10)	21380202 11/23	22.62	10.00	10.01	10.0	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
Mid-Day pH (10) check	↓	29	10	9.91	—	+/- 0.1 SU	<input checked="" type="radio"/> Yes No	
ORP (mV)	22760025 8/23		228	227.7	228	+/- 20mV	<input checked="" type="radio"/> Yes No	
DO (%) (1pt, 100% water saturated air cal)			100	99.08	100	+/- 6 % saturation	<input checked="" type="radio"/> Yes No	
Turbidity 0 NTU			0	.53	0	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 1 NTU			1	.56	.93	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	
Turbidity 10 NTU			10	10.35	10.1	+/- 0.5 NTU	<input checked="" type="radio"/> Yes No	

September 2023

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 09/19/23

Calibrated By: Jacob Truc

Field Conditions: Clear, 70°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>INSITU</u>	<u>884189</u>
Turbidity Meter	<u>LAOTTE</u>	<u>9124223</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>2400m44</u>	<u>05/2024</u>	<u>INSITU</u>
pH (SU)	4.00			<u>INSITU</u>
pH (SU)	7.00	<u>2290139</u>	<u>04/2024</u>	<u>INSITU</u>
pH (SU)	10.00	<u>20110130</u>	<u>04/24</u>	<u>INSITU</u>
D.O. (%)	N/A			<u>INSITU</u>
ORP (mV)	228.0	<u>24002258</u>	<u>06/2024</u>	<u>INSITU</u>

Calibration					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.490</u>	<u>32.10</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>3.94</u>	<u>32.10</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.95</u>	<u>32.1</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>32.3</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>31.1</u>	± 10%	NA
ORP (mV)	228.0	<u>230.4</u>	<u>32.17</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0.07</u>		
	<u>1</u>	<u>1.0</u>		
	<u>10</u>	<u>10.3</u>		

Calibration Check					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.29.8</u>	<u>33.34</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.25</u>	<u>33.34</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.99</u>	<u>33.3</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.93</u>	<u>32.14</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0.05</u>		
	<u>1</u>	<u>1.07</u>		
	<u>10</u>	<u>9.84</u>		

Notes:



Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 9/19/2023

Calibrated By: Thomas Heasler

Field Conditions: Clear, 70

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>hamilton 7020+</u>	<u>500205081R</u>
Turbidity Meter	<u>aquatrak</u>	<u>499619</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>240000H</u>	<u>5/24</u>	<u>inst. 4</u>
pH (SU)	4.00	<u>240000H</u>	<u>5/24</u>	
pH (SU)	7.00	<u>2279089</u>	<u>4/24</u>	
pH (SU)	10.00	<u>2210130</u>	<u>4/24</u>	
D.O. (%)	N/A			
ORP (mV)	228.0	<u>21390144</u>	<u>11/23</u>	<u>✓</u>

Calibration					
Time Start	Time Finish				
<u>0730</u>	<u>0815</u>				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.490</u>	<u>19.31</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>3.98</u>	<u>19.67</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.70</u>	<u>19.60</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>20.51</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>60</u>	<u>95.48</u>	± 10%	NA
ORP (mV)	228.0	<u>225</u>	<u>20.50</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0.00</u>		
	<u>1</u>	<u>1.03</u>		
	<u>10</u>	<u>9.6</u>		
		± 10% of standard	EPA 2023	

Calibration Check					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>3.560</u>		± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.09</u>	<u>28.89</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.05</u>	<u>26.83</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.92</u>		± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0.00</u>		
	<u>1</u>	<u>1.01</u>		
	<u>10</u>	<u>9.9</u>		
		± 10% of standard	EPA 2023	

Notes: Recal Conductivity (cal check at 4366.1)

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 9/26/23

Calibrated By: C. Cain

Field Conditions: Sunny 63°

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Han - Tru 4100</u>	<u>884189</u>
Turbidity Meter	<u>Hach 2100G</u>	<u>23060P00034</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>240200 44</u>	<u>5/24</u>	<u>In-Situ</u>
pH (SU)	4.00	<u>240200 44</u>	<u>5/24</u>	<u>In-Situ</u>
pH (SU)	7.00	<u>22290139</u>	<u>4/24</u>	<u>In-Situ</u>
pH (SU)	10.00	<u>22110130</u>	<u>4/24</u>	<u>In-Situ</u>
D.O. (%)	N/A			<u>In-Situ</u>
ORP (mV)	228.0	<u>24002258</u>	<u>6/24</u>	<u>In-Situ</u>

Calibration					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4490</u>	<u>22.09</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.0</u>	<u>22.14</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.0</u>	<u>22.32</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.0</u>	<u>22.50</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>22.50</u>	± 10%	NA
ORP (mV)	228.0	<u>228.0</u>	<u>22.5</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>800</u>	<u>802</u>		
	<u>100</u>	<u>99</u>		
	<u>20</u>	<u>26.1</u>		
	<u>6</u>	<u>9.7</u>	± 10% of standard	EPA 2023

Calibration Check					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4415</u>	<u>22.98</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.02</u>	<u>↓</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.99</u>	<u>23.12</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.96</u>	<u>23.25</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>800</u>	<u>798</u>		
	<u>100</u>	<u>97.3</u>		
	<u>10</u>	<u>10</u>		
	<u>20</u>	<u>19.9</u>	± 10% of standard	EPA 2023

Notes:

October 2023

Field Instrumentation Calibration Form

Site Name: Mont Hammond

Date: 10/3/2023

Calibrated By: f. Kessler

Field Conditions: clear, SS<sup>0</sup>

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>insitu</u>	<u>850724</u>
Turbidity Meter	<u>hach</u>	<u>          </u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>24000041</u>	<u>5/24</u>	<u>insitu</u>
pH (SU)	4.00			
pH (SU)	7.00	<u>22490134</u>	<u>4/24</u>	
pH (SU)	10.00	<u>2210130</u>	<u>4/24</u>	
D.O. (%)	N/A			
ORP (mV)	228.0	<u>21002258</u>	<u>0/24</u>	

Calibration					
Time Start <u>0820</u>		Time Finish <u>0855</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4490</u>	<u>18.92</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>18.72</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>19.27</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>19.30</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100</u>	<u>18.63</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>18.51</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>20.1</u>	± 10% of standard	EPA 2023
	<u>100</u>	<u>99.9</u>		
	<u>300</u>	<u>76.1</u>		

Calibration Check					
Time Start <u>1310</u>		Time Finish <u>1340</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>204</u>	<u>24.82</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.08</u>	<u>23.24</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.01</u>	<u>22.67</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.98</u>		± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>20.1</u>	± 10% of standard	EPA 2023
	<u>100</u>	<u>101</u>		
	<u>300</u>	<u>28.9</u>		

Notes: Recal conductivity = 0  
COND. 4265.0



Site Name: Hammond

Field Instrumentation Calibration Form

Date: 10-3-23

Calibrated By: Z. Webb

Field Conditions: Clear SSOF

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>wn-Sity Aqua</u>	<u>884189</u>
Turbidity Meter	<u>Hatch</u>	<u>10123</u>

Calibration Standard Information					
Parameter	Standard	Lot #	Date of Expiration	Brand	
Specific Conductance (µS/cm)	4.490	<u>24000044</u>	<u>05/2024</u>	<u>AIRALCAL</u>	
pH (SU)	4.00	<u>24000044</u>	<u>05/2024</u>	<u>AIRALCAL</u>	
pH (SU)	7.00	<u>22290139</u>	<u>04/2024</u>	<u>AIR</u>	
pH (SU)	10.00	<u>2211050</u>	<u>04/2024</u>	<u>AIR</u>	
D.O. (%)	N/A				
ORP (mV)	228.0	<u>24002258</u>	<u>06/2024</u>	<u>AIR</u>	

Calibration					
Time Start <u>0820</u>		Time Finish <u>0855</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.490</u>	<u>19.95</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>19.90</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>20.05</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>19.86</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100%</u>	<u>20.33</u>	± 10%	NA
ORP (mV)	228.0	<u>228mV</u>	<u>19.87°C</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>20</u>	<u>19.32</u>	± 10% of standard	EPA 2023
	<u>100</u>	<u>101</u>		
	<u>300</u>			

Calibration Check					
Time Start <u>1340</u>		Time Finish <u>1350</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.401</u>	<u>25.43</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.16</u>	<u>26.65</u>	± 0.1	GWMP
pH (SU)	7.00	<u>6.98</u>	<u>24.05</u>	± 0.1	GWMP
pH (SU)	10.00	<u>9.48</u>	<u>27.98°C</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>10</u>	<u>10.7</u>	± 10% of standard	EPA 2023
	<u>20</u>	<u>20.1</u>		
	<u>100</u>	<u>99.5</u>		
<u>300</u>	<u>788</u>			

Notes:

Site Name: 1-1 Cassin rd

Field Instrumentation Calibration Form

Date: 10-10-23

www.c  
=WL

Calibrated By: Zain Webb

Field Conditions: 55°F, some clouds

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>class: Aqua Troll 400</u>	<u>883553</u>
Turbidity Meter	<u>LaMotte 2020</u>	<u>7007-1416</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>2400044</u>	<u>05/2024</u>	<u>ATR</u>
pH (SU)	4.00	<u>2400044</u>	<u>05/2024</u>	<u>ATR</u>
pH (SU)	7.00	<u>22290139</u>	<u>04/2024</u>	<u>ATR</u>
pH (SU)	10.00	<u>22110130</u>	<u>04/2024</u>	<u>ATR</u>
D.O. (%)	N/A			<u>ATR</u>
ORP (mV)	228.0	<u>24002258</u>	<u>06/2024</u>	<u>ATR</u>

Calibration					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.490</u>	<u>17.84</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>17.50</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>17.72</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>17.98</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100%</u>	<u>16.14</u>	± 10%	NA
ORP (mV)	228.0	<u>228.0</u>	<u>17.92</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0</u>		
	<u>1</u>	<u>1</u>		
	<u>10</u>	<u>10</u>		

Calibration Check					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.490</u>	<u>24.74</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>24.39</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>24.83</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>25.01</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0</u>	<u>0</u>		
	<u>1</u>	<u>1</u>		
	<u>10</u>	<u>10</u>		

Notes:

Site Name: Plant Hammond

Field Instrumentation Calibration Form

Date: 10/10/23

Calibrated By: Jacob Tracy

Field Conditions: 84°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	AJR	8405-1416
Turbidity Meter	Zumatec	466105

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	24000049	05/24	AJR
pH (SU)	4.00	24000044	05/24	AJR
pH (SU)	7.00	22290139	04/24	AJR
pH (SU)	10.00	22110130	04/24	AJR
D.O. (%)	N/A			
ORP (mV)	228.0	2400258	06/24	AJR

Calibration					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	4.490	17.59	± 10% of standard	EPA 2023
pH (SU)	4.00	4.06	17.02	± 0.1	GWMP
pH (SU)	7.00	7.08	17.98	± 0.1	GWMP
pH (SU)	10.00	10.20	18.11	± 0.1	GWMP
D.O. (%)	N/A	100	18.53	± 10%	NA
ORP (mV)	228.0	232	17.80	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	0.01		
	1	0.91		
	10	10.0		

Calibration Check					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	4.490	18.23	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	18.23	± 0.1	GWMP
pH (SU)	7.00	6.98	17.95	± 0.1	GWMP
pH (SU)	10.00	10.01	18.01	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	0	-0.0		
	1	0.97		
	10	10.08		

Notes:

Site Name: Hanna

Field Instrumentation Calibration Form

Date: 10/24/2023

Calibrated By: Hyun Kwon

Field Conditions: Cloudy, 40F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Aquaflow 400</u>	<u>850735</u>
Turbidity Meter	<u>LaMotte 2020</u>	<u>2114-2693</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>2400044</u>	<u>05/2024</u>	<u>ATR</u>
pH (SU)	4.00	<u>2400044</u>	<u>05/2024</u>	
pH (SU)	7.00	<u>22290139</u>	<u>04/2024</u>	
pH (SU)	10.00	<u>22110150</u>	<u>04/2024</u>	
D.O. (%)	N/A			
ORP (mV)	228.0	<u>24002252</u>	<u>05/2024</u>	

Calibration					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.490</u>	<u>12.18</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>12.23</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>12.42</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>12.64</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100+</u>	<u>16.51</u>	± 10%	NA
ORP (mV)	228.0	<u>228.0</u>	<u>12.52</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0.0</u>	<u>0.0</u>	± 10% of standard	EPA 2023
	<u>1.0</u>	<u>1.00</u>		
	<u>10.0</u>	<u>10.0</u>		

Calibration Check					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4.490</u>	<u>25.32</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>25.99</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>25.92</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>25.52</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0.0</u>	<u>0.0</u>	± 10% of standard	EPA 2023
	<u>1.00</u>	<u>1.00</u>		
	<u>10.0</u>	<u>10.00</u>		

Notes:



Site Name: Plant Humana

Field Instrumentation Calibration Form

Date: 10-24

Calibrated By: Zain Webb

Field Conditions: Cloudy, 40°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>Orion A1207</u>	<u>11877800</u>
Turbidity Meter	<u>LaMotte 2010</u>	<u>1475-4011</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>2400044</u>	<u>05/24</u>	<u>AIR</u>
pH (SU)	4.00	<u>2400044</u>	<u>05/24</u>	<u>AIR</u>
pH (SU)	7.00	<u>2229039</u>	<u>04/24</u>	<u>AIR</u>
pH (SU)	10.00	<u>22110130</u>	<u>04/24</u>	<u>AIR</u>
D.O. (%)	N/A			<u>AIR</u>
ORP (mV)	228.0	<u>24002258</u>	<u>05/24</u>	<u>AIR</u>

Calibration					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4490</u>	<u>18.17</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>18.18</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>18.56</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>18.39</u>	± 0.1	GWMP
D.O. (%)	N/A <u>100%</u>	<u>100%</u>	<u>15.53</u>	± 10%	NA
ORP (mV)	228.0	<u>228</u>	<u>16.03</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0.00</u>	<u>0.0</u>		
	<u>1.00</u>	<u>1.00</u>		
	<u>10.00</u>	<u>10.00</u>		
		± 10% of standard	EPA 2023	

Calibration Check					
Time Start	Time Finish				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4490</u>	<u>24.60</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>24.33</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>23.09</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>22.72</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>0.00</u>	<u>0.01</u>		
	<u>1.00</u>	<u>1.00</u>		
	<u>10.00</u>	<u>10.00</u>		
		± 10% of standard	EPA 2023	

Notes

November 2023

Site Name Hannery

Field Instrumentation Calibration Form

Date: 11/21/23

Calibrated By: Hudson Kenney

Field Conditions: 60°F, RAIN

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>ARCA TRILL 900</u>	<u>877800</u>
Turbidity Meter	<u>HACH Z100Q</u>	<u>22090 D000357</u>

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4.490	<u>24000044</u>	<u>05/24</u>	<u>AIR</u>
pH (SU)	4.00	<u>24000044</u>	<u>05/24</u>	<u>AIR</u>
pH (SU)	7.00	<u>22290139</u>	<u>04/24</u>	<u>AIR</u>
pH (SU)	10.00	<u>22110170</u>	<u>09/24</u>	<u>AIR</u>
D.O. (%)	N/A	-	-	<u>AIR</u>
ORP (mV)	228.0	<u>24002250</u>	<u>06/24</u>	<u>AIR</u>

Calibration					
Time Start	Time Finish				
<u>730</u>	<u>830</u>				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4490</u>	<u>17.10</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>17.28</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>17.39</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>17.78</u>	± 0.1	GWMP
D.O. (%)	N/A	<u>100.1</u>	<u>17.44</u>	± 10%	NA
ORP (mV)	228.0	<u>228.4</u>	<u>16.85</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>10.0</u>	<u>10.0</u>		
	<u>20.0</u>	<u>20.0</u>		
	<u>100</u>	<u>100</u>		
	<u>800</u>	<u>800</u>	± 10% of standard	EPA 2023

Calibration Check					
Time Start	Time Finish				
<u>1335</u>	<u>1345</u>				
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4.490	<u>4490</u>	<u>18.55</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>18.57</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>18.35</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>18.28</u>	± 0.1	GWMP

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>10.0</u>	<u>10.0</u>		
	<u>20.0</u>	<u>20.0</u>		
	<u>100</u>	<u>100</u>		
	<u>800</u>	<u>800</u>	± 10% of standard	EPA 2023

Notes:

Site Name Plant Hammond

Field Instrumentation Calibration Form

Date: 11-21-23

Calibrated By: Zain Webb

Field Conditions: Rain, 50°F

Instrument	Manufacturer/ Model	Serial Number
Water Quality Meter	<u>AguaTroll 400</u>	<u>850735</u>
Turbidity Meter	<u>HACH 2100Q</u>	

Calibration Standard Information				
Parameter	Standard	Lot #	Date of Expiration	Brand
Specific Conductance (µS/cm)	4,490	<u>24000044</u>	<u>05/24</u>	<u>ATR</u>
pH (SU)	4.00	↓	↓	↓
pH (SU)	7.00	<u>22290139</u>	<u>04/24</u>	
pH (SU)	10.00	<u>22110130</u>	<u>04/24</u>	
D O (%)	N/A			
ORP (mV)	228.0	<u>2400256</u>	<u>06/24</u>	

Calibration					
Time Start <u>0724</u>		Time Finish <u>0833</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4490</u>	<u>17.01</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>17.24</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>17.63</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>17.76</u>	± 0.1	GWMP
D O (%)	N/A	<u>100%</u>		± 10%	NA
ORP (mV)	228.0	<u>228.0</u>	<u>17.82</u>	± 10	EPA 2023

Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>10</u>	<u>10</u>		
	<u>20</u>	<u>20</u>		
	<u>100</u>	<u>100</u>		
	<u>800</u>	<u>800</u>		

Calibration Check					
Time Start <u>1529</u>		Time Finish <u>1546</u>			
Parameter	Standard	Calibration Value	Calibration Solution Temperature (°C)	Acceptance Criteria	Reference
Specific Conductance (µS/cm)	4,490	<u>4490</u>	<u>18.86</u>	± 10% of standard	EPA 2023
pH (SU)	4.00	<u>4.00</u>	<u>18.78</u>	± 0.1	GWMP
pH (SU)	7.00	<u>7.00</u>	<u>18.61</u>	± 0.1	GWMP
pH (SU)	10.00	<u>10.00</u>	<u>18.59</u>	± 0.1	GWMP

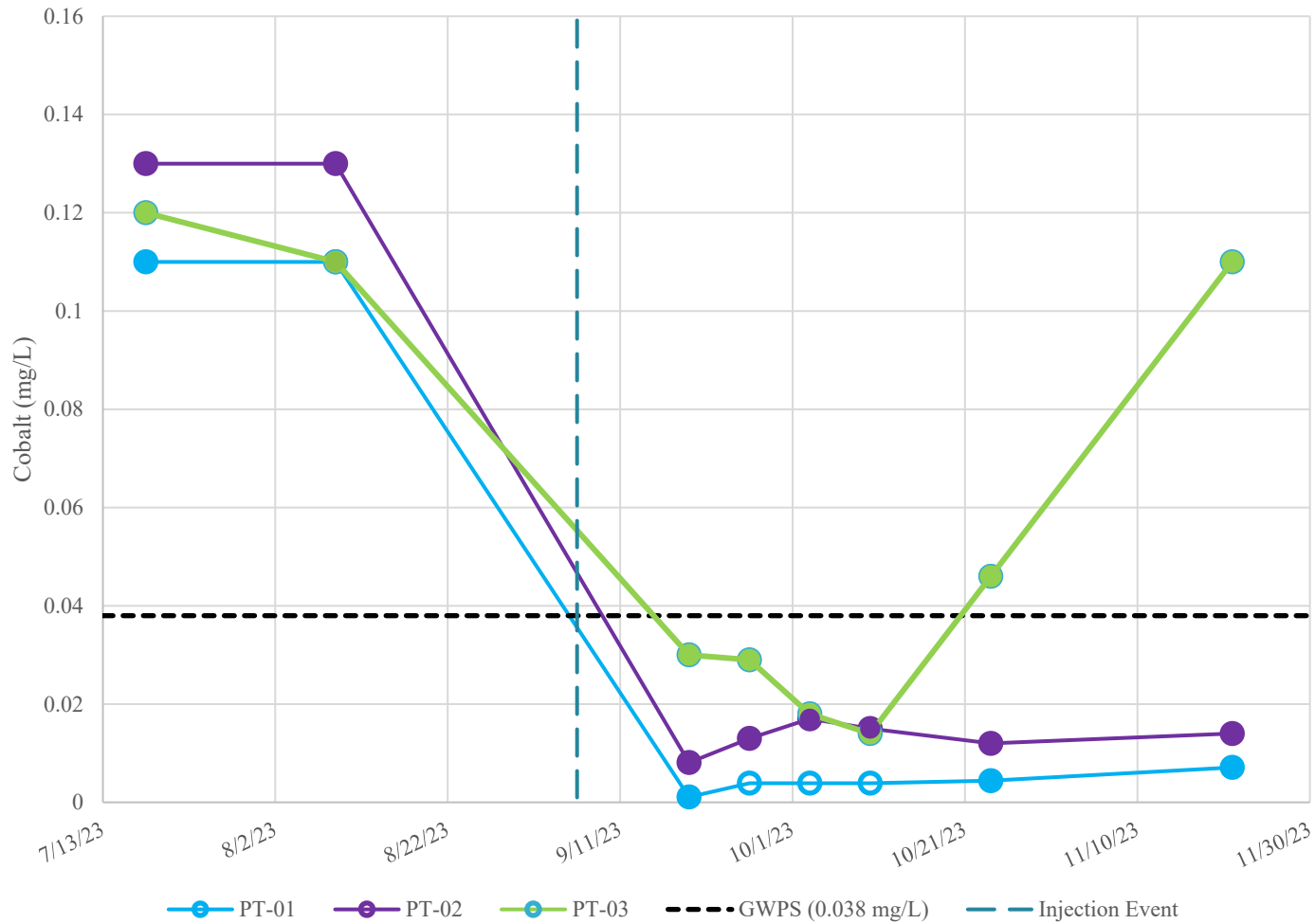
Turbidity (NTU)	Standard	Calibration Value	Acceptance Criteria	Reference
	<u>10</u>	<u>10</u>		
	<u>20</u>	<u>20</u>		
	<u>100</u>	<u>100</u>		
	<u>800</u>	<u>800</u>		

Notes:

Problems with pH probe again. Had to call ATR to troubleshoot.

# Time Series Plots

### Time Series



**Notes:**

1. mg/L = milligrams per liter
2. GWPS = Groundwater Protection Standard
3. Open symbols are not detected above, and are reported at the method detection limit.

**TIME SERIES – MW-33/35 PILOT STUDY AREA**

GEORGIA POWER COMPANY  
PLANT HAMMOND AP-2  
ROME, FLOYD COUNTY, GEORGIA

Prepared For:



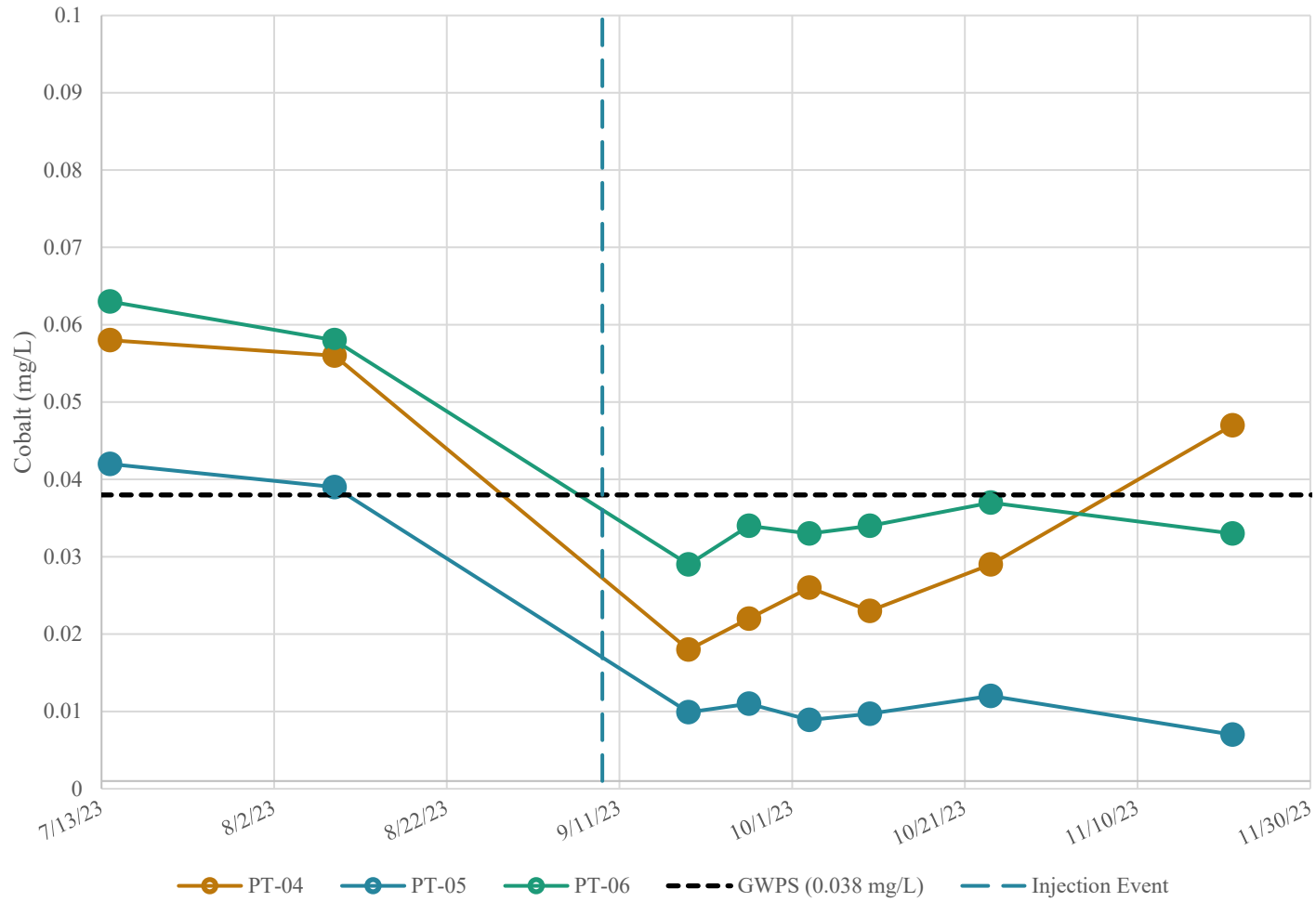
Prepared By:



KENNESAW, GA

JANUARY 2024

### Time Series



- Notes:
1. mg/L = milligrams per liter
  2. GWPS = Groundwater Protection Standard

#### TIME SERIES – HGWC-18 PILOT STUDY AREA

GEORGIA POWER COMPANY  
PLANT HAMMOND AP-2  
ROME, FLOYD COUNTY, GEORGIA

Prepared For:  


Prepared By:  


KENNESAW, GA

JANUARY 2024

# APPENDIX F

## Potable Well Survey Report



**Plant Hammond**

5963 Alabama Hwy  
Rome, GA 30165

Inquiry Number: 07486316.1r  
November 01, 2023

# The EDR GeoCheck® Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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# GEOCHECK® - PHYSICAL SETTING SOURCE REPORT

## TARGET PROPERTY ADDRESS

PLANT HAMMOND  
5963 ALABAMA HWY  
ROME, GA 30165

## TARGET PROPERTY COORDINATES

Latitude (North):	34.252258 - 34° 15' 8.13"
Longitude (West):	85.346763 - 85° 20' 48.35"
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	652231.3
UTM Y (Meters):	3791167.5
Elevation:	588 ft. above sea level

## USGS TOPOGRAPHIC MAP

Target Property Map:	34085-C3 ROCK MOUNTAIN, GA
Version Date:	1985

South Map:	34085-B3 LIVINGSTON, GA
Version Date:	1982

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

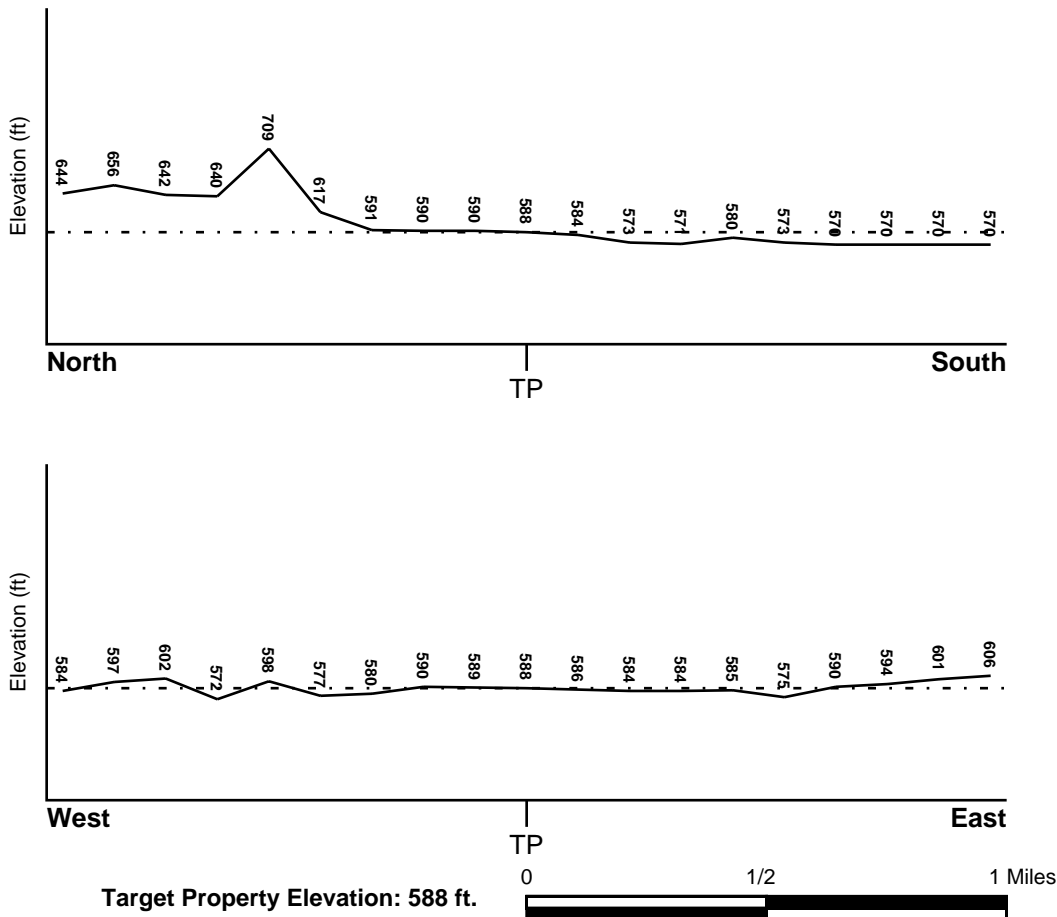
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## **FEMA FLOOD ZONE**

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
13115C0163E	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
13115C0164E	FEMA FIRM Flood data
13115C0252E	FEMA FIRM Flood data
13115C0251E	FEMA FIRM Flood data

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
ROCK MOUNTAIN	YES - refer to the Overview Map and Detail Map

## **HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

## GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

### **ROCK STRATIGRAPHIC UNIT**

Era:	Paleozoic
System:	Cambrian
Series:	Cambrian
Code:	C (decoded above as Era, System & Series)

### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

## **DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: ETOWAH

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: LOW

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50
2	7 inches	38 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50
3	38 inches	70 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silt loam  
clay loam

Surficial Soil Types: silt loam  
clay loam

Shallow Soil Types: sandy clay loam  
clay loam  
silty clay loam  
silty clay

Deeper Soil Types: clay loam  
stratified  
clay  
cherty - clay loam  
weathered bedrock  
loam

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	2.000
Federal FRDS PWS	2.000
State Database	2.000

## **FEDERAL USGS WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	USGS40000266955	1/8 - 1/4 Mile NW
B3	USGS40000266956	1/8 - 1/4 Mile NNE
D7	USGS40000266962	1/4 - 1/2 Mile North
B9	USGS40000266957	1/4 - 1/2 Mile NE
D12	USGS40000266965	1/4 - 1/2 Mile NNW
E13	USGS40000266972	1/4 - 1/2 Mile North
E16	USGS40000266968	1/2 - 1 Mile NNE
F18	USGS40000266981	1/2 - 1 Mile North
G21	USGS40000266978	1 - 2 Miles NE
H22	USGS40000266969	1 - 2 Miles ENE
H25	USGS40000266975	1 - 2 Miles ENE
I27	USGS40000266890	1 - 2 Miles South
J29	USGS40000266958	1 - 2 Miles East
K31	USGS40000266908	1 - 2 Miles SE
L33	USGS40000266966	1 - 2 Miles ENE

## **FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## **STATE DATABASE WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A2	0000004171	1/8 - 1/4 Mile NW
B4	0000004172	1/8 - 1/4 Mile NNE
C5	0000004168	1/4 - 1/2 Mile WNW
C6	0000004169	1/4 - 1/2 Mile WNW
D8	0000004175	1/4 - 1/2 Mile North
B10	0000004173	1/4 - 1/2 Mile NE
D11	0000004177	1/4 - 1/2 Mile NNW
E14	0000004181	1/4 - 1/2 Mile North
E15	0000004179	1/2 - 1 Mile NNE
17	0000004170	1/2 - 1 Mile West
F19	0000004188	1/2 - 1 Mile North

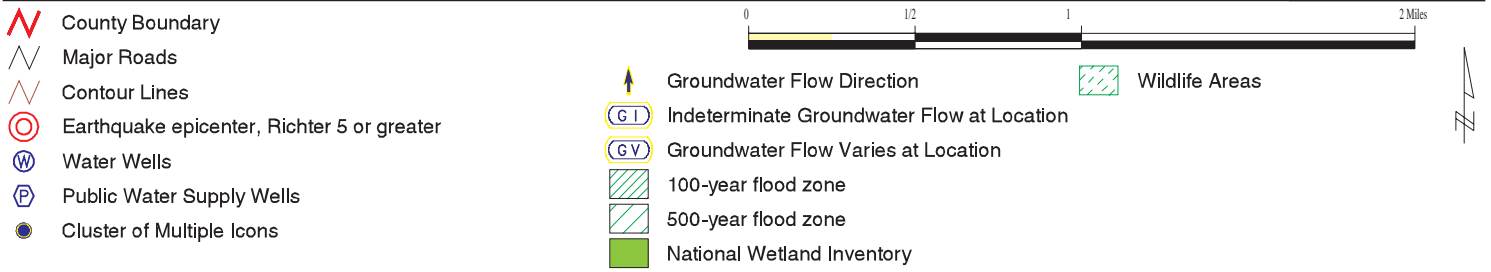
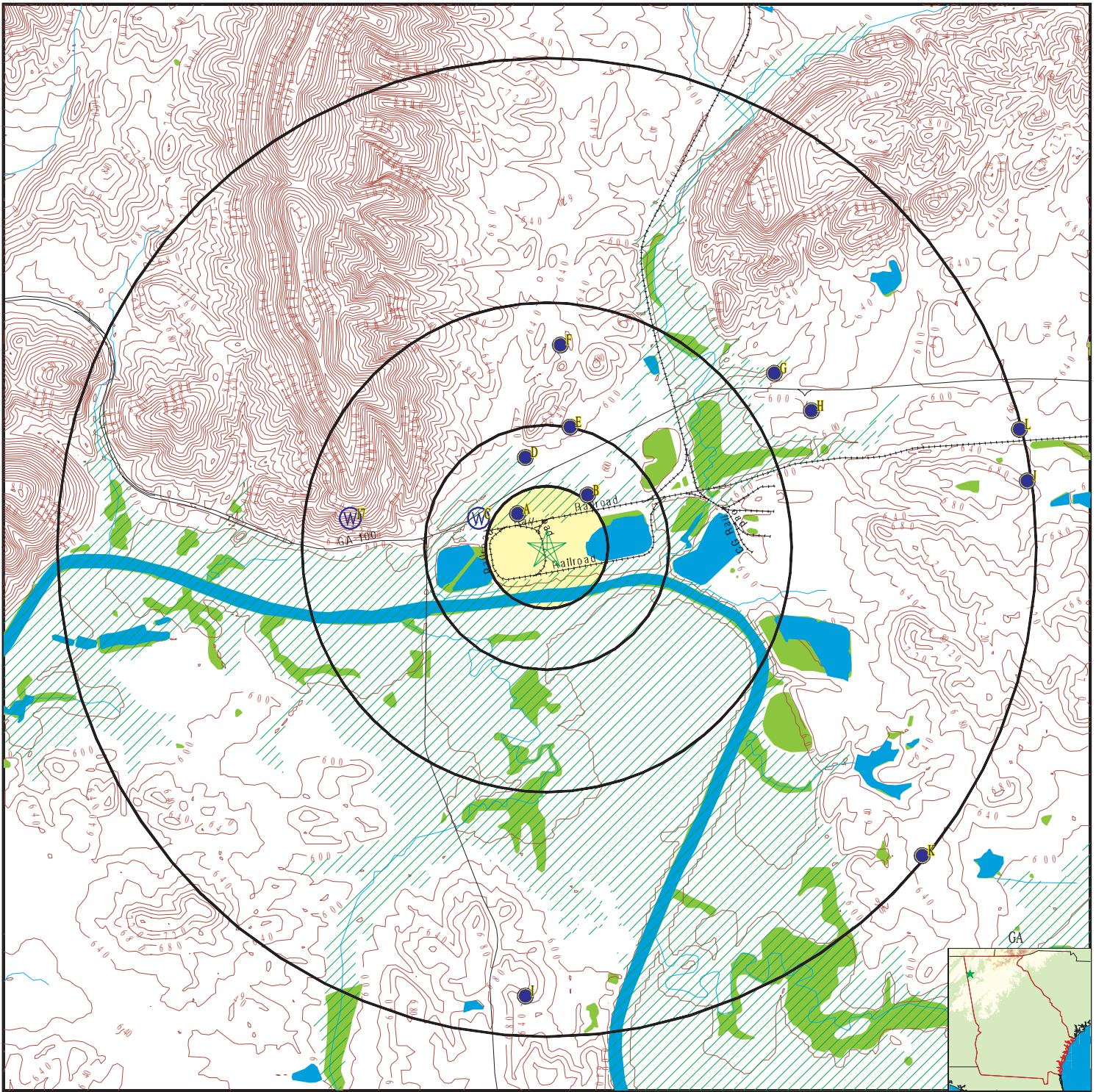


# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
G20	0000004185	1 - 2 Miles NE
H23	0000004180	1 - 2 Miles ENE
H24	0000004183	1 - 2 Miles ENE
I26	0000004144	1 - 2 Miles South
J28	0000004174	1 - 2 Miles East
K30	0000004151	1 - 2 Miles SE
L32	0000004178	1 - 2 Miles ENE

# PHYSICAL SETTING SOURCE MAP - 07486316.1r



**SITE NAME:** Plant Hammond  
**ADDRESS:** 5963 Alabama Hwy  
 Rome GA 30165  
**LAT/LONG:** 34.252258 / 85.346763

**CLIENT:** Geosyntec Consultants  
**CONTACT:** Anthony Szwast  
**INQUIRY #:** 07486316.1r  
**DATE:** November 01, 2023 3:20 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**A1**  
**NW**  
**1/8 - 1/4 Mile**  
**Higher**

**FED USGS      USGS40000266955**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ41	Type:	Well
Description:	GA POWER, PLANT HAMMOND	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Conasauga Formation
Aquifer Type:	Not Reported	Construction Date:	19511101
Well Depth:	411	Well Depth Units:	ft
Well Hole Depth:	411	Well Hole Depth Units:	ft

**A2**  
**NW**  
**1/8 - 1/4 Mile**  
**Higher**

**GA WELLS      0000004171**

County code:	115	Well num:	03JJ41
Remarks:	GA POWER, PLANT HAMMOND	Lat:	341515
Lon:	0852056	Latlon datum:	NAD27
Alt:	586.00	Alt datum:	NGVD29
Depth:	411	Depth to casing:	44.5
Casing dia:	12.	Casing matl:	Not Reported
Depth to top:	44.5	Depth to bot:	411.
Opening type:	X	Constr date:	19551101
Discharge:	69.60	Prim use:	N
Aquifer code:	371CNSG	Edr id:	0000004171

**B3**  
**NNE**  
**1/8 - 1/4 Mile**  
**Higher**

**FED USGS      USGS40000266956**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ35	Type:	Well
Description:	GA. POWER CO. WELL NO.3	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Conasauga Formation
Aquifer Type:	Not Reported	Construction Date:	195111
Well Depth:	405	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

**B4**  
**NNE**  
**1/8 - 1/4 Mile**  
**Higher**

**GA WELLS      0000004172**

County code:	115	Well num:	03JJ35
Remarks:	GA. POWER CO. WELL NO.3	Lat:	341518
Lon:	0852041	Latlon datum:	NAD27
Alt:	590.0	Alt datum:	NGVD29

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Depth:	405.0	Depth to casing:	22.0
Casing dia:	12.0	Casing matl:	Not Reported
Depth to top:	22.0	Depth to bot:	405.0
Opening type:	X	Constr date:	195111
Discharge:	Not Reported	Prim use:	Not Reported
Aquifer code:	371CNSG	Edr id:	0000004172

**C5  
WNW  
1/4 - 1/2 Mile  
Higher**

**GA WELLS      000004168**

County code:	115	Well num:	03JJS2
Remarks:	JOE EARLY	Lat:	341514
Lon:	0852106	Latlon datum:	NAD27
Alt:	590	Alt datum:	NGVD29
Depth:	Not Reported	Depth to casing:	Not Reported
Casing dia:	Not Reported	Casing matl:	Not Reported
Depth to top:	Not Reported	Depth to bot:	Not Reported
Opening type:	Not Reported	Constr date:	Not Reported
Discharge:	208.3	Prim use:	Not Reported
Aquifer code:	Not Reported	Edr id:	000004168

**C6  
WNW  
1/4 - 1/2 Mile  
Higher**

**GA WELLS      000004169**

County code:	115	Well num:	03JJS2
Remarks:	JOE EARLY	Lat:	341514
Lon:	0852106	Latlon datum:	NAD27
Alt:	590	Alt datum:	NGVD29
Depth:	Not Reported	Depth to casing:	Not Reported
Casing dia:	Not Reported	Casing matl:	Not Reported
Depth to top:	Not Reported	Depth to bot:	Not Reported
Opening type:	Not Reported	Constr date:	Not Reported
Discharge:	208.3	Prim use:	Not Reported
Aquifer code:	Not Reported	Edr id:	000004169

**D7  
North  
1/4 - 1/2 Mile  
Higher**

**FED USGS      USGS40000266962**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ31	Type:	Well
Description:	RUTH BRIDGES	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Floyd Shale
Aquifer Type:	Not Reported	Construction Date:	1949
Well Depth:	96	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1961-11-07
Feet below surface:	20	Feet to sea level:	Not Reported
Note:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**D8**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**GA WELLS      0000004175**

County code:	115	Well num:	03JJ31
Remarks:	RUTH BRIDGES	Lat:	341524
Lon:	0852052	Latlon datum:	NAD27
Alt:	590	Alt datum:	NGVD29
Depth:	96	Depth to casing:	20
Casing dia:	6	Casing matl:	Not Reported
Depth to top:	20	Depth to bot:	96
Opening type:	X	Constr date:	1949
Discharge:	10	Prim use:	H
Aquifer code:	331FLYD	Edr id:	0000004175

**B9**  
**NE**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000266957**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ40	Type:	Well
Description:	GA POWER CO, HAMMOND PLNT	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Conasauga Formation
Aquifer Type:	Not Reported	Construction Date:	195111
Well Depth:	405	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1951-11
Feet below surface:	15	Feet to sea level:	Not Reported
Note:	Not Reported		

**B10**  
**NE**  
**1/4 - 1/2 Mile**  
**Higher**

**GA WELLS      0000004173**

County code:	115	Well num:	03JJ40
Remarks:	GA POWER CO, HAMMOND PLNT	Lat:	341520
Lon:	0852035	Latlon datum:	NAD27
Alt:	590	Alt datum:	NGVD29
Depth:	405	Depth to casing:	Not Reported
Casing dia:	Not Reported	Casing matl:	Not Reported
Depth to top:	Not Reported	Depth to bot:	Not Reported
Opening type:	Not Reported	Constr date:	195111
Discharge:	40.	Prim use:	N
Aquifer code:	371CNSG	Edr id:	0000004173

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**D11**  
**NNW**  
**1/4 - 1/2 Mile**  
**Higher**

**GA WELLS      0000004177**

County code:	115	Well num:	03JJ14
Remarks:	MRS. ARTHUR L. LLOYD	Lat:	341530
Lon:	0852056	Latlon datum:	NAD27
Alt:	595	Alt datum:	NGVD29
Depth:	87	Depth to casing:	21
Casing dia:	6	Casing matl:	Not Reported
Depth to top:	21	Depth to bot:	87
Opening type:	X	Constr date:	1948
Discharge:	16.7	Prim use:	H
Aquifer code:	371CNSG	Edr id:	0000004177

**D12**  
**NNW**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000266965**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ14	Type:	Well
Description:	MRS. ARTHUR L. LLOYD	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Conasauga Formation
Aquifer Type:	Not Reported	Construction Date:	1948
Well Depth:	87	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1948
Feet below surface:	4	Feet to sea level:	Not Reported
Note:	Not Reported		

**E13**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000266972**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ13	Type:	Well
Description:	ARTHUR W. LLOYD	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Floyd Shale
Aquifer Type:	Not Reported	Construction Date:	1955
Well Depth:	72	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1955
Feet below surface:	15.0	Feet to sea level:	Not Reported
Note:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**E14**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**GA WELLS      0000004181**

County code:	115	Well num:	03JJ13
Remarks:	ARTHUR W. LLOYD	Lat:	341533
Lon:	0852047	Latlon datum:	NAD27
Alt:	625	Alt datum:	NGVD29
Depth:	72	Depth to casing:	28
Casing dia:	6	Casing matl:	Not Reported
Depth to top:	28	Depth to bot:	72
Opening type:	X	Constr date:	1955
Discharge:	15	Prim use:	H
Aquifer code:	331FLYD	Edr id:	0000004181

**E15**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**GA WELLS      0000004179**

County code:	115	Well num:	03JJ12
Remarks:	DEWEY H. WORTHY JR.	Lat:	341534
Lon:	0852038	Latlon datum:	NAD27
Alt:	600	Alt datum:	NGVD29
Depth:	60	Depth to casing:	55
Casing dia:	6	Casing matl:	Not Reported
Depth to top:	55	Depth to bot:	60
Opening type:	X	Constr date:	196106
Discharge:	10	Prim use:	H
Aquifer code:	331FLYD	Edr id:	0000004179

**E16**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000266968**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ12	Type:	Well
Description:	DEWEY H. WORTHY JR.	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Floyd Shale
Aquifer Type:	Not Reported	Construction Date:	196106
Well Depth:	60	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1961-11-07
Feet below surface:	15.35	Feet to sea level:	Not Reported
Note:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**17**  
**West**  
**1/2 - 1 Mile**  
**Higher**

**GA WELLS      000004170**

County code:	115	Well num:	03JJ47
Remarks:	A.A. LOONEY	Lat:	341514
Lon:	0852139	Latlon datum:	NAD27
Alt:	800	Alt datum:	NGVD29
Depth:	Not Reported	Depth to casing:	Not Reported
Casing dia:	Not Reported	Casing matl:	Not Reported
Depth to top:	Not Reported	Depth to bot:	Not Reported
Opening type:	Not Reported	Constr date:	Not Reported
Discharge:	Not Reported	Prim use:	Not Reported
Aquifer code:	Not Reported	Edr id:	000004170

**F18**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000266981**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ15	Type:	Well
Description:	ROME CRAFT	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Floyd Shale
Aquifer Type:	Not Reported	Construction Date:	1958
Well Depth:	205	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1958
Feet below surface:	40.0	Feet to sea level:	Not Reported
Note:	Not Reported		

**F19**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**GA WELLS      000004188**

County code:	115	Well num:	03JJ15
Remarks:	ROME CRAFT	Lat:	341551
Lon:	0852045	Latlon datum:	NAD27
Alt:	640	Alt datum:	NGVD29
Depth:	205	Depth to casing:	179
Casing dia:	6	Casing matl:	Not Reported
Depth to top:	179	Depth to bot:	205
Opening type:	X	Constr date:	1958
Discharge:	6.5	Prim use:	C
Aquifer code:	331FLYD	Edr id:	000004188



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**G20**  
**NE**  
**1 - 2 Miles**  
**Lower**

**GA WELLS      000004185**

County code:	115	Well num:	03JJ16
Remarks:	C.W. AKRIDGE	Lat:	341545
Lon:	0851950	Latlon datum:	NAD27
Alt:	590	Alt datum:	NGVD29
Depth:	89	Depth to casing:	7
Casing dia:	6	Casing matl:	Not Reported
Depth to top:	7	Depth to bot:	89
Opening type:	X	Constr date:	1941
Discharge:	5	Prim use:	H
Aquifer code:	331FLYD	Edr id:	000004185

**G21**  
**NE**  
**1 - 2 Miles**  
**Lower**

**FED USGS      USGS40000266978**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ16	Type:	Well
Description:	C.W. AKRIDGE	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Floyd Shale
Aquifer Type:	Not Reported	Construction Date:	1941
Well Depth:	89	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

**H22**  
**ENE**  
**1 - 2 Miles**  
**Higher**

**FED USGS      USGS40000266969**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ17	Type:	Well
Description:	C.W. AKRIDGE	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Floyd Shale
Aquifer Type:	Not Reported	Construction Date:	1945
Well Depth:	157	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

**H23**  
**ENE**  
**1 - 2 Miles**  
**Higher**

**GA WELLS      000004180**

County code:	115	Well num:	03JJ17
Remarks:	C.W. AKRIDGE	Lat:	341535
Lon:	0851942	Latlon datum:	NAD27
Alt:	605	Alt datum:	NGVD29

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Depth:	157	Depth to casing:	Not Reported
Casing dia:	6.0	Casing matl:	Not Reported
Depth to top:	Not Reported	Depth to bot:	Not Reported
Opening type:	Not Reported	Constr date:	1945
Discharge:	5	Prim use:	H
Aquifer code:	331FLYD	Edr id:	0000004180

**H24  
ENE  
1 - 2 Miles  
Higher**

**GA WELLS      0000004183**

County code:	115	Well num:	03JJ18
Remarks:	C.H. JOHNSON	Lat:	341539
Lon:	0851939	Latlon datum:	NAD27
Alt:	600	Alt datum:	NGVD29
Depth:	96	Depth to casing:	35
Casing dia:	6	Casing matl:	Not Reported
Depth to top:	35	Depth to bot:	96
Opening type:	X	Constr date:	1959
Discharge:	Not Reported	Prim use:	H
Aquifer code:	331FLYD	Edr id:	0000004183

**H25  
ENE  
1 - 2 Miles  
Higher**

**FED USGS      USGS40000266975**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ18	Type:	Well
Description:	C.H. JOHNSON	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Floyd Shale
Aquifer Type:	Not Reported	Construction Date:	1959
Well Depth:	96	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1961-11-07
Feet below surface:	33.28	Feet to sea level:	Not Reported
Note:	Not Reported		

**I26  
South  
1 - 2 Miles  
Higher**

**GA WELLS      0000004144**

County code:	115	Well num:	03HH27
Remarks:	SIDNEY EVANS	Lat:	341332
Lon:	0852054	Latlon datum:	NAD27
Alt:	660.0	Alt datum:	NGVD29
Depth:	129.0	Depth to casing:	50.0
Casing dia:	6.0	Casing matl:	Not Reported
Depth to top:	50.0	Depth to bot:	129.0
Opening type:	X	Constr date:	1956
Discharge:	9.0	Prim use:	H
Aquifer code:	371CNSG	Edr id:	0000004144

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**I27**  
**South**  
**1 - 2 Miles**  
**Higher**

**FED USGS      USGS40000266890**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03HH27	Type:	Well
Description:	SIDNEY EVANS	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Conasauga Formation
Aquifer Type:	Not Reported	Construction Date:	1956
Well Depth:	129	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

**J28**  
**East**  
**1 - 2 Miles**  
**Higher**

**GA WELLS      0000004174**

County code:	115	Well num:	03JJ20
Remarks:	JACK AKRIDGE	Lat:	341522
Lon:	0851845	Latlon datum:	NAD27
Alt:	670	Alt datum:	NGVD29
Depth:	65	Depth to casing:	Not Reported
Casing dia:	Not Reported	Casing matl:	Not Reported
Depth to top:	Not Reported	Depth to bot:	Not Reported
Opening type:	Not Reported	Constr date:	1955
Discharge:	11.7	Prim use:	H
Aquifer code:	371CNSG	Edr id:	0000004174

**J29**  
**East**  
**1 - 2 Miles**  
**Higher**

**FED USGS      USGS40000266958**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	03JJ20	Type:	Well
Description:	JACK AKRIDGE	HUC:	03150105
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Valley and Ridge aquifers	Formation Type:	Conasauga Formation
Aquifer Type:	Not Reported	Construction Date:	1955
Well Depth:	65	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

**K30**  
**SE**  
**1 - 2 Miles**  
**Higher**

**GA WELLS      0000004151**

County code:	115	Well num:	03HH03
Remarks:	L.L. PUCKETT	Lat:	341402
Lon:	0851912	Latlon datum:	NAD27
Alt:	650.0	Alt datum:	NGVD29

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Depth: 125.0	Depth to casing: 31.0
Casing dia: 6.0	Casing matl: Not Reported
Depth to top: 31.0	Depth to bot: 125.0
Opening type: X	Constr date: 1960
Discharge: 4.5	Prim use: H
Aquifer code: 371CNSG	Edr id: 0000004151

**K31**  
**SE**  
**1 - 2 Miles**  
**Higher**

**FED USGS      USGS40000266908**

Organization ID: USGS-GA	Organization Name: USGS Georgia Water Science Center
Monitor Location: 03HH03	Type: Well
Description: L.L. PUCKETT	HUC: 03150105
Drainage Area: Not Reported	Drainage Area Units: Not Reported
Contrib Drainage Area: Not Reported	Contrib Drainage Area Unts: Not Reported
Aquifer: Valley and Ridge aquifers	Formation Type: Conasauga Formation
Aquifer Type: Not Reported	Construction Date: 1960
Well Depth: 125	Well Depth Units: ft
Well Hole Depth: 125	Well Hole Depth Units: ft

Ground water levels, Number of Measurements: 1	Level reading date: 1960
Feet below surface: 27.0	Feet to sea level: Not Reported
Note: Not Reported	

**L32**  
**ENE**  
**1 - 2 Miles**  
**Higher**

**GA WELLS      0000004178**

County code: 115	Well num: 03JJ19
Remarks: C.W. AKRIDGE	Lat: 341533
Lon: 0851847	Latlon datum: NAD27
Alt: 635	Alt datum: NGVD29
Depth: 359	Depth to casing: Not Reported
Casing dia: Not Reported	Casing matl: Not Reported
Depth to top: Not Reported	Depth to bot: Not Reported
Opening type: Not Reported	Constr date: 1945
Discharge: Not Reported	Prim use: H
Aquifer code: 331FLYD	Edr id: 0000004178

**L33**  
**ENE**  
**1 - 2 Miles**  
**Higher**

**FED USGS      USGS40000266966**

Organization ID: USGS-GA	Organization Name: USGS Georgia Water Science Center
Monitor Location: 03JJ19	Type: Well
Description: C.W. AKRIDGE	HUC: 03150105
Drainage Area: Not Reported	Drainage Area Units: Not Reported
Contrib Drainage Area: Not Reported	Contrib Drainage Area Unts: Not Reported
Aquifer: Valley and Ridge aquifers	Formation Type: Floyd Shale
Aquifer Type: Not Reported	Construction Date: 1945
Well Depth: 359	Well Depth Units: ft
Well Hole Depth: Not Reported	Well Hole Depth Units: Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground water levels, Number of Measurements:	1	Level reading date:	1946-10-22
Feet below surface:	29.2	Feet to sea level:	Not Reported
Note:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

Federal EPA Radon Zone for FLOYD County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for FLOYD COUNTY, GA

Number of sites tested: 14

<u>Area</u>	<u>Average Activity</u>	<u>% &lt;4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% &gt;20 pCi/L</u>
Living Area - 1st Floor	1.586 pCi/L	93%	7%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.767 pCi/L	100%	0%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

**State Wetlands Data:** Wetlands Inventory

Source: Georgia GIS Clearinghouse

Telephone: 706-542-1581

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

## OTHER STATE DATABASE INFORMATION

### A listing of Private Water Well locations

Georgia Department of Public Health

Telephone: (404) 657-2700

A listing of Private Water Well locations

### Georgia Public Supply Wells

Source: Georgia Department of Community Affairs

Telephone: 404-894-0127

### USGS Georgia Water Wells

Source: USGS, Georgia District Office

Telephone: 770-903-9100

### DNR Managed Lands

Source: Department of Natural Resources

Telephone: 706-557-3032

This dataset provides 1:24,000-scale data depicting boundaries of land parcels making up the public lands managed by the Georgia Department of Natural Resources (GDNR). It includes polygon representations of State Parks, State Historic Parks, State Conservation Parks, State Historic Sites, Wildlife Management Areas, Public Fishing Areas, Fish Hatcheries, Natural Areas and other specially-designated areas. The data were collected and located by the Georgia Department of Natural Resources. Boundaries were digitized from survey plats or other information.

## RADON

### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.



## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### OTHER

Airport Landing Facilities: Private and public use landing facilities  
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater  
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

### **STREET AND ADDRESS INFORMATION**

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